Delivering successful IT-enabled business change

National Audit Office

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Delivering successful IT-enabled business change

This volume has been published alongside a second volume comprising of
Delivering successful IT-enabled business change: Case studies of success
HC 33-II, Session 2006-2007

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PREFACE

To remain efficient and competitive all modern societies need to embrace the opportunities provided by new technologies to deliver better services more cost effectively.

In its November 2005 IT strategy *Transformational Government, Enabled by Technology*, Government set itself a clear challenge to deliver new and existing services more efficiently, increasingly designed around the needs of customers and citizens rather than for the administrative convenience of providers.

To bring about these changes requires a significant financial investment in information technology and with that comes risk. Over the last ten years, the National Audit Office and the Committee of Public Accounts have reported on a number of high profile and expensive IT failures overseen by government departments. Such failures have angered and bewildered citizens and taxpayers and caused frustration and dismay to those directly affected.

This report, however, is about success; how IT-enabled business change can be got right. Drawing on 24 case studies from the public and private sectors here in the UK and overseas, the report demonstrates that major IT-enabled programmes and projects – including those in Government – can and do succeed and can deliver real and lasting benefits to citizens – for example the Department for Work and Pensions' Payment Modernisation Programme costing over £800 million is providing a quicker and more convenient service to the public.

Major IT-enabled programmes and projects will be complex and risky, involving innovative but often highly volatile technology and the need to respond to changes to requirements including externally triggered changes, to devise new business systems or draw together existing ones, and to demonstrate to those who have to operate or use the new technology that it will meet their needs.

We do not in this report consider the issue of the different types of contracting arrangement, whether highly legalistic with exacting penalty clauses for non-performance, or ones based more upon partnership. Much depends upon the type of IT-enabled change in question and whether routine or highly innovative and therefore inherently more risky to all parties. Contracting arrangements and commercial management in central civil government will form the subject of a further National Audit Office report, building on the Office's work on major Defence projects[1] and our report on HM Revenue & Customs' ASPIRE, which highlights lessons for departments preparing to re-compete IT contracts.[2] These reports form part of a National Audit Office programme of forthcoming reports on IT-enabled change, which include our reports on e-enabled services and shared services, both planned for 2007-08.

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1   See for example: National Audit Office (2006) *Using the Contract to Maximise the Likelihood of Successful Project Outcomes*, Report by the Comptroller and Auditor General, HC 1047 Session 2005-2006, 7 June 2006. London: The Stationery Office, which contains the National Audit Office's *Contract Strategies Tool: A structured approach to developing defence procurement contracting strategies*.
2   National Audit Office (2006) *HM Revenue & Customs: ASPIRE – the re-competition of outsourced IT services*, Report by the Comptroller and Auditor General, HC 938 Session 2005-2006, 19 July 2006. London: The Stationary Office.

As the Committee of Public Accounts has pointed out frequently in the past and expects to see, it is primarily the responsibility of individual departments through their Accounting Officers and boards to make sure that they deliver successfully IT-enabled business change and do not embark upon major programmes or projects where competence and capacity are in doubt. To achieve this, they need to have the appropriate capability and capacity, drawing on a range of skills and with the board taking full ownership of the change. This report should act as an encouragement to those in Government responsible for IT-enabled business change to believe that success is entirely possible. But from the outset such change requires clarity of purpose, clear leadership and commitment from the very top – including Ministers – and good plans undertaken by competent and capable people.

TERMS USED IN THIS REPORT

Audit Committee
The Audit Committee is appointed to support the Accounting Officer in monitoring the corporate governance and control systems in the organisation. The Audit Committee supports the Accounting Officer by offering objective advice on issues concerning the risk, control and governance of the organisation and the associated assurances. It has no authority in its own right, over the operations of the organisation or those bodies which conduct audit and assurance work (including Internal Audit). It should, however, advise the Accounting Officer on the adequacy, and the appropriateness in the light of both known and emerging risks, of the work plans of those bodies, including Internal Audit, which conduct audit and assurance work. http://www.nao.org.uk/guidance/finaud_and_corpgov.htm; http://www.hm-treasury.gov.uk/media/8D2/62/audit_committee_handbook2003.pdf

Benefits realisation
Realising the benefits projected in the business case – usually new, more effective or more efficient services – and achieving return on investment.

Capability reviews
Reviews of government departments targeted at underlying capability issues that impact on effective delivery, such as: do departments have the right strategic and leadership capabilities; do they know how well they are performing, and do they have the tools to fix their problems when they underachieve; do their people have the right skills to meet both current and future challenges; do they engage effectively with their key stakeholders, partners and the public?

Capacity building
Measures to increase the knowledge and skills needed to deliver a programme or project.

Centre of Excellence (CoE)
Programme and Project Management (PPM) Centres of Excellence were established in departments in 2003 and 2004 as one of the six key Cabinet actions to strengthen the delivery of government IT-enabled programmes and projects. They are intended to provide strategic oversight, scrutiny and challenge across a department's portfolio of programmes and projects, to act as a focal point for supporting individual programmes and projects, and to drive the implementation of improvements to increase the department's capability and capacity in programme and project delivery.

Chief Information Officer (CIO)
All main government departments now have a Chief Information Officer at or near board level who is responsible for championing the department's IT programmes and projects and management of its overall portfolio. Most Chief Information Officers have a background in the IT industry, but some are generalist officials who undertake the Chief Information Officer role in conjunction with other responsibilities.

Chief Information Officer Council
The Chief Information Officer Council is the first initiative to bring together Chief Information Officers from across all parts of the public sector to address common issues and to spread good practice across government.

Common Causes of Project Failure
Joint NAO-Office of Government Commerce document aimed at those managing or otherwise involved in the delivery of projects across government (see Appendix 3, Annex). http://www.ogc.gov.uk/sdtoolkit/Reference/ogc_library/bestpracticebriefings/causesprojfailure.pdf

e-Government Unit (eGU)	The e-Government Unit (eGU) is a unit of the Cabinet Office and is responsible for formulating information technology (IT) strategy and policy, developing common IT components for use across government, promoting best practice across government and delivering citizen-centred online services. In 2004-05, the e-Government Unit put in train a series of measures to improve delivery by drawing on best practice in the public and private sectors. These include bringing technology and business functions together through the establishment of a Service Transformation Board and establishing a Chief Information Officer Council to manage the government portfolio of programmes and projects.
Government procurement code	The Government Procurement Code of Good Practice sets out the core values and behaviour for all members of central civil government's supply chain, both government organisations and their suppliers. It is a code of conduct for all members of the supply chain that encourages participants to work together openly and co-operatively. It also represents a commitment that they are serious about wanting to be better customers and better suppliers, within relationships that can bring mutual reward. The Code has been jointly developed by the Office of Government Commerce (OGC), representatives from other government departments and representatives from industry. It forms part of OGC's guidance portfolio. The Code is not intended to have legal effect, although it is consistent with EC Rules and Procurement Policy Guidelines.
Intellect Concept Viability Service	This is a five-stage service provided for a small fee by the IT industry trade body Intellect. 1) Department submits a short written description of business need to Intellect. 2) Intellect invites selection of suppliers to comment. 3) Workshops facilitated by Intellect to exchange information between department and suppliers. 4) Intellect prepares Concept Viability Assessment based on suppliers' collated responses. 5) Concept Viability Assessment made available to all interested suppliers prior to official procurement process. (See: www.intellectuk.org/markets/groups/senior_it_forum/concept_viability.asp)
Intellect IT Supplier Code of Best Practice	Code of Best Practice setting out standards of professionalism that all providers of information systems and services to Government should endeavour to meet. (See: www.intellectuk.org/markets/groups/senior_it_forum/mechanism.asp)
Intelligent client	An organisation with the knowledge, skills and authority required to negotiate with and manage both suppliers and users and to contract with suppliers.
Inter-operability	The ability of a system or a product to work with other systems or products.
IT-enabled business change	Modifications to business processes to achieve business goals, supported and enabled by IT.
Key programmes	The key mission critical programmes (currently 15) with especially significant delivery or reputational impact for Government as a whole.
Legacy systems	Systems already in use that will support or interact with the business change programme or project.
Mission critical programmes and projects	Mission critical programmes or projects are defined as: "A: essential to the successful delivery of (i) a major legislative requirement OR (ii) a PSA target OR (iii) a major policy initiative announced and owned by the Prime Minister or a Cabinet Minister OR B: If the programme or project is not successful there are catastrophic implications for the delivery of a key public service, national security or the internal operation of a public sector operation.
Office of Government Commerce (OGC)	The Office of Government Commerce is an independent office of the Treasury and works with public sector organisations to help them improve their efficiency, gain better value for money from their commercial activities and deliver improved success from programmes and projects.

OGC Gateway™ Review	A review of an acquisition programme or procurement project carried out at a key decision point by a team of experienced people, independent of the project team. There are five OGC Gateway™ Reviews during the lifecycle of a project, three before contract award and two looking at service implementation and confirmation of the operational benefits. A project is reviewed at the OGC Gateway Review appropriate to the point reached in its lifecycle. Retrospective or combined OGC Gateway Reviews are not supported. The process emphasises early review for maximum added value. OGC Gateway Review 0 is a programme-only review that is repeated throughout the programme's life; it can be applied to policy implementation, business change or other types of delivery programme involving acquisition. It sets the programme review in the wider policy or corporate context.
OGC Management of Risk	Sets out a framework for taking informed decisions about risk at strategic, programme, project and operational levels to ensure that key risks are identified, assessed and action taken to address them.
OGC Managing Successful Programmes	Sets out an approach for managing change effectively, based on best practice in both the public and private sectors. It provides an overview of the programme management framework, and identifies key principles including leadership, benefits management, stakeholder management and communication, as well as risk management.
OGC Successful Delivery Toolkit	An electronic reference tool of best practice and guidance for use by Gateway reviewers, consultants, programme and project teams in departments, professional advisers, and those responsible for organisational standards.
Piloting	Establishes whether a system or a process is effective in a "real world" environment and whether a solution can withstand the rigours of operating in real life situations. Also helps gauge the behaviour and likely acceptance of target customers and users.
Portfolio management	Prioritisation of all an organisation's programmes and projects in line with business objectives and matched to its capacity to deliver them.
PRINCE2 (Projects in Controlled Environments 2)	Project management method covering the organisation, management and control of projects. PRINCE2 is the UK Government standard for public sector IT project management. It sets out good practice in risk management and in managing challenges and opportunities in an environment of rapid change.
Professional Skills for Government	Key part of the Government's Delivery and Reform agenda, a major, long-term change programme to ensure that civil servants have the right mix of skills and expertise to deliver effective services.
Programme	Portfolio of projects that aims to achieve a strategic goal of the organisation, planned and managed in a co-ordinated way.
Project	Specific suite of work aiming at a unique outcome, or series of outcomes, as distinct from being a repetitive process.
Programme and Project Management Specialism (PPM)	The Programme and Project Management (PPM) Specialism was established in October 2003. The specialism supports staff in government who wish to follow a career in programmes and projects rather than line-oriented career paths. It brings together all PPM specialists in central government and agencies, concentrating on helping, advising and supporting those individuals who are experienced or qualified programme and project staff, to develop their skills and careers.

Prototype	Mock up of the proposed final system that focuses on a subset of the key functionality. As well as being useful for validating a concept, a prototype provides a cut-down "working version" that can be demonstrated to key stakeholders to enable them to feed back comments and raise issues. Prototypes can help ensure the final design is correct, that it will deliver the business objectives and that contract milestones have been reached.
Resource accounting	Resource Accounting and Budgeting (RAB) is a system of planning, controlling and reporting on public spending for government. RAB was launched in 1993, with a commitment to introduce resource accounting. Resource accounting is the application of accruals accounting for reporting on the expenditure of central government and a framework for analysing expenditure by departmental aim and objectives, relating these to outputs where possible.
Senior Responsible Owner (SRO)	Every major IT change programme or project should have a Senior Responsible Owner (usually a Senior Civil Servant) to take overall responsibility for making sure that the programme or project meets its objectives and delivers the projected benefits. Key tasks include developing the business case, monitoring and liaising with senior management on progress and risks to delivery.
Six key actions	In December 2002, Ministers agreed six actions that targeted areas of weakness in the delivery of IT-enabled programmes and projects: 1) Establish Programme and Project Management (PPM) Centres of Excellence in each department with a remit including its Agencies and Non-Departmental Public Bodies. To be established by June 2003. 2) Accounting Officers to provide assurance on existing (pre go-live) and new major projects that they are not based on common causes of failure identified by the National Audit Office. 3) Mandate no big-bang implementations and developments (i.e. modular, incremental developments and implementations) unless approved by central scrutiny group. 4) No government initiative (including legislation) dependent on new IT to be announced before analysis of risks and implementation options has been undertaken. 5) Force prioritisation of all existing and new projects as Mission Critical, Highly Desirable and Desirable. 6) All High Risk and Mission Critical projects to have clearly identified (i) responsible Minister (ii) Senior Responsible Owner and Project Manager with good relevant track records.
Skills Framework for the Information Age (SFIA)	Provides a common reference model for the identification of the skills needed to develop effective information systems making use of information communications technologies. The SFIA Foundation is jointly owned by e-skills UK, the British Computer Society, the Institution of Electrical Engineers and the Institute for the Management of Information Systems. (See http://www.sfia.org.uk/)
Software maturity	Extent to which a specific process is explicitly defined, managed, measured, controlled, and effective. Commercial software is more mature than bespoke software.
Stakeholders	Parties with an interest in the execution and outcome of a programme or project. They would include business streams affected by or dependent on the outcome of a programme.
Transformational Government, Enabled by Technology	In November 2005, the Cabinet Office's e-Government Unit published *Transformational Government, Enabled by Technology*, Cm 6683., http://www.cio.gov.uk/transformational government/strategy/ setting out government strategy for delivering IT-enabled public services in the twenty-first century built around three key principles: services enabled by IT must be designed around the citizen or business, not the provider, and provided through co-ordinated delivery channels; Government must move to a "shared services" culture – in front and back offices, in information and in infrastructure – and release efficiencies by standardisation, simplification and sharing; and there must be broadening and deepening of government's professionalism in terms of the planning, delivery, management, skills and governance of IT-enabled change. A Cabinet Sub-Committee, the Committee for Electronic Service Delivery, chaired by the Chief Secretary to the Treasury, is the official owner of the *Transformational Government* strategy. Plans for implementation are in http://www.cio.gov.uk/transformational_government/implplan/

EXECUTIVE SUMMARY

1   The successful delivery of IT-enabled business change is essential for improving major public services, but experience in the public sector in Britain also shows that achieving such change is particularly complex and challenging in terms of the scale of the changes required, the cross-government co-ordination needed, and the technical issues around joining new and old systems.

2   The Committee of Public Accounts and the National Audit Office have examined many failures, identified what has gone wrong and made recommendations on how to avoid similar mistakes in the future. But, in addition to identifying mistakes and their causes, it is important to recognise that there have been many successful central government IT-enabled programmes and projects that are delivering real and lasting benefits to citizens, whether by increasing access to services or reducing the cost to the taxpayer. The purpose of this report is to demonstrate, drawing on a range of case studies from central government and elsewhere, how such successes have been achieved and to enable lessons from what has gone well to be transferred to new and existing programmes and projects in government.

3   In this report, we therefore identify 24 examples of successful programmes and projects; one third of them are drawn from British central government departments and agencies, and the rest from elsewhere in the public and private sectors in the United Kingdom, and from the public sector overseas **(Figure 1 on pages 11-13)**. The diversity of the case studies (which appear in Volume 2

of this report) demonstrates that success is achievable in both public and private sectors. The report draws out the activities and behaviours that have helped deliver this. Our report also draws on widespread contact with the IT industry and central government departments in Britain and our consultations in the United States.

4   Analysis of our case studies identified three key and recurring themes in successful programmes and projects:

■   **the level of engagement by senior decision makers of the organisations concerned;**

■   **organisations' understanding of what they needed to do to be an "intelligent client"; and**

■   **their understanding of the importance of determining at the outset what benefits they were aiming to achieve and, importantly, how programmes and projects could be actively managed to ensure these benefits were optimised.**

5   In the light of these three themes, we make a Recommendation to departments in the form of Key Questions they should ask themselves before embarking on IT-enabled change. Based on analysis of our case studies and other fieldwork, we also make Recommendations to central departments about what more can be done across government to support departments. In doing so, we hope this report will assist government departments and other public bodies to improve their capacity to bring about successful IT-enabled business change.

1	24 examples of successful IT-enabled business change

	Central government	Programme/project costs[1]
DWP Department for Work and Pensions	Department for Work and Pensions The Payment Modernisation Programme has transformed the payment of benefits and pensions by paying entitlements directly into recipients' bank accounts.	£824 million
consumer direct www.consumerdirect.gov.uk 08454 04 05 06	Department of Trade and Industry Consumer Direct provides consumers with a single access number to free advice when problems arise when dealing with traders.	£34 million
Business Link	Department of Trade and Industry — Small Business Service Businesslink.gov.uk is a website providing support, advice and services to businesses in the UK.	c.£17 million
the Warm front team	Department for Environment, Food and Rural Affairs – Eaga Partnership For citizens at risk of fuel poverty, the Warm Front Scheme provides a package of energy efficiency and heating measures to install or upgrade insulation and heating systems in their homes.	c.£1 million
The Pension Service Part of the Department for Work and Pensions	The Pension Service Pension Credit was a new entitlement that had less rigorous means testing and replaced the Minimum Income Guarantee.	£297 million
VOSA Vehicle & Operator Services Agency	Vehicle and Operator Services Agency Operator Self Service has modernised the approach to issuing Heavy Goods Vehicle Licences by redesigning the business process and IT support for the vehicle licensing business, enabling operators to carry out most licence transactions online at any time.	£9 million
ogc buying.solutions	OGCbuying.solutions eSourcing provides secure collaborative tools used by procurement professionals and suppliers to conduct strategic procurement activities online, including tendering, negotiation, contract award and management, to deliver value for money procurement solutions to the public sector.	£2 million
Environment Agency	Environment Agency The Fishing Rod Licences project transformed a fixed-hours Post Office based service for 1.2 million transactions a year to a self-service system enabling customers to purchase fishing licences online at any time.	£200,000
	Other public sector	
Transport for London	Transport for London The congestion charge was introduced to reduce traffic congestion in Central London by levying a flat rate fee upon drivers entering the congestion zone during the Monday–Friday working day.	£234 million

1   24 examples of successful IT-enabled business change *continued*

	Other public sector *continued*	**Programme/project costs**[1]
Causeway	Northern Ireland Criminal Justice Directorate The Causeway Programme links the case management systems of the six main Northern Irish criminal justice agencies.	£48 million
oyster®	Transport for London The Oyster® card is an electronic smartcard, introduced in 2003, as part of the Prestige Project, a private finance initiative to renew, operate and maintain all the Transport Authority's ticketing infrastructure.	£40 million capital cost
SCOTTISH WATER	Scottish Water "Promise to resolution" – an integrated customer management and field service programme – introduced a new customer service contact centre and work scheduling system to improve both efficiency and performance.	£14 million
NHS *UK Transplant*	UK Transplant The National Transplant Database provides a fast and accurate matching system to enable organs to reach patients as soon as organs become available for transplant.	Running costs part of annual budget of c.£14 million (2005-06)
Cambridgeshire County Council	Cambridgeshire County Council The Council transformed its governance structures following the introduction of portfolio management.	£90,000 provided by the ODPM (now the Department for Communities and Local Government), plus internal staff and senior management time
·EDINBVRGH· THE CITY OF EDINBURGH COUNCIL	City of Edinburgh Council As part of its "Smart City Programme" to modernise the Council's back office systems and processes, the Council undertook a modernisation of its services of Planning and Building Standards to enable individuals, construction firms, architects and solicitors to submit applications electronically and to find planning related information online.	Part of wider "Smart City Programme" to modernise the Council's back office systems and processes
DEPARTMENT OF DEFENSE	**International public sector** United States Department of Defense The Identity Management Programme provides military personnel with a Common Access Card to improve identity assurance and reduce fraud.	n/a
DIAL 311	New York City Mayor's Office The New York City 3-1-1 Citizen Service Center provides access to all government information and non-emergency services in the New York City area through a single telephone number. NYC 3-1-1 is available 24 hours a day, with operators providing services in over 170 languages.	US$25 million

	Other public sector *continued*	Programme/project costs[1]
	City of Anaheim	US$1.2 million
	The Enterprise Virtual Operations Center brings together real time data from the City of Anaheim's emergency services and makes the data securely accessible via the Internet, enabling city officials to see what is happening on all the City's critical response fronts.	
	Office of the Revenue Commissioners	€40 million
	The Republic of Ireland's Revenue On-Line Service (ROS) enables customers to both pay their taxes and file their returns online. The ROS Customer Information Service allows customers and their agents to view details of their Revenue Account.	
	British Columbia	Leveraged existing government telecommunications spending of Canadian $245 million (over 4 years)
	Network BC is a dedicated project office within the Ministry of Labour and Citizen Services that works with British Columbia's remote communities and the private sector to improve citizens' access to the Internet.	
	Private sector	
	APACS	£1.1 billion
	The UK payments trade association's chip and PIN programme is a new, more secure way to pay with credit or debit cards.	
	Britannia Building Society	£60 million
	The "Really Big Programme" involved replacing the Society's complete IT infrastructure to create a "single view" of each of its customers and their savings and investment accounts, mortgages, loans and other financial products.	
	Prudential UK	£37 million
	The "Single View" customer service transformation programme was introduced to improve customer marketing and account administration by providing staff with an integrated view of all the products and services each customer has purchased from Prudential UK.	
	Norwich Union	n/a
	'Pay As You Drive'™ insurance uses Global Positioning Satellite (GPS) technology to calculate monthly insurance premiums based on how often, when and where people drive.	

NOTE

1   Costs are those incurred by the programme/project in its life time, as provided by the case study body. They are not the subject of National Audit Office audits.

6 Many of our Recommendations focus on the need for greater stewardship and accountability within individual government departments and across Whitehall more generally. Beyond this, the Committee of Public Accounts has emphasised frequently the need for greater public transparency and accountability in departments' performance in managing their programmes and projects and, in particular, that the results of OGC Gateway Reviews™ should be published. At the time of publication of this report, recent decisions by the Information Commissioner in support of disclosure were the subject of legal appeals by the Office of Government Commerce. While there are arguments in favour of and against disclosure – which will be ultimately for the Courts to decide – Gateway Review reports form only one means to achieve greater departmental accountability for the management of major IT-enabled programmes and projects. The introduction of the Annual Report of the e-Government Unit in November 2006 offers a new and significant opportunity for greater accountability and to make public for the first time information on departments' aggregate expenditure on IT programmes and projects, and achievement against plans. Already in Defence, each year the cost, progress and performance of 20 of the largest defence projects are the subject of a Major Projects Report audited by the National Audit Office.[3] The provision of comparable information about the performance of civil IT-enabled programmes and projects would be in line with the more general thrust towards transparency in the management of departments through developments such as the publication of departmental capability reviews.

Recommendation for departments embarking on major IT-enabled business change

7 At the earliest point of any IT-enabled business change, the department should be able to demonstrate that it has considered and addressed the nine Key Questions set out in **Figure 2**. The issues raised by the questions are fundamental to successful delivery and, before undertaking contractual or other major commitments, departments should be able to demonstrate that they have put in place the capacity to successfully tackle the challenges posed.

2	Nine Key Questions for departments embarking on major IT-enabled business change

Ensuring senior level engagement

1 Is the board able to make informed judgements about the department's capacity to manage change?

2 Does the department have in place a decision making structure that will ensure strong and effective leadership of the IT-enabled business change?

3 What incentives exist to drive performance?

Acting as an intelligent client

4 Does the department have the necessary programme management skills?

5 What is the natural division of duties between the Programme and Project Management Centre of Excellence and the Chief Information Officer?

6 How will the department establish and promote an open and constructive relationship with suppliers?

7 How clear is the department about the business process that it is seeking to change or develop?

8 Does the technology exist to deliver the change?

Realising the benefits of change

9 Beyond immediate technical success, how will wider benefits be secured?

These questions are discussed further below.

Source: National Audit Office

8 The Key Questions are set out under the three key success criteria identified in our case studies. They are addressed to those individuals within departments and agencies who have a pivotal role to play in bringing about successful IT–enabled business change. These are primarily Accounting Officers and their executive boards, and "Senior Responsible Owners" who, for major programmes would themselves be board members and who, as their title implies, have a personal responsibility for ensuring that each of the programmes and projects under their charge achieves its objectives and delivers the projected benefits. There are also questions (in particular Questions 6-8) for Programme Managers who perform a vital role in support of Senior Responsible Owners, handling the day to day management of the programmes in question, including providing oversight of the various individual projects that often form discrete but essential parts of the wider business change.

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3 For example, National Audit Office (2005) *Ministry of Defence: Major Projects Report 2005,* Report by the Comptroller and Auditor General, HC 595-I Session 2005-2006, 25 November 2005. London: The Stationery Office; National Audit Office (2005) *Ministry of Defence: Major Projects Report 2005 Project Summary Sheets*, Report by the Comptroller and Auditor General, HC 595-II Session 2005-2006, 25 November 2005. London: The Stationery Office.

9 Responsibility for IT-enabled business change rests with individual departments and the nine Key Questions below are designed to assist Accounting Officers and their boards to put in place the appropriate capability and capacity to deliver programmes and projects successfully. We also draw the attention of Accounting Officers to implications for their departments of the Recommendations for central departments **(Figure 3 on pages 20 to 23)**; in particular Recommendation 7 – that the Recommendations of this report form part of the basis of an "annual stock take" being developed by central departments, drawing on the Leadership and Delivery strands of departmental capability reviews, and Recommendation 8, which emphasises Accounting Officer responsibilities, which would include for example the mandatory nature of Gateway Reviews.

Nine Key Questions for departments embarking on IT-enabled business change

Ensuring senior level engagement

Q1 Is the board able to make informed judgements about the department's capacity to manage change?

■ Our case studies (for example Prudential UK, Cambridgeshire County Council) highlight the importance to organisations in managing their portfolio of programmes and projects of establishing a clear overview of the range of business change activities planned or underway at any one time and assessing their capacity to handle the change. For departments and agencies, this will be aided by adopting the common approach to portfolio management being developed by the Chief Information Officer Council along the lines of their American counterparts who exercise critical oversight over Federal Government Agencies' IT-enabled programmes and projects through a process of annual review.

> Key success factor in our case studies: mechanisms to prioritise the programme and project portfolio in line with business objectives.

Q2 Does the department have in place a decision making structure that will ensure strong and effective leadership of the IT-enabled business change?

■ Successful delivery requires an accurate assessment of risk, the scale of the change proposed and whether it involves a new business process or upgrading of existing systems, the degree of innovation involved in the change itself and the supporting IT, and the likely effect on those having to operate the system and upon customers and clients. As our case studies illustrate, these issues need to be addressed at board level with direction and support provided by the board for those charged with delivery, underpinned by clear governance arrangements and internal and external scrutiny and challenge.

> Key success factor in our case studies: a clear decision making structure with agreed lines of accountability so that the right decisions are made swiftly and in line with business strategy.

■ In departments and agencies, the Senior Responsible Owner holds prime responsibility for the successful delivery of IT-enabled programmes and projects. For those Senior Responsible Owners in charge of programmes, our survey showed that while 76 per cent discussed progress with their Accounting Officer at least once a month, only 52 per cent did so with their Minister at least once a quarter.

■ It is essential that senior management invest sufficient time and priority to ensure effective oversight of the change. While our case studies demonstrate clearly the benefits of strong leadership and direction exercised by experienced and skilled individuals, the results of our survey of Senior Responsible Owners across government show that half are in their first "SRO" role and around half spend less than 20 per cent of their time on the role. This lack of experience and focus is compounded by the limited amount of support given to Senior Responsible Owners, with a striking 38 per cent of Senior Responsible Owners having no involvement with a Centre of Excellence and 20 per cent rating their support as poor.

■ There is particular risk where a business change involves several organisations coming together to join up activities, requiring additional governance arrangements to promote a common sense of purpose and a culture of joint responsibility. Here a cross-departmental board is needed, as happened in the case of the Department of Trade and Industry's Businesslink.gov.uk initiative, with sufficient seniority to demonstrate the commitment of the partner bodies, clear and up-front terms of reference, and a capacity to take collective decisions for the benefit of the programme as a whole rather than for the individual interests. A cross-department project board will also be needed. For its initiative to improve citizens' access to the Internet, British Columbia's Ministry of Labour and Citizen Services set up a dedicated project office – Network BC – to bring together the government ministries, health authorities and other public bodies and to manage the upgrade programme.

■ To ensure that risks are well-managed, Boards and Audit Committees will need to satisfy themselves that the department's programmes and projects are proceeding in a timely manner through external and internal assurance processes. In particular, in accordance with earlier guidance[4], they will need to take steps to assure themselves that IT governance is sufficiently robust to deliver key services by requiring regular advice and reports from internal auditors where large changes and upgrades to IT infrastructure are planned or in progress; that business cases are robust, projected benefits are measurable, and financial and other controls are sufficient to track benefits; and that programmes and projects are making timely progress through Gateway Reviews, the outcomes of which are communicated to the Audit Committee. Forty-two per cent of Audit Committees were never briefed on the results of Gateway Reviews; only 26 per cent received quarterly briefing; and only 42 per cent of internal audit and assurance departments received copies of all Gateway Reviews.

Q3   What incentives exist to drive performance?

■ In the commercial sector, IT-enabled business change is often the prime factor in whether a business succeeds or falters. As our case studies demonstrate (for example Britannia Building Society's "Really Big Programme" to replace its complete IT infrastructure

to create a "single view" of each customer's savings and investment accounts, mortgages, loans and other financial products) these are essential building blocks for competitive advantage. Reflective of that risk, incentive and performance regimes exist in the private sector to make sure that those charged with delivery are motivated to succeed and that they drive through the benefits.

> Key success factor in our case studies: senior management who demonstrate commitment to the change.

■ In departments and agencies, while there is a clear commitment to public service, there are few material incentives. The Review Body on Senior Salaries[5] has recommended that Government should consider the payment of non-consolidated market allowances and "golden hellos" to attract high level specialists to the Senior Civil Service. This is helpful for recruiting those with the skills and expertise needed to manage large programmes of IT-enabled business change. But not all government departments have yet created a "risk culture" that rewards well managed risk taking.[6] Beyond basic salary levels lies the important issue of financial incentives and career planning to help motivate senior management to undertake the well-managed risk taking entailed in delivering successful IT-enabled business change.

■ A lack of longer-term commitment to realisation of benefits in departments and agencies is also demonstrated across government in that currently (April 2004–June 2006) only five per cent of all Gateway Reviews are Gate 5 Benefits Evaluation Reviews, a percentage that has increased little since 2002-2004 (Appendix 2, Figure 11). The Department for Work and Pensions' Payment Modernisation Programme, which has been through a successful Gate 5 Gateway Review, has developed a benefits realisation plan assigning responsibility for promoting and securing benefits to named individuals – benefits owners – over the medium-term of the first few years' following implementation.

4   HM Treasury and Office of Government Commerce (2004) "Building a Cooperative Assurance Relationship between Internal Audit, Departmental Gateway Coordinators and Centres of Excellence". http://www.hm-treasury.gov.uk/media/8BA/50/ocg_audit_190105.pdf
5   Review Body on Senior Salaries (2006) *Report No. 62*, Twenty-Eighth Report on Senior Salaries, Cm 6727. London: The Stationery Office.
6   National Audit Office (2004) *Managing Risks to Improve Public Services*, Report by the Comptroller and Auditor General, HC 1078-I Session 2003-2004, 22 October 2004. London: The Stationery Office.

Acting as an intelligent client

Q4 Does the department have the necessary programme management skills?

■ Key to the success of our case studies was a recognition of the need to build the capability and capacity to deliver major programmes and projects and, within this, the key role played by the programme manager. While there have been previous initiatives to build a cadre of such managers within government, some of whom are now running major programmes and projects, these initiatives have not been completely successful. Numbers in the programme and project management specialism have doubled since 2004, but remain low at 2,300 across the civil service. In recognition of the need to strengthen this aspect of delivery capacity, one of the current main initiatives of the e-Government Unit is to broaden and deepen professional skills in managing IT-enabled programmes. This includes adopting the competency and skills framework of Skills for the Information Age.[7]

> Key success factor in our case studies: building capacity and capability.

■ Where third party consultancies are used, mechanisms are needed to build in-house capability and to provide a return on consultancy spend by requiring knowledge to be transferred from consultants to programme and project staff within the department. The Vehicle and Operator Services Agency, for example, agreed at the outset of the Operator Self Service project that its consultants would facilitate transfer of knowledge and skills throughout the business change.

Q5 What is the natural division of duties between the Programme and Project Management Centre of Excellence and the Chief Information Officer?

■ The Office of Government Commerce's Embedding Centres of Excellence Programme, introduced in 2003, measured departments' progress in setting up Programme and Project Management Centres of Excellence against established standards. Since completion of the centrally-run programme in 2005, the role of Centres of Excellence has developed at different rates and in different ways across government. In some departments, Centres of Excellence have the requisite authority to influence procurement and recruitment strategies, while in others their role is restricted to that of information management. In our survey, only half of Senior Responsible Owners considered their Centre of Excellence a hub for the dissemination of good practice or lessons learned; while only 38 per cent rated their contribution as very or fairly good.

> **The Programme and Project Management (PPM) Specialism** supports staff in government who wish to follow a career in programmes and projects rather than line-oriented career paths. It brings together all PPM specialists in central government and agencies, concentrating on helping, advising and supporting those individuals who are experienced or qualified programme and project staff, to develop their skills and careers.

> Key success factor in our case studies: building capacity and capability.

■ In part because they are the creation of two different parts of central government – the e-Government Unit and the Office of Government Commerce, as yet the relationship between Chief Information Officers and Programme and Project Management Centres of Excellence is not fully clear. While there are examples of where both are working well, there is a danger that the two will duplicate the actions of one another, with vague responsibilities and confused reporting lines.

Q6 How will the department establish and promote an open and constructive relationship with suppliers?

■ Our case studies indicate repeatedly the importance of establishing from the outset strong, constructive relationships between clients and suppliers, typified by shared governance arrangements, joint teams and establishing an environment in which each side is comfortable challenging the other. Sometimes these involve simple devices such as the Republic

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7   http://www.cio.gov.uk/transformational_government/implplan/ p.24.

of Ireland's Revenue On-Line Service where the suppliers and Revenue staff were co-located in an open plan office away from existing offices, or in the case of the Britannia Building Society where all team members wore Britannia's badge. Open relationships between clients and suppliers also bore fruit in the case of Pension Credit where the joint team was able to offer constructive challenge to some 50 requests for requirement changes.

> Key success factor in our case studies: creating constructive relationships with suppliers.

Q7   How clear is the department about the business process that it is seeking to change or develop?

■   Before embarking on change, a department must have a complete understanding of its current business processes and how its stakeholders interact both with the business and between themselves and a clear understanding of what it wants the new business process to achieve. These need to be coupled with good appreciation of the likely impact of the business process change on service levels, productivity and different stakeholders. Our case studies (for example the Northern Ireland Criminal Justice Directorate's Causeway Programme) show the commitment and amount of time taken by those embarking on complex transformations to get the business process clear to start with. This knowledge is crucial if an organisation is to engage with the IT industry as an intelligent client, providing a clear specification to potential suppliers to enable them to determine the most cost-effective system for achieving the department's goal and to design proposals to implement the business change. Uncertainty over possible impacts should be probed and tested by organisations piloting new business processes, building prototypes to demonstrate practicalities, and canvassing opinions from those who will actually have to change their behaviours to engage with the business change.

> Key success factor in our case studies: designing and managing the business the change.

Q8   Does the technology exist to deliver the change?

■   Our report *Improving Procurement*[8] recommended more proactive management of suppliers and earlier engagement before and during the earliest stages of procurements. For IT-enabled business change, departments should consult at an early stage with the industry to take market soundings and to test the viability of proposed IT-enabled changes and the robustness of the procurement strategy to deliver these; for example, by making use of mechanisms such as Intellect's Concept Viability Service.

> Key success factor in our case studies: managing the risks of the IT solution.

■   Within this, there needs to be robust and well-evidenced discussion about why and where the business change cannot make use of off-the-shelf systems and software and how the change will address issues of connection between the department's new and existing systems. For example, for the Department for Environment, Food and Rural Affairs' "Warm Front" Scheme Manager, Eaga Partnership was confident that its in-house IT staff had the skills and capacity to develop the secure web-based portals needed; whereas for Scottish Water's new integrated customer management and field service programme, to keep down costs the business lead of the project made an early decision to adopt off the shelf technology, despite significant pressure from the IT department that a bespoke system was needed.

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8   National Audit Office (2004) *Improving Procurement: Progress by the Office of Government Commerce in improving departments' capability to procure cost-effectively*, Report by the Comptroller and Auditor General, HC 361-1 Session 2003-2004, 12 March 2004. London: The Stationery Office.

Realising the benefits of change

Q9 Beyond immediate technical success, how will wider benefits be secured?

■ Many of our case study organisations needed to engage in significant work with customers, users and wider stakeholders to ensure that the design of the change met their needs and that interested parties supported the change. To realise the benefits projected in the business case of a major IT-enabled change, departments will need to identify the key stakeholder groups at the earliest stage and to engage with them throughout the change to ensure that their needs are addressed and their support and commitment gained and maintained.

> Key success factors in our case studies: selling the benefits to users and winning the support of wider stakeholders.

■ When embarking on an IT-enabled business change, our case studies, for example the Republic of Ireland's Revenue On-Line Service, illustrate the importance of being clear from the outset about issues such as who will champion change amongst users, and how their energies and support can be put to best effect. Conversely, areas of potential resistance and doubt need to be identified, and steps taken to counter and convince; otherwise there is a danger that the change does not fulfil its potential, even where the technical solution is successful. Here, the use of market research (an approach taken for example by the Department for Work and Pensions' Pension Credit) can assist departments in identifying how best to phase the roll out of the change to different key customer groups.

■ To realise the benefits of change, departments need to ensure therefore that business cases are not used solely as mechanisms to secure funding, but set out how the business change will be achieved, what the benefits will be and, importantly, what machinery will be put in place to drive the achievement of those benefits. This requires assigning clear responsibility for promoting and securing benefits to named individuals (for example, the Department for Work and Pensions' Payment Modernisation Programme benefits realisation plan).

> Key success factor in our case studies: optimising the benefits.

■ Business cases and benefit plans need to be subject to robust internal scrutiny by the department's Centre of Excellence, which should also be involved in regular reviews and revisions of the business case throughout the programme or project to ensure that in the light of policy changes and other changes to the external environment, the projected benefits remain realistic, relevant and realisable.

■ The introduction of resource accounting, combined with the drive for increased efficiency means that, elsewhere in government, there is a clear incentive – and need – for departments to be in a position to know how well they are using their assets. Yet, historically, for IT-enabled change, this information has often been lacking, with few OGC Gateway Reviews at Gate 5 (Benefit Evaluation) having been carried out to assess for each programme and project whether the benefits hoped for have actually been secured. While the percentage of programmes and projects that reach Gate 4 (Readiness for Service) and go on to Gate 5 has improved (Appendix 2, Figure 12), more needs to be done. As a consequence, the Office of Government Commerce Supervisory Board has agreed that from 2006-07 all programmes and projects must undertake a Gate 5 Review within 12 months of completing a Gate 4 Review. Gateway Reviews are only one aspect, but with increasing cross-departmental programmes and projects, clear and firm arrangements will need to be put in place to ensure accountability and responsibility for realisation and optimisation of business benefits across the departments and agencies involved.

■ Management of the department's portfolio of programme and projects should include monitoring of benefit realisation plans to ensure that benefits are optimised, both in terms of financial savings and in improved services to citizens.

Eight recommendations for central departments

10 In order for departments undertaking IT-enabled change to have the maximum chance of success, there are actions that central departments can take to strengthen processes and structures within government (Figure 3).

3	**Eight recommendations for central departments**		
Purpose	**Recommendation for**	**Recommendation**	**Related key findings**
Ensuring senior level engagement			
1 To ensure that Ministers are briefed at a sufficiently early stage to understand and act with an appropriate awareness of those risks	Office of Government Commerce and e-Government Unit	To agree with departments a clear framework for ministerial briefing.	■ 52 per cent of mission critical and high risk programme Senior Responsible Owners discussed progress with their Minister at least once a quarter, but 21 per cent had no progress discussions with their Minister (paragraph 2.11)
2 To improve departments' management of their portfolios of IT-enabled programmes and projects and address shortcomings	Office of Government Commerce	To improve the use of Gateway and mission critical data by: a) making greater use of lessons learned data to inform Ministers, Accounting Officers, the Chief Information Officer Council and others responsible for management of the programme and project portfolio about good and bad practice, and in particular to identify the impact of the Gateway process on programmes and projects over time and whether deficiencies identified by Gateway Reviews are being addressed; and, b) providing a clear message that Gateway Reviews should be routinely copied to the department's Centre of Excellence, as happens already in many departments, and to the department's Chief Information Officer so that lessons learned are disseminated across the department.	■ the percentage of "Green" Gateway Reviews has fallen while "Red" Reviews have increased (Appendix 2, Figure 13) ■ 77 per cent of Centres of Excellence received copies of all Gateway Reviews (paragraph 2.18)
3 To ensure that departments receive consistent messages about how to achieve successful delivery	Office of Government Commerce	To liaise closely with the e-Government Unit and Chief Information Officer Council as they develop portfolio management and governance and project control principles for IT-enabled programmes and projects and to take account of these in its best practice guidance and Gateway Review processes.	

3	Eight recommendations for central departments *continued*		

Purpose	Recommendation for	Recommendation	Related key findings
Acting as an intelligent client			
4 To ensure that roles and mechanisms within departments are co-ordinated and coherent	Office of Government Commerce and e-Government Unit	To: a) communicate clearly to departments the expected division of roles and responsibilities between Commercial Directors, Chief Information Officers, Senior Responsible Owners and Programme and Project Management Centres of Excellence;	■ support to Senior Responsible Owners from Centres of Excellence was variable, with only 38 per cent rating their contribution as very or fairly good (paragraph 3.26)
	Office of Government Commerce	b) require departments to provide to the Office of Government Commerce a model of their arrangements so that the division of responsibilities is communicated clearly to those responsible for improving programme and project management across government;	■ 53 per cent of Senior Responsible Owners strongly agreed or agreed that their Centre of Excellence was a hub for the dissemination of good practice or lessons learned; 48 per cent strongly agreed or agreed that it monitored and measured the performance of individual programmes and projects (paragraph 3.26)
	Prime Minister's Delivery Unit	c) ensure that departmental capability reviews establish that departments have carried out such mapping and allocation of responsibilities; and,	■ 58 per cent of Senior Responsible Owners met with their Chief Information Officer at least monthly (paragraph 3.27)
	Office of Government Commerce	d) provide benchmarking standards to enable Accounting Officers to assess whether their Centre of Excellence is strengthening the department's capability to deliver IT-enabled and other programmes and projects.	■ 76 per cent of programme Senior Responsible Owners discuss progress with their Accounting Officer at least once a month (paragraph 2.11)
5 To ensure that civil service generalists and IT professionals are equipped to meet the challenge of delivering IT-enabled change	Cabinet Office, e-Government Unit and Office of Government Commerce	To co-ordinate the work of the Professional Skills for Government programme, the Programme and Project Management Specialism, and the Chief Information Officer Council with its responsibility for the IT profession in government, in order to ensure that senior civil servants are equipped to oversee major change programmes and realise their benefits by: a) ensuring that both specialists and non-specialists receive training in programme and project management, strategic thinking, and communications and marketing – skills key to the management of large-scale change;	 ■ 75 per cent of Senior Responsible Owners spent a minority of their time on their role (paragraph 2.12)

3	Eight recommendations for central departments *continued*		
Purpose	**Recommendation for**	**Recommendation**	**Related key findings**
Acting as an intelligent client continued			
	Office of Government Commerce	b) ensuring that Senior Responsible Owners of mission critical and high risk programmes and projects are selected on the basis of a competency-based selection procedure that ensures that those nominated have the skills and experience to oversee such change;	■ 71 per cent of Heads of Centres of Excellence were fairly or very concerned about a lack of skills and proven approach to project management and risk management in their departments (paragraph 3.21)
	Office of Government Commerce	c) providing ongoing support and mentoring for Senior Responsible Owners;	■ 53 per cent of Senior Responsible Owners of mission critical and high risk programmes and projects are in their first Senior Responsible Owner role (paragraph 2.14)
	Office of Government Commerce	d) developing a means to provide clear career pathways for programme and project managers across government; and,	■ numbers in the Programme and Project Management Specialism have doubled since 2004, but remain low at some 2,300 across the Civil Service (paragraph 3.20)
	Office of Government Commerce	e) increasing the take up of Office of Government Commerce guidance and other central support by senior civil servants charged with responsibility for programmes and projects.	■ Some 13–23 per cent of Senior Responsible Owners had not used relevant OGC guidance (Figure 9, paragraph 3.29)
Realising the benefits of change			
6 To ensure that departments make sound investment decisions and realise the benefits of IT-enabled programmes and projects	Office of Government Commerce	To ensure that programmes and projects are brought into the Gateway system as early as possible by requiring departments to copy to the Office of Government Commerce and to the Chief Information Officer Council outline business cases for all mission critical and high risk programmes and projects (followed in due course by full business cases and significant changes in scope in business cases); and to require all business cases to be accompanied by a benefits realisation plan, based on Office of Government Commerce best practice and endorsed by the Accounting Officer, that identifies benefits, how ownership and accountability for benefits delivery is to be assigned across the department, how customers and other users are to be persuaded to adopt any new IT-enabled services, and how benefits will be tracked in the short and medium term of up to five years' after implementation.	■ currently (April 2004– June 2006) only five per cent of all Gateway Reviews were Gate 5 (Benefits Evaluation) Reviews (Appendix 2, Figure 11).

3	Eight recommendations for central departments *continued*		
Purpose	**Recommendation for**	**Recommendation**	**Related key findings**

To consolidate the recommendations above and to assist departments in developing their delivery capability

Purpose	Recommendation for	Recommendation	Related key findings
7 To improve departments' capability to deliver IT-enabled business change and other programmes and projects	Prime Minister's Delivery Unit and Office of Government Commerce	As ongoing follow up to departmental capability reviews and the Recommendation for departments and Recommendations to central departments above, to provide an annual "stock take" for Accounting Officers on their department's management of mission critical programmes and projects, including selection of and support to Senior Responsible Owners, timeliness of and response to Gateway Reviews, and performance of Centres of Excellence.	
8 To clarify for Accounting Officers their responsibilities with regard to IT-enabled business change and other mission critical and high risk programmes and projects	HM Treasury	To ensure that Treasury guidance, including *Government Accounting*, makes clear to Accounting Officers their responsibility for the effective governance of mission critical and high risk programmes and projects.	

PART ONE
Why departments need to deliver IT-enabled business change successfully

1.1   Information technology is playing an increasingly central role in the provision of major public services; whether the payment of benefits, the provision of healthcare, protecting the public, or simply the day-to-day interactions between government and citizens for services such as obtaining a new driving licence, or for seeking information such as overseas holiday advice. Across the whole public sector, government spends about £14 billion a year on new and existing information technology and related services.[9] In November 2005, *Transformational Government, Enabled by Technology* set out government strategy for delivering IT-enabled public services in the twenty-first century. Alongside a clear drive for greater efficiency in the way services are provided, the strategy called for public services to be designed and co-ordinated more around the needs of the citizen or customer, not the provider. This requires a better understanding of the needs of different groups of citizens, such as older people or parents, or business entities, such as farmers or small businesses. It also often involves the introduction of new IT systems, which to operate successfully, require organisations to work together around re-designed business processes, and the marriage of new and often innovative technology with older "legacy" IT systems, dating from a different era, and designed for different purposes.

1.2   To deliver the Government's current objectives, as well as working towards the vision set out in *Transformational Government*, there were at the time of this report some 120 mission critical or high risk IT programmes and projects in train across UK central civil government. Each faces a different set of challenges and the very scale of many creates particular issues around complexity, cost control and the inter-operability of different systems, particularly where more than one government department or agency is involved. A fundamental principle behind much of this increased investment is that it will deliver better cost effectiveness through the streamlining and amalgamation of corporate support activities and a reduction in traditional paper-based methods. The financial risks associated with IT-enabled business change are due therefore not only to the scale of the programmes and projects themselves, but to the benefits they need to achieve and the pressure to produce return on investment.

1.3   Across government, central departments have made major efforts to strengthen and improve departments' ability to manage the Government's portfolio of IT-enabled programmes and projects. At the highest level, there has been since 2001 a Cabinet Sub-Committee, the Committee for Electronic Service Delivery, chaired by the Chief Secretary to the Treasury and the official owner of the *Transformational Government strategy*. In 2004-05, the e-Government Unit put in train a series of measures to improve delivery by drawing on best practice in the public and private sectors. These include bringing technology and business functions together through the establishment of a Service Transformation Board and establishing a Chief Information Officer Council to manage the government portfolio of programmes and projects. Initiatives are also taking place **(Figure 4)** to develop the IT profession and departments' capacity to manage IT-enabled programmes and projects.

9   Cabinet Office (2005) *Transformational Government, Enabled by Technology*, Cm 6683. London: The Stationery Office, p.4.

1.4 To improve management of suppliers, the Office of Government Commerce and the IT industry body Intellect have developed the Government Procurement Code and the IT Supplier Code of Best Practice. The Chief Information Officer Council has asked the Office of Government Commerce to undertake a review to assess the capacity of the IT industry to deliver the portfolio. The Chief Information Officer Council is also working with Intellect to implement a supplier management initiative to strengthen relations between suppliers and government. The Chief Information Officer Council aims to improve performance of programmes and projects by ensuring that departments engage with suppliers at the earliest stage, have the same individuals deliver the totality of the programme or project, and involve suppliers in all levels of the governance process. In turn, suppliers are called upon to ensure that they put their best available staff into project teams.

1.5 Most departments now have a Chief Information Officer (often with direct experience of the IT industry). Where IT-enabled business change is of high strategic importance, the Chief Information Officer will often be a board position (as is the case with the Department for Work and Pensions). The Chief Information Officer's responsibilities may include overseeing the department's portfolio of IT programmes and projects and ensuring that they are properly aligned to the department's strategic objectives. Chief Information Officers can play a crucial role in providing assurance that the risks to departments' finances and business posed by major change programmes are being managed effectively. This follows practice in the United States where, for the last decade, it has been mandatory for every Federal Government Agency to employ a Chief Information Officer, with a set of key responsibilities enshrined in legislation and clearly defined duties to ensure a consistent approach across Federal Government **(Figure 5)**.

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4 Six point plan to develop the government IT Profession

The shortage of skills is being addressed by the Cabinet Office, as part of the wider Professional Skills for Government programme, through a six point plan to strengthen skills and capacity in IT within government.

- **Professional Competency Framework** to support the sharing of best practice and people across central government.

- **Networking and mentoring** by individuals working in the same area (for example, service delivery) across departments to encourage the sharing of best practice and experience.

- **A Government IT Academy** to develop professional skills and capabilities that distinguish them as IT Professionals.

- **Private sector collaboration:** the members of the Chief Information Officer Council have recently joined CIO Connect, a network of the Chief Information Officers representing most of the top 300 companies in Britain.

- **Communication** to reach 50,000 IT staff and their managers, along with a regular e-Bulletin, Chief Information Officers will meet face to face with as many of their department's IT staff as possible in their role as the local Head of Profession. Individuals have the opportunity to register an interest in the profession and engage with the agenda of the government IT profession.

- **Partnership:** working with professions with the same agenda, including Information Management, Information Security and Information Assurance, Communications, Procurement, Programme and Project Management.

Further details may be found at:
http://www.cio.gov.uk/itprofession/about/themes.asp

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5 The Chief Information Officer role in United States' Federal Agencies

Under the terms of *The Clinger Cohen Act* 1996:

- the Chief Information Officer must develop, maintain and facilitate the implementation of IT architectures;

- the Chief Information Officer is responsible for the agency's human capital requirements;

- the Chief Information Officer must provide advice and other assistance to senior management of the agency to ensure that information technology is acquired and information resources are managed in a manner appropriate for that agency; and

- the Chief Information Officer must report to the head of the agency.

In addition, Chief Information Officers are required by the *E-Government Act* (2002) to make an annual report (Exhibit 300) to the Office of Management and Budget, giving a high level summary, which includes any IT investment's justification, project plans, benefit-cost analysis, acquisition plan, risk management plan and enterprise architecture plan, to enable the Office of Management and Budget to determine if investment funding should be recommended or continued.

Source: Government Accountability Office

The purpose of our report

1.6   In the face of major initiatives to use IT to realign services and the introduction of roles and mechanisms to improve delivery of IT-enabled change, what we have therefore attempted in this report is to identify through examples of successful IT-enabled change how that success has been brought about, the key contributory factors and, most importantly, how these can be reproduced in government departments.

1.7   Identifying such case studies has not been an easy task; despite asking many people in both the supplier and client communities in this country and overseas, as well as a range of other bodies. This may be because, as noted by the Standish Group report (2004), delivery of IT-enabled business change is a major challenge for all organisations, whether public or private.[10] Alternatively, this may be because to define success in major business transformations meaningfully is not easy; or it may be that people are simply reluctant, particularly in United Kingdom central government, to proffer examples of what went well when faced with a widespread perception, borne out of a number of major and costly failures, that IT-enabled business change is not something to associate publicly with success.

1.8   This last issue of risk aversion is one of the main reasons for this report. We have found a perception amongst a wide body of commentators within industry and Whitehall that well publicised failures are driving a culture of risk aversion amongst those responsible for delivering IT-enabled change, which in turn risks poorer decision making, lost opportunities for innovation and ultimately poorer value for money for the taxpayer. Major IT-enabled business change is risky: IT is not a steady and stable commodity like building a new road. And yet what IT-enabled programmes and projects can deliver – when they go right – by way of reduced costs or better, more responsive services is significant. In the case of the Payment Modernisation Programme, for example, the move away from paper based order books to electronic payment into citizens' bank accounts has reduced processing cost per transaction from 67 pence to one penny.

1.9   In defining success, we have focused on those programmes and projects that deliver benefits. Routinely, success has been measured against three basic criteria – delivery on time, to specification and to budget. While these are important disciplines for programme and project management and a project may be a success in terms of achieving a new technical implementation, our workshop with the Public Sector Chief Information Officers' Council highlighted the importance in measuring success of realising the projected benefits of any IT-enabled change – whether these are significant improvements to the quality of existing services to citizens, businesses, or others, the generation of efficiency gains, or the ability to offer new and possibly innovative services.

Our sources of evidence and the structure of our report

1.10   Featured in this report are therefore 24 IT-enabled programmes and projects that to one degree or another can be classed as successes and met the following criteria:

- significant degree of business transformation;

- significant delivery of benefits;

- diversity of examples in terms of size and types of transformations; and/or

- deemed successful by their respective organisations and by others in the industry.

1.11   The case studies have not been the subject of National Audit Office audits, but have been prepared in conjunction with the organisations concerned, taking in their views on the essential ingredients that helped them deliver success. We do not comment on the wider performance of those bodies or their suppliers, focusing instead on the key principles and practices to emerge from the case studies. The case studies are drawn from the public and private sectors within the United Kingdom, as well as a number from the public sector overseas, on the advice of the Office of Government Commerce and the e-Government Unit, suppliers, industry award bodies, consultants and professional bodies, other audit institutions and our own knowledge.

1.12   They cover a range of activities from developing Internet- or contact centre-based services to major overhauls of businesses processes – whether driving efficiency and change within organisations or using IT to support new services and products for customers or citizens. They range in scale from the Environment Agency's development of electronic fishing rod licences, to the Department for Work and Pensions' Payment Modernisation Programme costing over £800 million. From these, we have drawn key principles applicable to successful delivery of IT-enabled change in central government, as well as in the wider public sector and elsewhere.

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10   Standish (2004) *Third Quarter Research Report*. West Yarmouth, MA.: The Standish Group International Inc.

1.13 There are of course many routes to delivering IT-enabled business change successfully. Here, we focus on three core principles common to all our case study organisations, regardless of whether they were in the public or private sector, or the size, complexity or type of change they were undertaking:

■ **ensuring senior level engagement;**

■ **acting as an intelligent client; and**

■ **realising the benefits of change**.

Within these are ten key activities that guided the behaviour of our case study organisations **(Figure 6 overleaf)**.
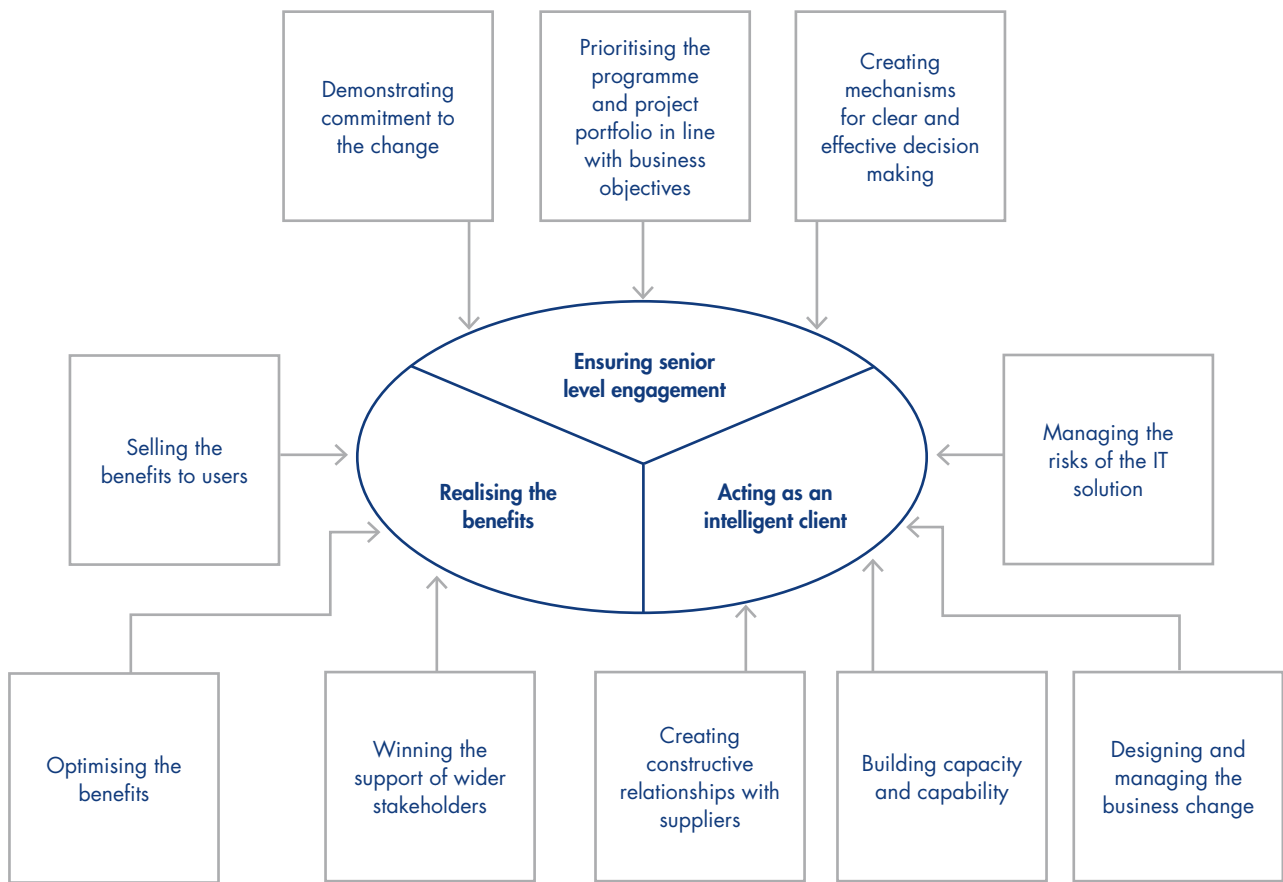
1.14 The three core principles were important for all of our case studies, the specific activities also, but the demands of different types of business change brought different activities to the fore. For innovative transformations reliant on leading edge technology, for example Norwich Union's 'Pay As You Drive'™ insurance, extensive testing of technical viability was needed. Some transformations have captive audiences, for example the United States' Department of Defense Common Access Card, the users of which are military personnel and their families, civilian staff, and contractors. Beyond these groups, to succeed many business changes must convince customers and clients of their benefits, requiring them to change the ways in which they operate. This includes citizens, businesses and professional groups who may be turned against business changes that do not meet their needs. Lessons from our case studies are set out in Parts 2–4 of the report under the three themes described above: ensuring senior level engagement; acting as an intelligent client; and, realising the benefits of change.

1.15 To supplement the findings of our case studies and to understand how the key principles can be replicated in government departments' present and future IT programmes and projects, we consulted widely through workshops with major IT suppliers held in collaboration with Intellect, presentations to the Intellect Public Sector Suppliers Council, a workshop of government Chief Information Officers (CIOs), interviews with IT industry trade associations, professional bodies, suppliers and consultancy firms, and interviews with the central government bodies most responsible for IT-enabled business change across government – the e-Government Unit and the Office of Government Commerce. This work was supported by a census of central government Centres of Excellence and a survey of Senior Responsible Owners of mission critical and high risk IT-enabled programmes and projects. To draw on international experience, we also visited the Government Accountability Office to discuss developments in the delivery of IT-enabled business change in United States' federal government and visited a Federal Government Agency for discussion with its Chief Information Officer. These findings form the second section of Parts 2-4 "How equipped are departments to deliver".

1.16 Further details of our methodology – how we identified our case studies, and the census, survey, workshops, focus groups and interviews that we carried out are given in Appendix 1. Appendix 2 contains analysis of Gateway Review and mission critical reporting data. The full case studies appear in Volume 2 of this report.

6 Core principles and activities that contributed to success

Demonstrating commitment to the change

Prioritising the programme and project portfolio in line with business objectives

Creating mechanisms for clear and effective decision making

Selling the benefits to users

Ensuring senior level engagement

Realising the benefits

Acting as an intelligent client

Managing the risks of the IT solution

Optimising the benefits

Winning the support of wider stakeholders

Creating constructive relationships with suppliers

Building capacity and capability

Designing and managing the business change

Source: National Audit Office

PART TWO
Ensuring senior level engagement

2.1 In Part 2, we set out the lessons from our case studies, survey findings and other evidence on the importance of senior management creating the right structure and providing the right support to maximise the chance of achieving successful IT-enabled business change.

Lessons from our case studies

2.2 Our case studies demonstrate that senior level engagement is crucial for successful delivery in three ways:

- **by providing mechanisms to prioritise the programme and project portfolio in line with business objectives;**

- **by creating a clear decision making structure with agreed lines of accountability so that the right decisions are made swiftly and in line with business strategy; and**

- **by demonstrating that senior management is committed to the change.**

Prioritising the programme and project portfolio in line with business objectives

2.3 Good portfolio management at board level helps ensure that decisions about the priority of programmes and projects are clearly in line with the organisation's business strategy, that there is the capacity to support

them, and that the portfolio represents the optimum balance between benefits and risk. Our case studies include good examples of corporate governance structures that enabled organisations to prioritise their programmes and projects, supported by a dedicated function providing the board with the information needed to take informed investment decisions. Prudential UK's Business Transformation Group, for example, produces a quarterly report to assist its board to prioritise resources on its largest value initiatives. To manage its programme portfolio, Cambridgeshire County Council set up Business Development Area Boards, chaired by the Chief Executive or Deputy Chief Executive, supported by a Corporate Project Office responsible for providing an overview of current programme activities, the strategic objectives being pursued, issues, risks and benefits.

2.4 Short timescales combined with clear objectives and direction can help keep the change a top management priority, focusing senior decision makers on managing risks and tackling problems head on. A number of the IT-enabled changes featured as cases studies were achieved against tight timescales. The New York City 3-1-1 Citizen Service Center, for example, met a target to be operational within a year, and for "Warm Front", the Eaga Partnership signed up to a contractual arrangement for the successful introduction of a new IT-enabled business process within six months.

Creating mechanisms for clear and effective decision making

2.5 Decisive decision making minimises delays, releases tied up resources and avoids additional costs, particularly where supplier contracts are on a "time and materials" basis. This is particularly important for those major government programmes that are cross-government initiatives requiring co-ordination of a number of departments' decision-makers. Here, it is important to establish up front governance arrangements with joint boards and hierarchies to enable the partners to take immediate decisions, or to escalate problems rapidly to more senior decision makers.

2.6 For Businesslink.gov.uk, an initiative to create a single interface between the whole of UK government and UK business, the Department of Trade and Industry needed cross-government support. The Department set up a Programme Board of chief executives or senior management team members of the organisations involved. Clear terms of reference set out the agreed commitment of Board members, and their seniority enabled the Programme Board to make clear decisions on behalf of the organisations it represented.

2.7 British Columbia's Network BC put in place a governance model with an Executive Governance Committee with representation from the various public bodies involved to provide strategic direction and ultimate dispute resolution and a Council of Chief Information Officers to make ongoing management and operational decisions. For Transport for London's Oyster® card Programme, the programme director set time limits for resolving issues, after which a decision would be imposed. This encouraged the programme team and suppliers to resolve issues quickly. To ensure it was alerted to major problems, Britannia Building Society's board maintained financial oversight of its "Really Big" transformation programme by agreeing a low (3 per cent) budget contingency. When unexpected costs arose, the programme manager provided a range of options to enable the board to decide how to proceed. Senior managers responsible for Transport for London's Congestion Charge programme understood clearly the decisions they could make and made themselves accessible to the delivery team so they could readily address issues, whether political, technical or operational, as they arose.

Demonstrating commitment to the change

2.8 Where change has been inspired from the top, for example in the case of the development of the New York City 3-1-1 Citizen Service Center or Transport for London's congestion charging, the resultant strong leadership and commitment has in turn prompted the creation of machinery to provide effective direction and management of that change. Leadership of the change by top management of the business also helps avoid the risk that focusing on the IT aspect of the business change leads organisations to vest too much responsibility for the transformation in the IT function. Board directors of the business unit are better placed to understand the impact of the transformation on customers, working practices, financial efficiencies and marketing opportunities.

2.9 The role of top management can be crucial in managing risk to the reputation of the organisation and its programme from announcing goals and timetables for programme and projects that are aspirational rather than realistic, resulting in negative publicity when not achieved. Major business changes create uncertainty and media interest will be high. Negative publicity can damage the reputation of not only the change programme, but also the organisation as a whole. In the private sector in particular, this can affect the behaviour of investors and customers and the organisation's profitability. In the public sector, it can dissuade intended users from trying a new system and create a negative profile that absorbs management time and additional costs to correct. For NYC 3-1-1, for example, the Mayor's objective was to deliver the new system in one year, with tight completion targets for different parts of the programme. To avoid raised expectations, however, no public commitment was made to a "go live" date and no announcement was made until the system was actually in operation.

2.10 A powerful champion can be an effective way of driving through complex change, but vesting authority in a single decision maker is not the only solution. Prudential UK's Chief Executive adopted a collegiate approach for its 1000 day Transformation Programme, with a governance model which rotated responsibility for programme milestones to a different board member every quarter, ensuring that there was widespread engagement and commitment, and spurring each business area in turn to deliver its aspects of the business change.

How equipped are departments to deliver senior level engagement?

2.11 Within departments, there has been a move towards improved governance arrangements for IT-enabled programmes and projects and greater involvement of boards and Ministers. Every mission critical programme and project now has an assigned Minister and Senior Responsible Owner,[11] as well as a programme or project manager, each with a clear set of responsibilities. There is relatively good interaction between Senior Responsible Owners of programmes and Accounting Officers, with three quarters (76 per cent) saying that they discussed progress with their Accounting Officer at least once a month. However, the picture is less clear with Ministers; there is a risk that without clear and regular communication programmes fall out of alignment with ministerial objectives or that Ministers are not fully informed about emerging risks to delivery. Our survey identified that while a half (52 per cent) of programme Senior Responsible Owners met with their Minister at least once a quarter, 28 per cent had discussions less than once a quarter, and a fifth (21 per cent) had not discussed progress with the nominated Minister.

2.12 The size and complexity of many government IT-enabled change programmes and projects and the associated risks require that Senior Responsible Owners spend the time needed to discharge their responsibilities fully. Having Senior Responsible Owners at or near board level means that they can exert influence so that the other parts of the business are aligned to the change and fully signed up to delivering its benefits. However, such individuals need to devote time to that role if they are to be effective. For most (75 per cent), the role occupied only a minority of their time, with half (45 per cent) spending under 20 per cent of their time on their programme or project.

2.13 This has implications for the management of suppliers, who in our workshops saw the level of commitment to IT-enabled business change of senior managers in public sector organisations to be less than in the private sector, where changes are market-driven, with the potential, if got wrong, to threaten the very existence of the organisation. Changes in the public sector were perceived to be driven by a range of factors influencing and modifying ministerial policy.

2.14 Our survey of Senior Responsible Owners also brought out the relative inexperience of senior civil servants in running mission critical and high risk programmes and projects, with half (53 per cent) being in their first Senior Responsible Owner role.

2.15 Our analysis of Gateway data shows that issues about programme and project governance ("Roles and responsibilities") also remain high on the list of Gateway reviewers' concerns **(Figure 7 overleaf)**.

2.16 An enhanced level of senior management engagement has been driven in part by the requirement for departments to report regularly to the Prime Minister through the Office of Government Commerce on the status of their mission critical programmes and projects (further details are in Appendix 2). Also important is the Gateway Review process (currently the subject of a refresh programme) which has raised the visibility of the quality of departments' performance in managing the business change.

2.17 In our survey, we found widespread support in departments for the Gateway process. Regardless of the "Red-Amber-Green" outcome, 98 per cent of Senior Responsible Owners rated the quality of the conclusions from their last Gateway Review as either "very" or "fairly" good.

2.18 Gateway Reviews are "owned" by the Senior Responsible Owner of the programme or project and while this is important for securing Senior Responsible Owners' support for the process, the potential of the Reviews to enhance scrutiny of individual programmes and projects and wider dissemination of "lessons learned" is not being fully exploited. Only three-quarters (77 per cent) of Centres of Excellence received copies of all Gateway Reviews. For the remainder that do not, this damages their ability to act as a focal point for supporting departments' capability and capacity both in their "policing" role and as conduits for dissemination of good practice.

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11   In December 2002, Ministers agreed six actions that targeted areas of weakness in the delivery of IT-enabled programmes and projects. Action 6: All high risk and Mission Critical projects to have clearly identified (i) responsible Minister (ii) Senior Responsible Owner and Project Manager with good relevant track records.

7 Between the periods July 2003 to February 2004 and March 2004 to March 2006 the percentage of "Red" issues raised in Gateway Reviews of IT-enabled programmes and projects fell in three of the top five categories, but concerns about skills and resources rose

Total red issues: 92 (July 2003-February 2004); 321 (March 2004-March 2006)

Source: Office of Government Commerce

NOTE

July 2003-February 2004 is the period reported on in the National Audit Office report *Improving IT Procurement*.

2.19 More importantly, Gateway Reviews of mission critical and high risk programmes and projects were not always communicated to those responsible for internal and external scrutiny and challenge. Just under half (42 per cent) of Audit Committees were not briefed on the results of Gateway Reviews and only a quarter (26 per cent) received briefing quarterly. The ability of Audit Committees to provide constructive challenge is further weakened in that in only 42 per cent of organisations do internal auditors get copies of all Gateway Reviews.

2.20 Currently, therefore, exisiting mechanisms for scrutiny are insufficiently exploited because the dissemination of Gateway Reports is not standardised. The Office of Government Commerce intends to use a single point of contact to co-ordinate its engagement with departments on both Gateway Reviews and Centres of Excellence. This would help ensure that Centres of Excellence receive consistently copies of all Gateway Reviews and are better placed to spread the lessons learned. Copying Gateway Reviews to Chief Information Officers would have the added benefit of helping put them in a position to provide boards and Accounting Officers with the assurance that they need that such programmes and projects can be delivered.

PART THREE
Acting as an intelligent client

3.1 To succeed in major change programmes, organisations need the knowledge and skills to act as an intelligent client. These include forming productive, value-for-money relationships with suppliers, an in-depth understanding of the business process the organisation is seeking to change, the level of technical challenge involved and how to meet it, and clear understanding of the additional resources and skills needed to supplement existing capabilities.[12] Successful change programmes were characterised by the effort their organisations put into:

■ **building capacity and capability;**

■ **creating constructive relationships with suppliers;**

■ **designing and managing the business change; and**

■ **managing the risks of the IT solution.**

Lessons from our case studies

Building capacity and capability

3.2 All our case studies owe much of their success to the quality of their programme and project managers. Some of our case study organisations had the in-house capacity to undertake the roll out of the business change. The City of Edinburgh Council's e-Government Unit, for example, has a cadre of programme and project management specialists with PRINCE2 qualifications who can be seconded to Council departments undertaking change programmes. Others recognised at the outset however the gaps in their capability and contracted with third party consultancies to fill them.

3.3 This third party advice centred on assistance to organisations in shaping their requirements and testing the quality of bidders' proposals. Such testing included visits to potential suppliers' existing facilities to see if they could deliver what they promised. For its Payment Modernisation Programme, the Department for Work and Pensions for example examined the operation of large contact centres with facilities to store benefit order books securely.

3.4 Third parties were also used to provide independent quality assurance. Britannia Building Society, for example, contracted with consultants to validate quarterly, or as the programme approached major delivery milestones, whether the conditions for success were in place.

3.5 An important part of working with consultants is to learn from their experience in order to develop the capability to manage future changes and secure longer term benefit for the public sector. The Vehicle and Operator Services Agency agreed at the outset of the Operator Self Service project that its consultants would facilitate transfer of knowledge and skills throughout the business change. Initially, for example, consultants led and coached a dedicated contract management team to manage suppliers. Over time, internal expertise increased and reliance on consultants was removed. In working with consultants to trial its new integrated customer management and field service programme, Scottish Water ensured that process design skills were transferred from the consultants to the front line staff. This enabled front line teams to introduce further improvements to the process changes.

12   Office of Government Commerce, *OGC Gateway Review 2, Procurement Strategy*.

Creating constructive relationships with suppliers

3.6 Our case studies illustrate the importance as systems are developed and implemented of establishing relationships of openness and trust between client and supplier. Clients need sufficient understanding of the issues facing the supplier to know when problems arise, as inevitably they will, why and to determine whether they are due to poor performance or genuine difficulties that all parties need to work together to resolve. Equally, suppliers need to make sure that their understanding of the client's needs is clear – and to challenge where this is not the case. This can be assisted by the development of joint governance arrangements.

3.7 In working with the Department for Work and Pensions on the launch of Pension Credit, for example, EDS operated "open book" accounting, giving the Department access to the company's project accounting records so it could establish how much EDS was paying for hardware, software and subcontracted consultancy. The Northern Ireland Criminal Justice Directorate's Causeway Programme built a strong collaborative relationship with its main supplier Fujitsu Services whereby, at each stage of the programme, Fujitsu provided the Causeway management team with open access to its designs and specifications so it could obtain a second opinion from an independent company specialising in quality assurance.

3.8 Where an organisation's project staff work in joint teams with suppliers and contractors, relatively simple devices can build team cohesion and help delivery. Some of our case studies co-located their staff with those of the supplier. The Republic of Ireland's Revenue On-Line Service, for example, co-located its programme staff with those of its suppliers Accenture and Baltimore Technologies in an open plan office, away from existing Revenue offices. For its "Really Big" change programme, Britannia Building Society built mixed project teams of its own and suppliers' staff and fostered a sense of team identity by all team members wearing Britannia's badge.

3.9 Programme and project delivery benefits when suppliers can offer constructive challenge to their clients, an approach which forms one of the ten commitments in the Intellect IT Supplier Code of Best Practice endorsed by the Office of Government Commerce. British Telecom, for example, required the City of Edinburgh Council to put in place a governance structure to ensure senior management oversight for the modernisation of its Planning and Building Standards services. Further into a programme, constructive challenge can highlight unrealistic, unsafe or technically unfeasible requirements or mid-programme changes. For Pension Credit, the open relationship between the Department for Work and Pensions team and EDS paid dividends when different business units of the Department made some 50 requests for requirement changes. The project team and EDS worked to challenge and find other solutions for many of the changes, avoiding significant additions to the cost and delivery time of the programme.

Designing and managing the business change

3.10 An essential pre-requisite for engagement with suppliers is the need for the client to be clear about what the business transformation is aiming to achieve. Government departments are frequently administering systems, such as benefit payments, built on primary legislation modified over decades by secondary legislation, regulations and case law. IT-enabled business change may experience problems because the organisation fails to understand and communicate to suppliers the processes it is seeking to transform. Reflected repeatedly in our case studies is the effort organisations put into mapping out clearly the new business process, probing its robustness, and trialling and testing assumptions with those who have to operate or use it. For its Causeway programme, the Northern Ireland Criminal Justice Directorate spent eight months mapping the business processes involved to ensure that the new system was feasible.

3.11 Scottish Water drew on its field operation staff's experience to design, operate and check its new integrated customer management and field service programme. In-house business analysts worked with consultants Celerant to trial the new process at designated field sites and to work through a range of scenarios before committing to purchase software to implement the process. Similarly, the Vehicle and Operator Services Agency drew on the practical experience of front line staff to develop and assess the advantages and disadvantages of a range of business models and process options to deliver a new commercial vehicle licensing service. As a result, front line delivery staff could use their experience of processing applications to make important contributions to the design of the self-service application process. In both cases, involving front line staff had the added advantage of building the credibility of the new process within the organisation.

3.12 Where users are outside the organisation, involving them early in the design of the change is important to establish whether it will meet their needs and to increase likelihood of take up. OGCbuying.solutions, for example, involved key public sector customers in designing its eSourcing solution and eAuction facility.

3.13 Wherever possible, our successful case studies avoided the strain on organisational resources and the technical and reputation risks of "big bang" roll outs and phased in the business change. Ireland's Revenue On-Line Service was rolled out in phases, with the simplest taxes and processes – filing and paying VAT returns and employers' withholding taxes – acting as "proof of concept", demonstrating that the system worked and building support for the change. The Department for Work and Pensions' Payment Modernisation Programme rolled out firstly long-term payments – war pensions and Child Benefit – whose recipients would not create a constant churn by moving quickly on and off the system. Less "steady state" benefits, such as Jobseeker's Allowance, were implemented at later stages.

3.14 For Pension Credit, the Department for Work and Pensions allowed demand to build up gradually, testing the new processes before volumes rose. Demand was managed by adjusting advertising levels and promotion strategies. The Department also gave itself additional sea room by giving citizens an 18-month window in which to take up the Credit. Similarly, the Environment Agency launched its online fishing rod licence service to coincide with the annual low-season sales period, thereby reducing potential demand on the system and minimising the risk of technology failure.

Managing the risks of the IT solution

3.15 Our successful case study organisations endeavoured to reduce the risks by relying wherever possible on their existing IT infrastructure, mature technology and off-the-shelf software. Re-using the existing infrastructure means that systems already have skilled support staff and are well understood by the organisation, as well as the more obvious savings through lower procurement costs.

3.16 For novel changes, development funding may be justified to ensure that the proposed change will work. The Northern Ireland Criminal Justice Directorate's Causeway programme to link the case management systems of criminal justice agencies broke new ground. There were few examples worldwide to follow and there were doubts over the technical viability of passing large amounts of information between six different case management systems. To establish the feasibility of the IT solution, the Causeway team undertook a six-month proof of concept exercise with three short listed suppliers, each of whom received funding to develop a prototype demonstration system. The Causeway team brought in third party technical consultants to help evaluate the demonstration systems, which uncovered significant weaknesses in one supplier's prototype. The prototype phase helped Causeway gauge whether it could overcome the main technical hurdles before committing major expenditure, to select the best supplier, and to incorporate feedback from key stakeholders to improve the final design.

3.17 For software, it is often easier, cheaper and less risky to modify a business process to make use of tried and tested off-the-shelf packages available from commercial application vendors than to develop bespoke software. This may also have additional cost and supply benefits. The United States' Department of Defense, for example, chose standard Java Card technologies for the Common Access Card for its Identity Management Programme. This offered access to competing card vendors, ensuring continuity of supply if one supplier went out of business, and mixing and matching of different suppliers' software and hardware to obtain the most cost-effective package. Scottish Water introduced its new integrated customer management and field service project as part of a programme to achieve 40 per cent savings in operating costs by 2006. To keep down costs and optimise return on investment, the business lead of the project made an early decision to adopt off the shelf technology supplied by Oracle, despite significant pressure from the IT department that a bespoke system was needed. This allowed a fast track implementation of the software, with the first installation completed in 90 days.

3.18 Others have taken a hybrid approach. Eaga Partnership, for example, was confident that its in-house IT staff had the skills and capacity to develop the secure web-based portals needed by its Home Energy Advisers and installation contractors to update central records from their home or office through the Internet. This approach was allied to an off-the-shelf Oracle Financials and Customer Relationship Management implementation.

3.19 The use of mature rather than innovative technology reduces risks to the reliability of the system, but considerable risks are likely to remain, particularly where system inter-operability is involved. The NYC 3-1-1 programme, for example, depended on consolidating the call centres from 40 different New York City agencies. Risk was managed through a phased roll out of the system. While all agencies were linked to the 3-1-1 system as the first point of contact for citizens, initially only 11 were fully consolidated into the 3-1-1 call centre, with the remainder becoming fully integrated over time.

How equipped are departments to act as an intelligent client?

3.20 A common characteristic of our case studies is the leadership and competence displayed by the programme or project manager. Such appointments are critical to the success of an IT-enabled change. Yet these appointments have not always been handled well in government departments, leaving the programme or project exposed. The experience of suppliers in our workshops was that although they have improved, public sector programme and project management skills still lag behind those of the private sector, as do commercial skills and market awareness. Since our report on *Improving IT Procurement*, membership of the government-wide Programme and Project Management Specialism has almost doubled from some 1,200 in 2004 to 2,300 in 2006, but the numbers remain small in relation to Civil Service staffing.

3.21 The scarcity of skills was reflected in our survey findings. Of the National Audit Office and Office of Government Commerce's "eight common causes of project failure" listed in Appendix 3, "lack of skills and proven approach to project management and risk management" was a cause of concern for 71 per cent of Heads of Centres of Excellence. This was also an issue for Gateway reviewers, "adequate skills and business resources" (Figure 7 in Part 2) being identified as an increasing area of concern.

3.22 Constructive relationships with suppliers emerged as one of the strongest drivers for success in our case studies. In our workshops with major IT suppliers, we found that generally they had seen improvement in government IT professionals' understanding of the business of the IT sector and our survey found that 80 per cent of Senior Responsible Owners had involved their main supplier(s) in their last Gateway Review. In addition, relationships with suppliers were not considered a cause for concern by most Centres of Excellence, but a quarter (23 per cent) expressed concerns about one of the National Audit Office and the Office of Government Commerce's common causes of failure of IT projects "lack of effective project team integration between clients, the supplier team and the supply chain"; and 23 per cent were concerned about "lack of understanding of and contact with the supply industry at senior levels in the organisation". Better working relationships were being fostered though practices such as regular joint reviews, shared "learned lessons reports", and regular, informal feedback.

3.23 Although supplier relationships had improved, a key difference between private and public sector clients highlighted in our supplier workshops was that it was easier with private sector clients to create open relationships **(Figure 8)** and a sense of common purpose and shared risk. As our case studies show repeatedly, such relationships can be achieved however in both sectors and were crucial for the successful delivery of many of our case studies (for example, the Payment Modernisation Programme and Britannia Building Society). They also brought other programmes back on track (for example, Pension Credit, where at one point relationships between suppliers were deteriorating to the detriment of solving technical problems). Openness also encourages suppliers to constructively challenge clients' proposals, particularly when requirement changes are likely to increase risks and delay delivery (paragraph 3.9).

3.24 In addition to programme and project management skills, our case studies, for example Scottish Water and Revenue On-Line, put considerable effort into understanding the business process they wanted to implement and investigating the viability of proposed IT solutions so they could communicate clearly to the industry at the procurement stage what was required. While this report focuses on delivery rather than procurement, market sounding is an important part of planning the business change process. Few of the Centres of Excellence or the Senior Responsible Owners we surveyed had made use, for example, of Intellect's Concept Viability Service, yet the Service is designed to help organisations test and refine the thinking behind major business changes before going to the market to contract with suppliers.

3.25 Given the relative lack of experience of many Senior Responsible Owners (paragraph 2.14), there is a clear need for departments to ensure they are supported by sources of professional expertise. Delivering Policy workshops, for example, have been established by the Cabinet Office, HM Treasury, the Office of Government Commerce and the National School of Government as best practice for mission critical policies and programmes. They aim to smooth the transition from policy development to implementation by assisting the lead policy official and/or Senior Responsible Owner and their teams to address the common causes of unsuccessful policy delivery and to plan how the policy will be implemented. The Office of Government Commerce's Executive Support Service supplies experienced, accredited individuals to act as mentors to Senior Responsible Owners or to provide advice and guidance as Non Executive Members of Programme Boards.

8   IT suppliers' key differences between private and public sector clients
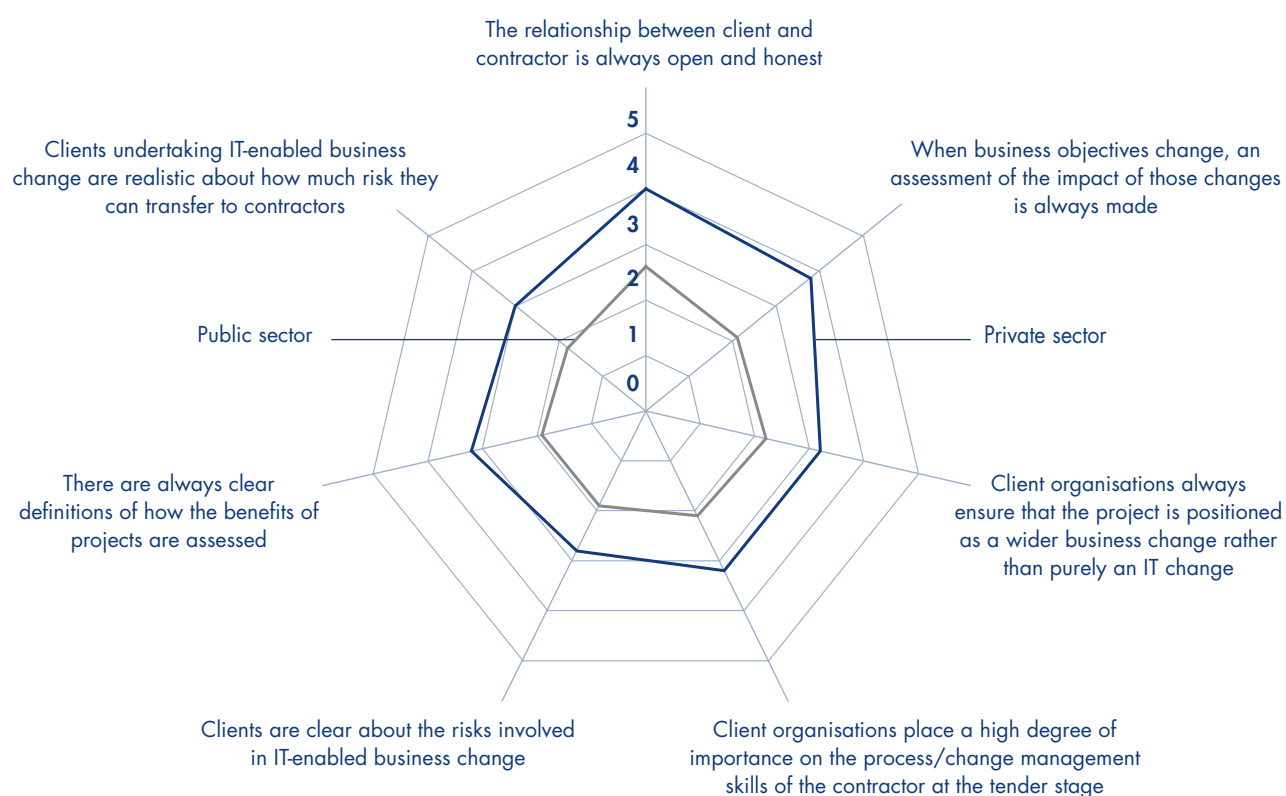
Source: Ipsos MORI-NAO IT suppliers workshops (n=21)

NOTE

5 indicates a strong rating. 1 indicates a weak rating.

3.26 Within departments, Centres of Excellence were designed to occupy a central position and to provide both scrutiny and support to Senior Responsible Owners, Chief Information Officers and Ministers. Their contribution is however variable, with a striking 38 per cent of Senior Responsible Owners having no involvement with a Centre of Excellence, 20 per cent rating the support of the Centre of Excellence as poor, and only 38 per cent rating its contribution as very or fairly good. Only around half (53 per cent) of Senior Responsible Owners strongly agreed or agreed that their Centre of Excellence was a hub for the dissemination of good practice or lessons learned and half (48 per cent) that it monitored and measured the performance of individual programmes and projects.

3.27 Chief Information Officers are another important source of potential support and expertise to Senior Responsible Owners and our survey showed that 58 per cent of Senior Responsible Owners met with their Chief Information Officer at least monthly. The creation of the Chief Information Office role raises the issue however of the co-ordination of their responsibilities with those of

Centres of Excellence and the contribution of each in, for example, supporting Senior Responsible Owners, building capability and capacity in programme and project management of IT-enabled change, and spreading good practice.

3.28 As well as the support of colleagues, those responsible for programmes and projects made use of a range of guidance tools produced by the Office of Government Commerce. Both Heads of Centres of Excellence and Senior Responsible Owners found Office of Government Commerce guidance helpful **(Figure 9)**, indicating that use of these products has increased since 2003-04 when we last examined this issue.[13]

3.29 Some 13–23 per cent of Senior Responsible Owners had not used the different types of guidance however, indicating further scope for the Office of Government Commerce to make senior civil servants more aware of what is available. This is consistent with our *Improving IT Procurement* report where we noted that experienced users were more familiar with such guidance.

9	Centres of Excellence and Senior Responsible Owners found OGC guidance helpful		
OGC Guidance	**Centres of Excellence: Guidance "very helpful" or "fairly helpful"** %	**Senior Responsible Owners: Guidance "very helpful" or "fairly helpful"** %	**Senior Responsible Owners: Guidance "not used"** %
Managing Successful Programmes	94	73	15
PRINCE2	90	70	13
Guidance on Management of Risk	90	70	15
Successful Delivery Toolkit	87	65	23

Source: National Audit Office

13   National Audit Office (2004) *Improving IT Procurement: The impact of the Office of Government Commerce's initiatives on departments and suppliers in the delivery of major IT-enabled projects*, Report by the Comptroller and Auditor General, HC 877 Session 2003-2004, 5 November 2004. London: The Stationery Office.

PART FOUR
Realising the benefits of change

4.1 Benefits realisation is an ongoing process that begins at the earliest stage of any change programme. Organisations must understand what they are trying to achieve and the costs and benefits of achieving it, and put in place measures to determine that the benefits have been realised. Otherwise, there is no obvious driver to push and promote the purpose of the planned business change. Successful change programmes:

- **sold the benefits to users;**

- **won the support of wider stakeholders; and**

- **continued to optimise the benefits after completion of the programme or project.**

Lessons from our case studies

Selling the benefits to users

4.2 A programme or project may be delivered to time, specification and budget, but a system no one uses represents failure not success. This is particularly important for IT-enabled changes to public services, which to be successful may need to convince millions of people of either the need for or the benefits of changing their behaviour. A major factor in the success of our case study organisations was their understanding of the scope, magnitude and implications of the changes they were proposing to implement, who would be affected and what would persuade users to adopt the new system.

4.3 When the Department of Trade and Industry began the introduction of Consumer Direct, some local authorities were reluctant to change existing local Trading Standards services. The Department ran a communication and stakeholder engagement campaign to highlight the benefits of Consumer Direct through a dual approach, marketing the new service not only to local authorities, but also among potential customers, by using mail shots to target streets where residents were least likely to be aware of how to complain about poor standards of goods and services.

4.4 Roll out may involve market segmentation to build support among key customers first. For its Oyster® card, Transport for London targeted through posters, press advertising and emails those customers most likely to take it up – season ticket holders accustomed to paying for their travel in advance. Similarly, the Vehicle and Operator Services Agency targeted big customers with substantial truck fleets through trade meetings and events, with the aim of converting to the new system the 12.5 per cent of customers responsible for 50 per cent of the transactions.

4.5 For some major changes, users may need special facilities to participate. The success of the Department for Work and Pensions' Payment Modernisation Programme depended on converting 15 million customers' payments to electronic methods. This required a clear communications strategy to persuade customers, many of whom had no bank accounts and some of whom had poor credit histories, to forgo collecting benefits and pensions in cash in favour of receiving money paid into an account.

4.6 The UK payments trade association's chip and PIN Programme needed to overcome a mismatch in the priorities of retailers and banks. For banks, the benefits of the change were through the potential for reduced credit card fraud. For retailers, the scheme created additional costs because they were obliged to replace point of sale equipment. In keeping both sides at the negotiating table, the Programme was supported by Government, the most powerful stakeholder, which pushed both parties to tackle credit card fraud. The chip and PIN team designed a targeted approach to convince retailers of the merits of the change by devising different strategies according to their market share. The largest and most influential retailers were invited to participate in meetings with senior representatives of the team. Smaller retailers were targeted by their banks, which provided promotional literature and telephone support lines.

Winning the support of wider stakeholders

4.7 To realise the projected benefits of the change, organisations need to communicate the benefits of their new systems not only to users, but also to those in a position to influence the success of the system and of the organisation as a whole. Wider stakeholders may include investors, customers, trade unions, regional and local authorities, lobby groups, consumer groups, professional bodies, and voluntary and community bodies representing the interests of particular communities or sectors of society. Stakeholder consultation is particularly important in sectors with strong lobby groups and where consultation may be a statutory requirement.

4.8 In their initial planning, successful organisations identify wider stakeholders and determine how they will communicate and consult with them to win their support. In the planning phase of Ireland's Revenue On-Line Service, the project team invited to workshops influential stakeholders, including professional bodies, tax agents, accountants and large businesses, to explain the plans and to address concerns. Further marketing included mail shots and touring mobile units to demonstrate the new system to potential customers, including directors and senior partners in businesses and accountancy practices. For the Department of Trade and Industry's Consumer Direct programme, a tailored communications plan allowed the Scottish implementation of consumer direct to address stakeholder concerns and helped develop enthusiasm for the project.

Optimising the benefits

4.9 To determine whether a programme or project has been successful, clear criteria to measure success must be built into the business case and effort taken at the end of the process to establish whether they have been achieved. Benefits may include reduced costs, improved service or the ability to offer new services. Steering citizens and businesses towards self-service transactions delivered through the Internet, for example, can achieve substantial efficiency gains. The Irish Revenue Commissioners have set a staff redeployment target to achieve a 30 per cent increase in the number of staff engaged on compliance work by the end of 2007. Achieving this target will be greatly assisted by the increased take up of online filing on the Revenue On-Line Service, which has eliminated the need for manual processing of paper returns. In the competitive financial services market, the Britannia Building Society's "Really Big Programme" was crucial in maintaining its edge. By giving staff access to a customer's whole product profile, staff could identify opportunities to present customers with new products and services.

4.10 Important for the full realisation of benefits are plans to monitor not only immediate benefits, but also benefits that may be realised long after the end of the programme. Tracking over time enables organisations to make more informed investment decisions about IT-enabled change in the future and can generate improved return on any original investment by continuing re-assessment of how new systems can be developed and put to greater use. After its contact centre for insurance products went live, Prudential UK sought to improve the ratio of calls handled at the first level of contact by improving the service to avoid customers having to be passed on to the more expensive second tier of specialist staff. Similarly, New York City uses data from its 3-1-1 system to improve service delivery, and continuous up-training makes call handlers more confident about dealing with a wider range of issues. Analysis of call patterns is used to examine, for example, the time taken to fix a pothole, follow up on a noise complaint, or replace a streetlight. Data are also used to plan services. Complaints about crime, noise or anti-social behaviour can be analysed for peak times and locations to help schedule police patrols.

4.11 The United States' Department of Defense has determined that its Common Access Card reduced the time taken to issue an identity card to 15 minutes compared with hours previously. To maximise benefits, however, the Department of Defense has an ongoing programme to devise new uses for the Common Access Card, including developing its ability to do web-based e-business and adding a biometric to the card to improve identity authentication.

4.12 The Department for Work and Pensions' Payment Modernisation Programme benefits realisation plan will monitor benefits, including reduced transaction costs, reduced fraud, and savings in staff and other operational costs until 2009-10. This required commitment from across the Department and its agencies to track, measure, refine and optimise benefits. The benefit realisation plan assigns clear accountability to "benefit owners" who are signed up to achieving the plan's targets. A Residual Issues Team has been put in place to optimise benefits further; for example, by reducing transaction costs through bringing down the proportion of customers still receiving payment through the more expensive option of cheques.

4.13 The National Health Service's organ transplant service UK Transplant undertakes constant analysis of its National Transplant Database; for example, to improve the allocation procedures for donated organs. This helps better identify the most suitable patients and ensures vital organs reach them as quickly as possible. The Database also needs to be flexible to adapt to new policy options, such as enabling new procedures for live donations.

How equipped are departments to realise the benefits of IT-enabled business change?

4.14 Suppliers in our workshops reported that, in their judgement, both public and private sector bodies took seriously the issue of benefits realisation but, as Figure 8 above indicates, public sector clients were less likely to position the IT-enabled change as an integral part of wider business change and were less clear about how to define the benefits. A key means to achieving such benefits involves early and informed engagement with stakeholders. Another of the National Audit Office and Office of Government Commerce's "eight common causes of failure" (Appendix 3): a "lack of effective engagement with stakeholders" caused concern to 42 per cent of Centres of Excellence.

4.15 Benefits evaluation is a key and final stage of the OGC Gateway Review process. Our analysis of Office of Government Commerce Gateway data (Appendix 2 – Figure 11) shows that only four per cent of all 720 Gateway Reviews of IT-enabled programmes and projects carried out between June 2002 and June 2006 were Gate 5 (Benefits Evaluation) Reviews; although the percentage of programmes and projects that reach Gate 4 (Readiness for Service) and go on to Gate 5 has increased (Appendix 2, Figure 12). To address this, the Office of Government Commerce Supervisory Board has agreed that from 2006-07 all programmes and projects must undertake a Gate 5 Review within 12 months of completing a Gate 4 Review, unless there are specific circumstances such as the delivery date being beyond the twelve month period.

4.16 Beyond the immediate post-implementation period, optimisation of benefits involves tracking and positively promoting sustained improvements to business processes in the longer term. With the introduction of resource accounting and the drive for increased efficiency, there is, elsewhere in government, clear incentive for departments to make maximum use of their assets. However, where IT-enabled business change is concerned, information on the costs and benefits has often been in short supply, as has information on how well programmes and projects are realising benefits. In addition, longer-term benefits optimisation can be hampered by dilution of accountability through often significant changes in staffing of government IT-enabled programmes and projects as one phase ends and another commences. The solution is the approach adopted by the Department for Work and Pensions in their benefits realisation plan – that of assigning responsibility for promoting and securing benefits to named individuals – benefits owners – over the medium-term of the first few years' following implementation. This approach is being promoted by the Office of Government Commerce as good practice.

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APPENDIX ONE
Methodology

1   Fieldwork took place between July 2005 and June 2006.

Case studies

2   We reviewed a wide range of programmes and projects put forward as successful, excluding those that could not demonstrate significant take up by users or clear benefits, and selected 24 as case studies that most strongly met the following criteria:

■   **significant degree of business transformation** – significant changes to work practices or interactions with stakeholders

■   **significant delivery of benefits** – programmes – and projects realised either financial or non-financial benefits

■   **diversity of examples in terms of size and types of transformations** – web transformations, back office transformations, large and small internal process changes, business-to-business and business-to-consumer transformations

■   **deemed successful** by their respective organisations and by others in the industry.

3   The case studies included public and private sectors in the UK and the public sector overseas. The private sector examples include winners of industry awards and programmes and projects nominated by major suppliers and consultants, including IBM, Oracle, Deloitte, EDS, Capgemini and Hedra plc. Central government examples were nominated by the Chief Information Officer (CIO) Council and the Office of Government Commerce, as well as suppliers. Some nominees emerged from workshops at the sector trade association Intellect. Overseas examples were gathered from Supreme Audit Institutions, suppliers and contractors in the Republic of Ireland, the United States and Canada.

4   For each case study, we conducted semi-structured interviews with programme and project managers (some 40 in all). Interviews lasted from 1.5 to 3 hours and were wherever possible taped and transcribed. Transcripts were analysed to draw out key principles and activities commonly found in successful IT-enabled business change programmes and projects.

5   At the end of the fieldwork, we conducted a thematic analysis of the case study evidence, which identified the three core principles of successful IT-enabled business change described earlier.

Supplier workshops

6   Two half-day workshops were held in collaboration with Intellect (the trade association for the UK IT industry) – 17 attendees for the public sector and five for the private sector – of major IT suppliers to public and private sectors. These were facilitated by Ipsos MORI, who recorded and transcribed the proceedings and subjected them to thematic analysis. The workshops addressed three key issues:

■   How can government departments deliver large, complex IT-enabled business change projects more effectively?

■   Are there key differences between how the public and private sectors manage key points of vulnerability, immaturity and risk in the project lifecycle and if so, are there lessons from the private sector that the public sector could adopt?

■   How should success in an IT-enabled business change project or programme be measured and evaluated beyond budget, time and quality?

CIO workshop

7 A further workshop set up in collaboration with the e-Government Unit and facilitated by Ipsos MORI, was held with seven government Chief Information Officers (CIOs) to explore:

■ examples of successful IT-enabled business change;

■ the role of CIOs in IT-enabled business change; and

■ how the CIO role should develop in the future.

Ipsos MORI recorded, transcribed and analysed the proceedings.

Interviews with industry experts and suppliers

8 Semi-structured interviews and consultations were undertaken with IT industry trade associations, professional bodies and consultancy firms, involving some 30 directors and senior representatives from the British Computer Society, CIO-Connect, Institute of Directors (Senior Policy Advisor), Society of Information Technology Management, Accenture, Atos Origin, BT, Capgemini, Deloitte, EDS, Fujitsu, Hedra, HP Laboratories, IBM, Oracle, PA Consulting Group, SAP and Siemens Business Services. These focused on identifying major factors contributing to the delivery of IT-enabled business change, barriers to success and examples of successful business changes.

9 Interviews were also conducted with the central government bodies most responsible for IT-enabled business change across government – the e-Government Unit and the Office of Government Commerce.

Census and survey

10 A census of central government Centres of Excellence and a survey of Senior Responsible Owners of mission critical and high risk programmes and projects were conducted by Ipsos MORI to capture views on best practice and how the delivery of IT-enabled business change could be strengthened in government **(Figure 10)**.

10	Centres of Excellence census and Senior Responsible Owner survey

	Number	Returns	Response rate %
CoE census	31	31	100
SRO survey	42	40	95

Senior Responsible Owner (SRO) survey sample of 42 (56 programmes and projects covered; 13 SROs were SROs for more than one programme or project) based on population of 84 covering 107 programmes and projects in departments within the NAO's remit involved in IT-enabled mission critical or high risk civil programmes and projects. SROs whose responsibilities included areas covered in the questions – Chief Information Officers, Centres of Excellence or Office of Government Commerce guidance were excluded. Where departments had more than one, every alternate programme or project was selected.

Source: National Audit Office

International comparison

11 A visit to the Government Accountability Office in the United States was undertaken to discuss developments in the delivery of IT-enabled business change and the role of the Chief Information Officer, and a visit to a Federal Government Agency for discussion with its Chief Information Officer.

Expert review

12 With the assistance of Intellect, our findings were presented at interim and final stage to the Intellect Public Sector Suppliers Council to validate them with industry experts and to provide expert feedback and review.

APPENDIX TWO

Gateway Reviews and mission critical reporting

Gateway Reviews

1   Gateway data of IT-enabled programmes and projects show that although the number of programmes and projects entering the Gateway process has remained relatively steady, rising slightly from an average of 14 a month to 15 a month, more programmes are now entering at Gate 0 **(Figure 11)**. This is an improvement since 2004-05 when the Committee of Public Accounts raised concerns that, despite Gateway Reviews being mandatory for high and medium risk programmes and projects, 30 per cent were bypassing Gates 0 and 1, entering the process after the business case had been prepared.[14] Concerns remain however about the final stage of the process. By June 2006, 468 IT-enabled programmes and projects had entered the Gateway process. Of 83 IT-enabled programmes and projects that completed their Gate 4 (Readiness for Service) stage by June 2005, overall only a third (33 per cent) went on to a Gate 5 Review by June 2006; although the percentage of programmes and

projects that reach Gate 4 and go on to Gate 5 increased from 28 per cent to 36 per cent between 2003 and 2006 **(Figure 12)**. As a consequence, the Office of Government Commerce Supervisory Board has agreed that from 2006-07 all programmes and projects must undertake a Gate 5 Review within 12 months of completing a Gate 4 Review, unless there are specific circumstances such as the delivery date being beyond the twelve month period.

2   Across government, scrutiny and oversight of Gateway Reviews have been strengthened with the introduction in 2005 of a process whereby the National Audit Office receives copies of letters from the Office of Government Commerce's Chief Executive to Accounting Officers where a programme or project under their command receives consecutive "Red" Gateway Reviews. This raises the visibility of highly specific risks to programmes and projects to make sure Accounting Officers engage with the risks and take action to address them.

| **11** | More IT programmes are entering the Gateway process at the beginning (Gate 0 Strategic Assessment), but there has been little increase in the percentage of Gate 5 (Benefits Evaluation) Reviews |

Gate	Jun 02 – Mar 04	Jun 02 – Mar 04	Apr 04 – Jun 06	Apr 04 – Jun 06	Total Reviews Jun 02 – Jun 06	Total Reviews Jun 02 – Jun 06
	n	**%**	**n**	**%**	**n**	**%**
Gate 0 Strategic Assessment	50	**16**	125	**31**	175	**24**
Gate 1 Business Justification	56	**18**	64	**16**	120	**17**
Gate 2 Procurement Strategy	64	**21**	60	**15**	124	**17**
Gate 3 Investment Decision	84	**27**	63	**15**	147	**20**
Gate 4 Readiness for Service	49	**16**	76	**19**	125	**17**
Gate 5 Benefits Evaluation	8	**3**	21	**5**	29	**4**
Total IT-enabled programme and project reviews	311	**100**	409	**100**	720	**100**

Source: Office of Government Commerce

14   Committee of Public Accounts (2005) *The Impact of the Office of Government Commerce's Initiative on the Delivery of Major IT–enabled projects*, 27th Report of Session 2004–05, 6 April 2005, London: The Stationery Office.

3   Another potential issue of concern is that over the period April 2004 to June 2006, for IT-enabled programmes and projects the percentage of Gateway Reviews designated as "Green" fell to 10 per cent (from 20 per cent for June 2002-March 2004), while "Red" Reviews increased from 30 per cent to 34 per cent, indicating more detection by reviewers of issues needing immediate action **(Figure 13)**. As we commented in our report on *Improving IT Procurement*, "Red" Reviews at early stages can indicate that the Gateway Review process is working effectively[15], but the Red-Amber-Green changes are difficult to interpret. Are reviewers becoming tougher and/or more cautious/risk averse, is the management of programmes and projects deteriorating, or are the programmes and projects being undertaken more risky? In addition, the Office of Government Commerce does not currently track the progress of individual programmes and projects through the Gateway process, which makes it difficult to assess where particular problems arise.

12 A third of IT-enabled programmes and projects that completed the Gate 4 (Readiness for Service) stage of the Gateway process reached Gate 5 (Benefits Evaluation)

Period	Total	Gate 4 programmes and projects going on to a Gate 5 Review by June 2006	%
IT-enabled programmes and projects completing Gate 4 Review stage by March 03	36	10	28
IT-enabled programmes and projects completing Gate 4 Review stage April 03 – June 05	47	17	36
Total	83	27 [1]	33

Source: Office of Government Commerces

NOTE

1   Two additional Gate 5 Reviews took place directly from Gate 3 Reviews.

13 Red, Amber, Green status of Gateway Reviews of IT-enabled programmes and projects

Period	Red		Amber		Green		Total
	n	%	n	%	n	%	
April 04–June 06	138	34	232	57	39	10	409
June 02–March 04	94	30	154	50	63	20	311
Total							**720**

Source: Office of Government Commerce

15   National Audit Office (2004) *Improving IT Procurement: The impact of the Office of Government Commerce's initiatives on departments and suppliers in the delivery of major IT-enabled projects*, p.24.

Mission critical reporting

4   Across government, the requirement for departments to report regularly to the Prime Minister through the Office of Government Commerce on mission critical programmes and projects has improved their visibility and accountability. Due to the constant evolution of the list, it is difficult however to detect whether increased visibility of programmes and projects and the actions taken by the Office of Government Commerce as a result of Key Programme reporting are contributing to successful delivery and whether, as might be expected, individual programmes and projects are moving towards the "Green" end of the spectrum as they near completion **(Figure 14)**.

In addition, the decline between 2004 and 2005 in the percentage of "Green" rated mission critical programmes and projects is difficult to interpret due to the change from 2005 to the four-colour rating model of Red, Amber/Red, Amber/Green, Green.

5   While the nature of mission critical programmes and projects means that they may remain risky endeavours throughout their life cycle, there is scope for the Office of Government Commerce to monitor the status of individual programmes and projects over time to probe any apparent shortfalls in performance and to ensure that the necessary interventions are identified and monitored.

14 Between 2004 and 2005 the percentage of "Red" rated mission critical programmes and projects remained relatively constant while "Green" ratings declined

Report date	Total programmes/ projects	Mission critical status 🔴	Mission critical status 🟡		Mission critical status 🟢	Not rated	Total
		Red %	Amber %		Green %	%	%
	n						
July 2006[1]	91	10	22 7 42		14	6	100
December 2005[2]	97	11	22 48		12	6	100
November 2004	117	14	56		28	3	100
July 2004	122	9	49		35	7	100
February 2004	112	9	50		38	5	100
October 2003	100	13	45		37	5	100
July 2003	113	9	49		36	6	100

Key

Red	Highly problematic – requires urgent and decisive action.
Amber/Red	Problematic – requires substantial attention, some aspects need urgent attention.
Amber (superseded)	Either: 1) Key issues – e.g. funding/business case, Ministerial and official-level leadership, and deliverability of major milestones – impacting successful delivery, or 2) Major variances from plan.
Amber/Green	Mixed – aspect(s) require substantial attention, some good.
Green	Good – requires refinement and systematic implementation.

Source: Office of Government Commerce

NOTES

1 Some departments have not yet discontinued the classification "Amber".

2 The schedule of mission critical reporting was curtailed in March 2005 by the General Election.

APPENDIX THREE

DAO(GEN)07/04 Delivering Success in Government Acquisition-Based Programmes & Projects

1 Horse Guards Road London
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30 March 2004

Brian Glicksman
Treasury Officer of Accounts

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DAO(GEN)07/04

Dear Accounting Officer

DELIVERING SUCCESS IN GOVERNMENT ACQUISITION-BASED PROGRAMMES & PROJECTS

Summary and Purpose

The purpose of this letter is to advise Accounting Officers:

■ that procedures introduced in January 2003 by the Office of Government Commerce to improve the delivery of IT-enabled programmes and projects are now extended to all acquisition-based programmes and projects;

■ that, as a result, the responsibilities of Accounting Officers outlined in DAO (GEN) 01/03 to assure their major IT-enabled projects against common causes of project failure are now extended to cover all major acquisition-based projects.

The list of common causes of project failure against which Accounting Officers are asked to assure their projects has been updated by OGC and NAO to reflect this broadening of scope and is enclosed at Annex 1.

Action and Contacts

1 A Major Project is defined as one that scores 41 or more on the Gateway Risk Potential Assessment or is prioritised as Mission Critical.

2 Accounting Officers are asked to:

a note the expansion of scope of the procedures introduced in 2003 from IT-enabled to acquisition based.

b ensure, from the date of this letter, that all Mission Critical and High Risk acquisition-based projects do not suffer from any of the common causes of failure as identified by the OGC and NAO.

    c draw this letter to the attention of appropriate staff in their departments and Executive Agencies, to the attention of the Chair of their Audit Committee, and to the attention of staff in their NDPBs.

    d note that enquiries about the actions described above should be addressed to the OGC Service Desk on 0845 000 4999, ServiceDesk@ogc.gsi.gov.uk

3 DAO (GEN)01/03 detailed six actions agreed by Ministers to strengthen the delivery of IT-enabled Government programmes and projects. Ministers decided in December 2003 that these actions will apply to all acquisition-based programmes and projects. The revised actions are:

    a Departmental Programme/Project Management Centres of Excellence to cover all acquisition based, and all mission critical and/or high risk programmes/projects, including agencies and NDPBs.

    b Accounting Officers to provide assurance on all mission critical and high-risk acquisition-based projects, that they do not suffer from the common causes of failure identified from OGC and NAO experience.

    c Mandate no big-bang implementations and developments (i.e. mandate modular, incremental implementations and developments) for IT-enabled programmes and projects, unless approved by central scrutiny group (Chief Secretary to the Treasury, Minister for e-Transformation, OeE, OGC).

    d No government initiative (including legislation) dependent on IT to be announced before analysis of risks and implementation options has been undertaken.

    e Prioritise all acquisition-based programmes and projects as Mission Critical, Highly Desirable or Desirable.

    f All mission critical and high risk acquisition-based programmes and projects, to have a clearly identified: (i) responsible Minister and (ii) Senior Responsible Owner, and Project Manager, with good, relevant track records.

Next Steps

4 The arrangements developed for confirming Accounting Officer assurance of IT-enabled projects will now extend to encompass other acquisition-based projects. OGC advises that following a Gateway 1 review of a Mission Critical or High Risk acquisition-based project, Accounting Officers should satisfy themselves that the project does not suffer from any of the common causes of failure. Having done so, a signed note to this effect should be placed on the relevant project file.

5 Where Mission Critical and High-Risk acquisition-based projects have already completed a Gateway 1 review (business justification), but have not gone live, this assurance check should be completed by 1 May 2004.

6 The Gateway criteria are being amended so that subsequent Gateway reviews will check for the existence of the appropriate record. The absence of such a record will result in an automatic Gateway recommendation that the project should not proceed until this requirement has been met.

7 Separate guidance is being issued to Departmental Centres Of Excellence to cover these new arrangements.

8 This letter replaces DAO (GEN) 01/03, which is hereby cancelled.

Yours sincerely

Brian Glicksman
Treasury Officer of Accounts

Annex: NAO/OGC agreed list of common causes of project failure

1 Lack of clear link between the project and the organisation's key strategic priorities, including agreed measures of success.

2 Lack of clear senior management and Ministerial ownership and leadership.

3 Lack of effective engagement with stakeholders.

4 Lack of skills and proven approach to project management and risk management.

5 Too little attention to breaking development and implementation into manageable steps.

6 Evaluation of proposals driven by initial price rather than long-term value for money (especially securing delivery of business benefits).

7 Lack of understanding of and contact with the supply industry at senior levels in the organisation.

8 Lack of effective project team integration between clients, the supplier team and the supply chain.

Questions to ask

1 Lack of clear link between the project and the organisation's key strategic priorities, including agreed measures of success.

- Do we know how the priority of this project compares and aligns with our other delivery and operational activities?

- Have we defined the critical success factors (CSFs) for the project?

- Have the CSFs been agreed with suppliers and key stakeholders?

- Do we have a clear project plan that covers the full period of the planned delivery and all business change required, and indicates the means of benefits realisation?

- Is the project founded upon realistic timescales, taking account of statutory lead times, and showing critical dependencies such that any delays can be handled?

- Are the lessons learnt from relevant projects being applied?

- Has an analysis been undertaken of the effects of any slippage in time, cost, scope or quality? In the event of a problem/conflict at least one must be sacrificed.

2 Lack of clear senior management and Ministerial ownership and leadership.

- Does the project management team have a clear view of the interdependencies between projects, the benefits, and the criteria against which success will be judged?

- If the project traverses organisational boundaries, are there clear governance arrangements to ensure sustainable alignment with the business objectives of all organisations involved?

- Are all proposed commitments and announcements first checked for delivery implications?

- Are decisions taken early, decisively, and adhered to, in order to facilitate successful delivery?

- Does the project have the necessary approval to proceed from its nominated Minister either directly or through delegated authority to a designated SRO?

- Does the Senior Responsible Owner (SRO) have the ability, responsibility and authority to ensure that the business change and business benefits are delivered?

- Does the SRO have a suitable track record of delivery? Where necessary, is this being optimised through training?

3 Lack of effective engagement with stakeholders.

- Have we identified the right stakeholders?

- In so doing, have we as intelligent customers, identified the rationale for doing so (e.g. the why, the what, the who, the where, the when and the how)?

- Have we secured a common understanding and agreement of stakeholder requirements?

- Does the business case take account of the views of all stakeholders including users?

- Do we understand how we will manage stakeholders e.g. ensure buy-in, overcome resistance to change, allocate risk to the party best able to manage it?

- Has sufficient account been taken of the subsisting organisational culture?

- Whilst ensuring that there is clear accountability, how can we resolve any conflicting priorities?

4   Lack of skills and proven approach to project management and risk management.

- Is there a skilled and experienced project team with clearly defined roles and responsibilities? If not, is there access to expertise, which can benefit those fulfilling the requisite roles?

- Are the major risks identified, weighted and treated by the SRO, the Director, and Project Manager and/ or project team?

- Has sufficient resourcing, financial and otherwise, been allocated to the project, including an allowance for risk?

- Do we have adequate approaches for estimating, monitoring and controlling the total expenditure on projects?

- Do we have effective systems for measuring and tracking the realisation of benefits in the business case?

- Are the governance arrangements robust enough to ensure that "bad news" is not filtered out of progress reports to senior managers?

- If external consultants are used, are they accountable and committed to help ensure successful and timely delivery?

5   Too little attention to breaking development and implementation into manageable steps.

- Has the approach been tested to ensure it is not 'big bang' for example in IT-enabled projects?

- Has sufficient time been built in to allow for planning applications in Property & Construction projects for example?

- Have we done our best to keep delivery timescales short so that change during development is avoided?

- Have enough review points been built in so that the project can be stopped, if changing circumstances mean that the business benefits are no longer achievable or no longer represent value for money?

- Is there a business continuity plan in the event of the project delivering late or failing to deliver at all?

6   Evaluation of proposals driven by initial price rather than long-term value for money (especially securing delivery of business benefits).

- Is the evaluation based on whole-life value for money, taking account of capital, maintenance and service costs?

- Do we have a proposed evaluation approach that allows us to balance financial factors against quality and security of delivery?

- Does the evaluation approach take account of business criticality and affordability?

- Is the evaluation approach business driven?

7   Lack of understanding of and contact with the supply industry at senior levels in the organisation.

- Have we tested that the supply industry understands our approach and agrees that it is achievable?

- Have we asked suppliers to state any assumptions they are making against their proposals?

- Have we checked that the project will attract sufficient competitive interest?

- Are senior management sufficiently engaged with the industry to be able assess supply-side risks?

- Do we have a clear strategy for engaging with the industry or are we making sourcing decisions on a piecemeal basis?

- Are the processes in place to ensure that all parties have a clear understanding of their roles and responsibilities, and a shared understanding of desired outcomes, key terms and deadlines?

- Do we understand the dynamics of industry to determine whether our acquisition requirements can be met given potentially competing pressures in other sectors of the economy?

8   Lack of effective project team integration between clients, the supplier team and the supply chain.

■   Has a market evaluation been undertaken to test market responsiveness to the requirements being sought?

■   Are the procurement routes that allow integration of the project team being used?

■   Is there early supplier involvement to help determine and validate what outputs and outcomes are sought for the project?

■   Has a shared risk register been established?

■   Have arrangements for sharing efficiency gains throughout the supply team been established?

If any of the answers to the above questions are unsatisfactory, an acquisition-based project should not be allowed to proceed until the appropriate assurances are obtained.

Explanatory notes

An acquisition-based project is one that has a significant element dependent on the supply of goods and/or services by a third party supplier or suppliers. Whilst it is not essential for the goods or services to be provided by a single supplier, the contribution of the third party supplier or suppliers should be considered significant if a failure to deliver on their part attracts public criticism.

A high-risk project is one which scores 41 or more against OGC's Gateway Risk Potential Assessment framework.

A project is defined as a unique set of co-ordinated activities with a finite duration, defined cost and performance parameters and clear outputs to support specific business objectives.

By value for money is meant "the optimum combination of whole-life cost and quality, fitness for purpose to meet user requirements" (Government Accounting).