CORPORATE IDENTITY

A critical analysis of private companies' engagement with the identity cards scheme

UK PASSPORT SERVICE

An Executive Agency of the Home Office

Demonstration Card

Reference Number: 3859

Mr Alan Lodge

Thank you for taking part in the UKPS Biometrics Enrolment Trial

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Introduction

There has been considerable criticism of the Identity Cards Bill on the grounds of erosion of civil liberties, ineffectiveness in its intended aims and lack of clarity around cost, but relatively little attention seems to have been paid to the significant practical problems of implementing ID cards and the National Identity Register (NIR). There is considerable unease within the information technology (IT) industry around both the government's record on IT procurement and the technologies - especially biometrics and database security - proposed for use in the ID cards scheme.

Most of the implementation of the scheme is likely to be done by private companies, some of which have already been meeting and lobbying government. These include companies with previous poor records in outsourced public sector work. Corporate Watch decided to investigate and bring to public attention which companies have shown interest in the ID cards scheme and (where relevant) their records in public-sector projects. We have also provided a brief overview of some of the opinions of industry and official bodies on the IT procurement process and ID card technologies.

> *Implementation of the ID cards scheme is likely to be done by private companies, including companies with previous poor methods in outsourced public sector work.*

Company Profiles

The profiles that follow are a selection of the companies which have shown an interest in involvement in implementing ID cards. They are intended to suggest what types of companies may be involved in the scheme and give an idea of their records in government procurement, where relevant. The selection should in no way be taken to indicate relative importance of the companies concerned or perceived likelihood of winning contracts should the ID cards scheme become law. Unreferenced information is taken from companies' websites.

"A national ID card for the UK is overly ambitious, extremely expensive and will not be a panacea against terrorism or fraud."

Atos Origin

Atos Origin is an international IT services company with annual revenues around £3bn and 50,000 employees in 50 countries.

Atos Origin has the contract for the NHS e-booking system[11] , which is currently running around 12 months behind schedule[12] . A National Audit Office report in January 2005[13] suggested the major fault for delays does not lie with the company, but there were problems with implementation and the British Medical Association had previously expressed concerns about the security of the system[14] .
The company is open about its interest in the ID cards scheme and ran the pilot scheme examining biometric registration for passports and ID cards in 2004.
Atos Origin UK - Fulcrum House, 2 Killick Street, London N1 9JZ Tel: 0207 830 4444 *www.atosorigin.co.uk*

> **Atos Origin has the contract for NHS e-booking; the British Medical Association had previously expressed concerns about the security of the system.**

BT Global Services

BT Global Services, formerly BT Syntegra, is the business services section of the BT Group.

BT Global Services' Chief Executive, Andy Green in October told The Business, 'We are looking closely at the national ID cards project where we believe BT's extensive networking experience would be invaluable[15].' BT has met with Home Office officials to discuss the scheme[16] , and co-sponsored the Intellect organised 'Identity Cards - The Next Steps' conference in May 2004[17] .

BT has attracted controversy in major government contracts. For example, problems at the Child Support Agency were exacerbated by the fact that BT Syntegra's telephone system routed calls to the wrong offices around the country.
BT Global Services - BT Centre, 81 Newgate Street, London EC1A 7AJ Tel: 0207 356 5000 *ww.BTglobalservices.com*

Electronic Data Systems (EDS)

Texas-based Electronic Data Systems (EDS) is the worlds second-largest IT services company. The company's contracts with UK government departments represent two thirds of EDS's total revenue in the UK[18].

EDS's current contracts include the Ministry of Defence (worth £2.3 billion over 10 years[19]), the Department for Work and Pensions (£2.6 billion over 5 years[20]), the Courts Service (£20 million[21]), HM Prison Service(£200 million over 10 years[22] plus a new £39 million contract to run the National Offender Management Information System[23]) and the Metropolitan Police.

EDS's government contracts have been plagued with controversy:

Tax credits:

The Working Tax Credits and Child Tax Credits system was launched in April 2003. By the end of the tax year 2003/04 one third of all tax credit awards had been overpaid[24] , totalling £2.2 billion[25] , and 713,000 households had been underpaid a total of £464 million[26.].82,000 low income households were forced to make repayments[27]. Following a lengthy dispute over compensation payments, EDS made an out of court settlement to HM Revenue and Customs of £71.25 million[28] .This is the largest disclosed compensation payment from a supplier for failure of a government IT contract[29]. The system is now being run by Cap Gemini, Ernst & Young and Fujitsu services[30].

> **EDS's government contracts, such as the Tax Credits system, have been plagued with controversy. By the end of the tax year 2003/04, 23,000 claimants were underpaid a total of £8 million.**

Child Support Agency:

EDS installed this IT system 18 months late in March 2003, leading to calls for the IT system, and even the agency itself to be scrapped[31] . The total cost of the project, with the contract running to 2010, is estimated at £456 million[32] . A Work and Pensions Select committee inquiry into the scandal showed how IT problems hampered the progress of cases and slowed down the assessment of maintenance payments[33] . Between 3 March 2003 and 19 September 2004, the Agency retained £12.1 million of payments to EDS.

EDS' involvement in ID cards

EDS co-sponsored the *'Identity Cards - The Next Steps'* conference in May 2004 and gave an industry presentation. EDS was also joint sponsor (with Thales) of the *'Digital Identity'* conference in November 2004 .

In June 2005 The Business magazine revealed that:

EDS has been heavily involved with the Home Office team preparing the way for the multi-billion pound identity cards project for almost two years. Ministers have admitted that members of their ID card project team held face-to-face meetings with EDS officials during [...]the last session of parliament. [36]

EDS is the largest issuer of smart cards in the US, where it is responsible for the Department of Defense Common Access Card, and the Transportation Security Agency's Registered Traveler programme.
EDS UK: 2nd Floor, Landsdowne House, Berkeley Square, W1J 6ER Tel. 0207 569 5100 *www.eds.com*

Iridian Technologies

US-based Iridian Technologies holds patents on the core concepts and technologies behind iris recognition. The first commercial product reached the market in 1998. The technology has never been used on a scale anywhere close to that envisaged in the UK ID cards scheme.

The London School of Economics' recent report into ID cards presents evidence to show that, while iris scanning technology is more accurate than other biometrics, substantial practical difficulties face people with even minor eye conditions or visual aids using the technology. Iridian admits that up to 2% of the community will not be able to register an iris scan.

Since Iridian is the sole patent holder, the use of iris recognition technologies in the UK ID cards scheme is likely to be a an expensive option.

Iridian Technologies - 1245 Church Street, Suite 3,
Moorestown, New Jersey, 08057 USA
Tel: +41-79-213-76-44   *www.iridiantechnologies.com*

Iris recognition technology has never been used on a scale anywhere close to that envisaged in the UK ID cards scheme. Difficulties face people with even minor eye conditions. Up to 2% of the community will not be able to register an iris scan.

NEC

NEC (formerly Nippon Electronics Company) is Japanese based global electronics company. It has 147, 800 employees and in 2004 had a turnover of over $47 billion.

NEC Security Solutions is a world leader in biometric identification systems. It has over 60% of the worldwide fingerprint market and its systems are claimed to be some of the most reliable in the world - however, even the world's most reliable system has an accuracy of only 96.8%.

NEC has considerable experience in ID cards, including the world's largest biometric database for the South African Home Affairs National Identity System (HANIS) (issued to over 45 million adults) and the Macau national ID card.

NEC also provides digital fingerprinting technology to the City of London Police.

NEC (UK) Ltd - NEC House, 1 Victoria Road, London W3 6BL Tel: 0208 993 8111 *www.nec.co.uk*

NEC Security Solutions has over 60% of the worldwide fingerprint market, however, even the world's most reliable system has an accuracy of only 96.8%.

PA Consulting Group

PA Consulting Group is a management, systems and technology consulting firm. It employs more than 3,000 people in 35 countries.

PA Consulting is the Home Office's 'Development Partner' for the ID cards scheme, on a contract likely to be worth at least £19 million over 18 months[37] . It is unclear exactly how many PA Consulting employees are currently working on the scheme, but there were reported to be forty in January 2005 - it seems unlikely that this number would have gone down[38] .

In 2000, PA Consulting was employed to advise on the awarding of the contract to set up the Criminal Records Bureau, responsible for legally required criminal record checks on people working with children. PA's advice sent the contract to Capita, whose mismanagement led to months of delays, causing problems for thousands of job applicants, a cost overrun of £68.2m and eventually a recommendation by the National Audit Office that the contract be renegotiated[39].

PA Consulting Group 123 Buckingham Palace Road, SW1W 9SR Tel: 0207 730 9000 *www.paconsulting.com*

Siemens Business Services

Siemens Business Services (SBS), a subsidiary of German-based Siemens AG, provides information technology, net-working and large scale installations and systems maintenance. SBS's current UK government contracts include a 10 year contract with the National Assembly for Wales worth over £200 million, and a 10 year contract with the UK Passport Service for an automated passport processing system, which will be updated to allow for biometric passports.

SBS has been awarded a number of large scale IT contracts some of which have resulted in extremely high profile failures, costing the taxpayer millions:

· **Passport Agency:** Problems with the launch of the contract with SBS caused meltdown in the Passport Agency in 1999. The software was incapable of dealing with the volume of work, resulting in a backlog of 565,000 passports and delays of up to 50 days in the processing of applications. The delays led to £12.6 million of extra costs to the Agency, only £2.45 million of which were paid for by the company [40].

> *SBS representatives contradicted themselves by describing biometric technologies as 'emergent' and 'future technologies' before claiming that they are 'well proven'.*

· **Immigration and Nationality Directorate:** In April 1996 SBS won a con-tract to deliver a new system to speed up the processing of asylum applica-tions. The system was due to go live in October 1998 but failures with the software meant that only a interim system was rolled out in 2000, and the full system was dropped in February 2001. Computer Weekly commented that 'the IND's attempt to modernise its systems could go down in the text books as a classic example of how not to manage an IT project[41].

SBS has provided card based systems in Italy, Germany, Poland, Latvia and Lithuania, Singapore, India, Bosnia-Herzegovina and Ukraine, and biometric cards utilising iris recognition technology in Singapore[42].   SBS co-sponsored the 'ID Cards: The Next Steps' conference in May 2004 and gave a presentation.
In a media statement SBS representatives contradicted themselves by describing the biometric technologies envisaged by the ID cards legislation as 'emergent' and 'future technologies' before claiming that they are 'well proven'[43] .

Siemens Business Services: Siemens House, Oldbury, Bracknell, Berkshire, RG12 8FZ Tel. 01344 784300

Thales

Thales is a French-based global electronics company working in aerospace, defence and information technology. It is 33% owned by the French state[44].

In the UK Thales has over 10,000 employees based at 60 locations. Thales UK is the UK's second largest supplier of military equipment[45] . Beyond defence, one of Thales' core activities is security with services including secure identification solutions and IT security.

Along with EDS, Thales Security Systems was one of the principal sponsors of the 'Digital Identity' conference in November 2004[46].   In 2002 Thales won a contract for the production of ID cards for the People's Republic of China - a project subsequently mentioned in a report by Amnesty International into the misuse of security technologies by oppressive regimes[47].   In 2005 it won a similar contract in Morocco. Thales has also supplied smartcard technology to the US, South Africa, Namibia, Poland and the Netherlands.

Thales UK - 2 Dashwood Lang Road, The Bourne Business Park, Addlestone, Nr Weybridge, Surrey KT15 2NX Tel: 01932 824800 *www.thalesgroup.co.uk*

Unisys

US-based Unisys is an IT and consulting company specialising in server technology and systems design and with experience in smart cart technology.

In June 2005 Unisys co-sponsored the 'Towards Procurement and Implementation' conference on ID cards, at which ID cards Program Director Katherine Courtney was a key speaker[48] . The following month Unisys sponsored a Fabian Society seminar on ID cards featuring Home Office minister Tony McNulty[49].

Unisys was involved in introducing the national ID card system in Panama. In 2002 Panama's electoral commission cancelled the four-year contract for the high tech digital cards. Unisys was sacked after a Colombian man was found illegally holding 500 blank cards and the company admitted that it too had 30,000 blank cards, all of which should have been handed to the Panamanian government. The company has also been involved in issuing ID cards in Malaysia.

Unisys Ltd - Bakers Court, Bakers Road, Uxbridge UB8 1RG Tel: 01895 237137
www.unisys.co.uk

IT Procurement - the government's record

There have been a number of high-profile and expensive disasters in IT procurement during the lifetime of the current government, some of which are described in more detail in the company profiles above. While the companies involved in these projects must take some of the blame, it would be a mistake to ignore the role of poor planning and mismanagement by government departments. It is beyond the scope of this briefing to diagnose the causes of the government's failures in IT, but a few snapshots might help suggest where the process breaks down.

> *"The Government has no lawyers who deal with technology procurement. They're fantastic at drafting legislation, but they have no technology expertise. The Government is the dream client."*

IT procurement -
the government's record

It is interesting to note that in at least one area - the preparation of contracts - the government is moving in the opposite direction from industry. A recent article in The Lawyer on legal firms involved in public sector IT contracts reveals that most major private companies now keep such work in-house, but according to IT partner Michael Chissick from Field Fisher:

> The Government has no lawyers who deal with technology procurement. They're fantastic at drafting legislation and I couldn't touch them on planning, but they have no technology expertise. The Government is the dream client. [50]

In other words, the government is contracting out the writing of major IT contracts even as such a strategy is abandoned by industry.

The closed nature of the procurement process has also provided grounds for concern, including among parliamentary committees. Five years ago, the Office of Government Commerce (OGC) was set up to monitor and improve standards in outsourcing. One of its roles is to carry out 'Gateway' reviews of the progress of major technology projects at key stages of the procurement and implementation process. These reviews have usually been confidential, but in April 2005 a report by the Public Accounts Committee on the impact of the OGC recommended:

> ... this Committee believes that, to further enhance external scrutiny, there is a strong case for the publication of Gateway review reports, particularly given the repeated failures of public sector IT-enabled projects and programmes in recent years. [51]

Yet the Home Office has refused to publish any of the Gateway reviews on the ID cards scheme, which suggests both that limited external accountability continues and that the content of the reviews is damaging. Similarly, the Home Affairs Select Committee, in its report on identity cards in July 2004, was, 'concerned about the closed nature of the procurement process which allows little public or technical discussion of the design of the system or the costings involved.[52]

> ## "The ID card scheme has been characterised by a lack of openness, honesty and transparency."

IT industry views on government procurement

Among the IT industry press, there is little doubt where to look for some of the causes of government IT failure:

> [...] too often ministers and suppliers encourage each other to think big: to launch something that is immeasurably more complex than what has gone before, to beat the rest of world, to do it quickly, but in stages, and with as little transparency as possible.

> Little can be done to force adherence to good practice in the public sector other than by legislating for accountability and transparency, and allowing rigorous external scrutiny of the feasibility and progress of projects by disinterested parliamentarians, the media and taxpayers.[53]

> So far the ID card scheme has been characterised by a lack of openness, honesty and transparency. Information about progress has been published selectively or not at all, and it is not unusual for potentially serious problems to be played down in parliamentary questions, statements to select committees and answers to media questions.[54]

> Tony Collins, Computer Weekly, 2/11/05 and 6/12/05

> Blame the contractor, sure, but (sympathy for EDS) if you go to the contractor with something vague, then continually change your mind as the project goes ahead, your costs will climb, it'll be late and it won't work. So I think we should bar ourselves from specifying an ID scheme until UK.gov has passed its IT proficiency test. [55]

> John Lettice, The Register 2/12/04

> Not only are so many of these systems failing to provide the benefits that are touted for them, they are frequently very expensive. Curiously, government persists in the belief that everything is better if it is done by a commercial company. But government, being government, has to introduce unwieldy procedures for procurement that work in favour of large suppliers who have huge overheads and very patchy track records.[56]

> Martin Brampton, silicon.com 16/8/05

Companies themselves are sometimes sceptical of the government's processes: Andy Vernon, PA Consulting Group's public sector specialist, told silicon.com recently, 'One key cause of government IT delivery failures is the scale and complexity of the initiatives undertaken.[57]

It is difficult to find any praise for large-scale government IT procurement practices, other than an occasional claim that the situation is 'improving', with smaller projects and more openness, neither of which applies to the ID cards scheme. This makes it difficult to believe that this next major IT project can escape the same problems of cost-overrun, delay and failure to deliver functionality which have plagued previous efforts.

A brief overview of industry insiders' comments:

'*A national ID card for the UK is overly ambitious, extremely expensive and will not be a panacea against terrorism or fraud, although it will make a company like mine very happy.*'

Roberto Tavano, biometrics specialist for Unisys (see company profiles). Quoted in *the Guardian*, 21/10/05.

I have concerns with the current architecture and the way it looks at aggregating so much personal information and biometrics in a single place. There are better ways of doing this. Even the biometrics industry says it is better to have biometrics stored locally [...] Every supplier I talk to privately expresses their concerns.' Jerry

Fishenden, national technology officer, Microsoft UK. Quoted in *silicon.com* 18/10/05

'*The plan is working on the assumption that, by the time it is live, the technology will have come on in leaps and bounds. But that is not a reasonable basis from which to start.*'

Graham Titterington, principal analyst at Ovum quoted in *Computing online magazine* 17/10/05

'*There's never been a biometric register of this size. It's unproven territory.*'

John Elliott, ID card specialist at Consult Hyperion, quoted in *the Guardian* 26/5/05

"There's never been a biometric register of this size. It's unproven territory."

Identity card technology - views from industry

The government's ID cards scheme essentially requires three broad areas of technology - the National identity Register (NIR) database, biometric scanning and the cards and card readers themselves. Each of these areas is subject to its own controversies. Hi-tech industry association Intellect claims, 'the technology being considered... is well-established and has been proven successful.' But the same press release describes how, 'Intellect is looking forward to working with the Home Office in the coming months to demonstrate the hi-tech sector's ability to meet the technological challenges created by the Government's ID Cards proposals,' indicating that the group is anything but disinterested.

Other organisations and experts are more sceptical. Online technology magazine silicon.com is fairly characteristic in supporting the principle but expressing and publicising serious doubts about the practical aspects of the scheme with its 'ID cards on trial' campaign for greater transparency. In particular, silicon.com notes the obvious conflicts of interest: '...the UK IT industry, almost to a man, has remained silent except to tell the government how wonderful its proposals are in anticipation of getting a slice of contracts that are going to total anywhere from £6bn to £19bn [...] One biometrics supplier emailed us to say what a dog's dinner he thought the whole thing was - and then asked us not to name him as his company is involved in the project and hopes to bid for some of the ID cards work once it is passed into law.'

QinetiQ's views on ID card technology

Once of the most vocal critics of the practical and technological elements of the ID cards scheme has been QinetiQ, formerly the Defence Evaluation and Research Agency (DERA). QinetiQ is fully supportive of the concept of ID cards, but has consistently expressed doubts over the specifics of the scheme.

'...biometric technology is not accurate enough to support [the government's claims], says Neil Fisher, director of security solutions at defence technology supplier QinetiQ. ' From Computing online magazine 17/10/05

In October, Dame Pauline Neville-Jones, former chair of QinetiQ, told *silicon.com*: **'The requirement for 100 percent accuracy is huge and I don't think we've ever seen a system which is 100 per cent accurate.'**

'We could get to a situation where we have something incredibly intrusive but also incredibly ineffective.'

A lengthy submission by QinetiQ to the Home Affairs Select Committee in January 2004 raised issues not just over the technology planned for the ID cards scheme, but over the whole intent and particularly the issue of compulsion.

Biometric Registration Pilot Scheme April-December 2004

The Passport Service Biometrics Enrolment Trial tested the process of registering 10,000 volunteers' biometric data in a mock-up of a possible ID cards/biometric passport enrolment scenario. The trial, carried out by consultants Atos Origin (see company profiles) using technology from Iridian, Identix and NEC, with MORI surveying participants' responses, attempted to collect volunteers' facial biometric, iris scans and fingerprints.

The trial encountered problems recruiting sufficient volunteers particularly among people with disabilities - the original target of registering 1,000 disabled participants had to be reduced to 750.

The trial was explicitly not designed as trial of the technology, but a test of the process of enrolment and public reactions. The biometric enrolment (i.e. capturing usable images) and verification (checking the registered images against a further scan) success rates were remarkably low, particularly for disabled participants. Only 61% of disabled participants and 90% of the sample chosen to represent the general population were able to enrol two iris scans; verification of facial scans was 48% for disabled participants and 69% for the representative sample; fingerprint verification was around 80% for both groups. 0.62% of disabled participants were unable to enrol a single biometric .

This is the only major trial that has so far been carried out in relation to the ID cards scheme. It clearly neither gives the technology a green light nor fully tests all aspects of the scheme. As David Porter, head of security and risk at consultants Detica pointed out during the scheme:

'[...] at this stage they are only looking at how to scan and capture biometric information from volunteers onto a database. The scheme isn't looking at how effective the card is when used on a day-to-day basis. As such, we're only examining the tip of the iceberg. '

> *No country has attempted to use biometric technologies to register a population the size of the UK.*

> *Only 61% of disabled participants were able to enrol two iris scans.*
> *0.62% of disabled participants were unable to enrol a single biometric.*

Conclusion

Giving evidence to the Home Affairs Select Committee in July 2004, Professor Martyn Thomas, representing the UK Computing Research Committee, said he:

> ...believed that the difficulties inherent in a public procurement project of this scale were insuperable. He also argued that penalty clauses can only guard against financial loss, and not against the unavailability of a public service.[58]

This cuts to the core of the issue - if the practical implementation of the ID cards project should fail, it will not merely be a waste of taxpayers' money but a cause of major inconvenience and stress to members of the public.

The likely problems with the technology - failure to verify biometrics, lack of security of NIR data, physical failure of cards and readers - are such that the inconvenience would affect specific individuals rather than being evenly spread around the system, and would disproportionally affect particular groups of people, such as those whose physical characteristics make it difficult to register a biometric.

Neither the major contractors nor the government have shown themselves capable of organising and implementing an outsourced IT scheme on this scale. No country has attempted to create a database of the scale and type planned for the NIR, nor to use biometric technologies to register a population the size of the UK. While risks must sometimes be taken, to legislate for the use of experimental technology in the face of a rising chorus of well-informed voices calling for the project to be sent back to the drawing board seems nothing less than foolhardy. Given that there is no urgent need to introduce an ID card right now, no overwhelming internal logic for the government's particular scheme as such, and rapidly shrinking public support, can pushing on into the unknown really be justified?

One option would be to reject the proposed scheme outright and allow the government to think again. Failing that, it should not be too late to amend the scheme to protect the public from technological and organisational failures. At a legislative level, it can be argued that the simplest way to achieve this is that no-one should be forced to have or produce an ID card, or to register on the NIR, until the technologies can be shown to be sufficiently developed, secure and effective. This would mean amending the Bill to:

> ·remove the obligation to register on the NIR in order to renew a passport

> ·require new primary legislation before cards or NIR registration could be made compulsory for any section of the population

> ·prohibit both public and private sector bodies from requiring an ID card in any situation - i.e. ensure that other forms of identification should always be acceptable, whether to access public services or in other situations such as applying for jobs - there have been reports that some large employers are already considering requiring employees to register for ID cards.

These amendments would ensure, in effect, a 'market' situation for ID cards - as with most other new technologies, individuals would adopt them as they personally saw fit - i.e. at the point at which the benefits of having a card outweighed the costs - whether those costs are financial, practical or worries about security and civil liberties. Those who feel that for them personally the costs continue to outweigh the benefits would not be compelled to obtain a card for someone else's convenience. If the system could be made to work, it could then be expanded as necessary at a future date.

Footnotes

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3 - The Guardian, 'Hi-tech Cassandras foresee trouble with ID cards' Mark Tran 21/10/05 *http://business.guardian.co.uk/economicdispatch/story/0,,1597733,00.html*

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8 - Memorandum submitted to Home Affairs Select Committee, January 2004 *http://www.publications.parliament.uk/pa/cm200304/cmselect/cmhaff/130/130we47.htm*

9 - Atos Origin, 'UK Passport Service Biometrics Enrolment Trial Report' May 2005 *http://www.passport.gov.uk/downloads/UKPSBiometrics_Enrolment_Trial_Report.pdf*

10 - Detica press release 27/4/04 'Biometric ID Cards - Pilot Scheme Only Examines the Tip of the Iceberg'
http://www.detica.com/indexed/Opinion_BiometricIDCardsPilotScheme.htm

11 - This contract was in fact awarded to Schlumberger Sema, which was subsequently taken over and subsumed into Atos Origin in January 2004. We refer to the company by its current name of Atos Origin throughout to avoid confusion.

12 - Evidence given by Sir Nigel Crisp, Chief Executive of the NHS, to the Public Accounts Committee 31/10/05
http://www.publications.parliament.uk/pa/cm200506/cmselect/cmpubacc/uc634-i/uc63402.htm (transcript of uncorrected oral evidence)

13 - National Audit Office report 'Patient Choice at the Point of GP Referral' January 2005 *http://www.e-health-insider.com/tc_domainsBin/Document_Library0282/NAO_Patient_Choice_ES.pdf*

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21 - Government News Network, 'Old Bailey gets new technology - halfway mark for Xhibit as witnesses in over half our crown courts get information quicker' 26/10/05

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26 - Parliamentary Ombudsman, 'Tax Credits: putting things right', 3rd Report-Session 2005-2006 HC 124 (2005-2006) 21/6/05

27 - ibid

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30 - The Business 'Tax Credit Firm in New ID Card Contracts Row' Brian Brady 26/6/05

31 - Work and Pensions Committee Press Notice, 'The Child Support Agency Must Improve Its Service Within Weeks Or Face Being Scrapped ' 26/01/05

32 - Work and Pensions Select Committee report, 'The Performance of the Child Support Agency' 26 /1/05, paragraph 63

33 - Ibid, paragraph 46

34 - Intellect UK press release, 'Up to the Challenge - ICT Industry Demonstrates ID Cards Delivery', 24/05/04

35 - Program for 5th Digital Identity Forum, 'Moving Digital ID to Population Scale' *http://www.chyp.com/digid/digid5.asp*

36 - The Business 'Tax Credit Firm in New ID Card Contracts Row' Brian Brady 26/6/05

37 - Accountancy Age 'PA Consulting bill for ID cards to bust £18m estimate' James Bennett and Kevin Reed 14/7/05 *http://www.accountancyage.com/accountancyage/news/2139802/pa-consulting-bill-id-cards*

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Companies which have shown an interest in the ID cards scheme	link with ID			Nature of business/likely areas of involvement									INVOLVEMENT
	potential bidder in the press	met with home office officials	gave submission to consultation	consultancy	biometrics	telephony	application processing	software	NIR	networking	cards	readers	
Accenture	X								X	X			former MD is now the head of E-Government and ultimately the entire ID cards scheme
Astron Clinica					1								gave an industry demonstration at 'ID Cards - The Next Steps'
Atos Origin	X	X		X					X	X			has lobbied hard for the introduction of bio-metric ID cards and ran passport agency trial in 2004. Sponsored 'ID Cards - Toards Implementation & Procurement'
Authentec	X	X			X								
Aware		X						X					
Axalto	X										X	X	sponsored 'ID Cards - Towards Implementation & Procurement'. Gave presentation at 'ID Cards - The Next Steps'
Bioscrypt	X	X			X								
BT	X	X	X			X	X		X	X			co-sponsored 'ID Cards - The Next Steps' & organised a public consultation
Cap Gemini	X	X							X	X			
Cogent	X	X			X								
Consult Hyperion		X		X									organised conference including 'ID Cards - The Next Steps'
CoreStreet		X									X		
CSC Computer Sciences	X		X		X						X	X	
Cubic Transportations	X		X								X		
Daon								X					gave a presentation at 'ID Cards - Towards Implementation & Procurement'
Datacard	X	X									X		
De La Rue	X	X									X		
Detica				X									sponsored 'ID Cards - Towards Implementation & Procurement'. Conducted poll on public attitudes to ID cards 2004
EDS	X	X	X				X		X	X			sponsored 'ID Cards - Towards Implementation & Procurement'. Co-spon-sored 'Digital Identity', gave a presentation at 'Identity Cards - The Next Steps'
Energis/cable and wireless			X			X			X				
Experian		X		X									
Fujitsu Microelectronics	X	X		X					X	X			part of the Sirius consortium which advised on feasability and costs in 2002. Sponsored 'ID Cards - Towards Implementation & Procurement'.
Global Crossing				X									part of Sirius consortium which advised on feasibility and costs in 2002
IBM	X		X						X	X			
ID Data	X				X						X		presentation at 'Identity Cards – The Next Steps'
Identix	X	X			1,2							X	provided technology for Passport Agency biometric enrolment trial in 2004

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Infineon	X	X									X		
Iridian Technologies	X				3							X	provided technology for passport agency bio-metric enrollment trial in 2004
KPMG			X	X									has lobbied hard for the introduction of bio-metric ID cards and ran passport agency trial in 2004. Sponsored 'ID Cards - Toards Implementation & Procurement'
Lasercard Systems	X	X	X								X		
Logica CMG	X		X							X			
Monoco			X		X								
MULTOS			X				X						
NEC	X				2				X				
PA Consulting Group				X									Home Office 'Development Partner' on ID cards scheme since May 2004
Pricewaterhouse Coopers				X									part of Sirius consortium which advised on feasibility and costs in 2002
QinetiQ			X	X									
Senselect	X				2								gave a presentation at 'Identity Cards - The Next Steps'
Serco	X		X				X		X	X			
Shreeveport				X									one staff memeber on secondment to Home Office team
Siemens Business Services	X						X		X	X			sponsored 'ID Cards - Towards Implementation & Procurement. Co-sponsored 'Identity Cards - The Next Steps' and a debate at the Labour party conference.
St. Microelectronics	X	X									X		
Sun Microsystems	X								X	X			co-sponsors of 'Identity Cards - The Next Steps'
Thales	X								X	X			co-sponsors of 'Digital Identity' conference
Trace Tag											X		gave a presentation at 'Identity Cards - The Next Steps'
Unisys	X		X				X		X		X	X	sponsored 'ID Cards - Towards Implementation & Procurement'
Viisage	X				1								new director gave speech at 'Identity Cards, The Next Steps', whilst employed by a US defence agency

Biometrics - specific interests: 1 = facial recognition 2 = fingerprints 3 = iris scanning

Conferences: 'Identity Cards - The Next Steps' - May 2004, sponsored by Home Office. 'ID Cards – Towards Implementation and Procurement' June 2005, 'Digital Identity' November 2004

Which companies are preparing to bid for contracts under the ID cards scheme?

Are they the same companies that have been involved in the major public-sector IT scandals of recent years?

Is the government learning its lesson on IT procurement?

What does the IT industry think of the technologies proposed for ID cards and the National Identity Register?

What would be the consequences of technology failures for the ID cards scheme?