

CRN multi-disciplinary project
Participation in Internet Mediated Interactions
(Computer Science, Public Policy, Economics)

The Structure of E-government

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Changing government-citizen interactions

- Around 60 % of population in UK are Internet users (OXIS)
- 52% of users go to Internet first to 'find name of MP if don't know it', 38% to 'find information on your taxes', 70% to 'plan a journey/book holiday'
- Significant chunk of population (25% and growing) will interact with government on-line (e-government) as far as possible
- What experience will they have of interacting with government?

E-Gov is huge and growing

		Google	Yahoo!
AU	.gov.au	7M	8M
CA	.gc.ca	12M	9M
UK	.gov.uk	9M	14M
US	.gov	361M	79M

- Very hard to construct a usable taxonomy for these sizes
- Dependence on search engines

Developing a methodology for researching e-government

- How interconnected is the government domain – how ‘small world’ - how introverted (self-referential) – how extroverted – how ‘healthy’?
- How does UK government compare to other government domains?
- What do webmetrics tell us about relationships between states, public, private, voluntary sectors, citizens?
- How can we evaluate ‘e-government’ – all current evaluations are methodologically suspect

Hypothesis: shifting nodality of e-government

- Key tool of government policy is **nodality** – ‘the property of being in the middle of information or social networks’
- ‘Unhealthy’ e-government will lose nodality in internet world -
- if other organisations are more sophisticated at increasing visibility, structuring domains, reducing dark matter....
- government can lose a competition it didn't know it entered
- and hands over control of its own nodality to eg. Google

Eg. UK, approx 9 million pages in .gov.uk domain, government tries to ‘control’ interactions via portal (directgov.gov.uk) – from which web crawler on 9 iterations reaches only 10%

What is a 'healthy' government domain?

- Not too much 'dark matter' (%age of crawlable, searchable content)
- High visibility (high number of 'in-links')
- Small diameter (number of clicks from one side to other) – dependent on size, structure etc.
- With a 'healthy' domain, government gains 'nodality' in the on-line world

Audit offices as test case for methodology

- Government domains introduce size problems for testing methodological ideas (several million pages)
- Inconsistency in what is included in government domain
- Parliamentary/congressional audit offices have roughly comparable roles across countries
- Australia/UK/Canada/US offer range of political environments

Audit Office - Australia

The screenshot shows the homepage of the Australian National Audit Office (ANAO) in a Mozilla Firefox browser window. The browser's address bar displays the URL <http://www.anao.gov.au/>. The website features a navigation menu on the left with categories such as "What's New", "Budget 2004-5", "About Us", "Employment", "Tabling Schedule", "Publications", "Seminars", "Tenders", "Contracts", "Links to sites", "Requests", and "Search". The main content area includes the ANAO logo, a large image of a building, and a "Welcome" message. The "Welcome" message states: "The Australian National Audit Office (ANAO) is a specialist public sector practice providing a full range of audit services to the Parliament and Commonwealth public sector agencies and statutory bodies. Our audit clients include some 300 government bodies. These include Budget dependent agencies involved in the delivery of core services and commercially oriented entities." Below this, there are two "Budget" logos for the 2005-06 period, with the right one linking to the "Prime Minister and Cabinet Portfolio Budget Statement 2005-06". The footer contains copyright information for the Commonwealth of Australia 2000, links for "Contact Us", "Disclaimer", and "Privacy", and the AGPS logo (Australian Government Locator Service).

HomePage - Mozilla Firefox
File Edit View Go Bookmarks Tools Help
<http://www.anao.gov.au/>
Personal Volleyball News MFF UCL Research Useful Recipies People Conferences Google Citeseer Travel Shopping LBS
HomePage

What's New
Budget 2004-5
About Us
History of the ANAO
Current Annual Report
Previous Annual Report
Corporate Plan
Corporate Structure
Affiliations
Guide to Conduct

Employment

Tabling Schedule
Publications
Audit Reports
Better Practice Guides
Opinions (Bulletins)
Speeches
Audit Work Program
Other Publications

Seminars
Tenders
Contracts
Links to sites
Requests
Enter New Request
View My Requests

Search

Australian National Audit Office

Welcome
The Australian National Audit Office (ANAO) is a specialist public sector practice providing a full range of audit services to the Parliament and Commonwealth public sector agencies and statutory bodies. Our audit clients include some 300 government bodies. These include Budget dependent agencies involved in the delivery of core services and commercially oriented entities.

Budget
2005-06

Budget
2005-06
[Prime Minister and Cabinet Portfolio Budget Statement 2005-06](#)

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agps Australian Government Locator Service

Done

Audit Office - Canada

The screenshot shows a Mozilla Firefox browser window displaying the website of the Office of the Auditor General of Canada. The browser's address bar shows the URL: <http://www.oag-bvg.gc.ca/domino/oag-bvg.nsf/html/menue.html>. The website header includes the organization's name in both English and French, a navigation menu with links for Français, Contact Us, Help, Search, and Canada Site, and a secondary menu with links for About Us, Publications, Media Room, Site Map, and OAG Home. The main content area features a large blue banner with the OAG logo and the text "Office of the Auditor General of Canada". Below this, there is a "What's New" section with a "Mandate" link, a "Reports to Parliament By" section with links for Year, Federal Institution, and CESD, and a "Reports to Northern Legislative Assemblies" section. A "Work Opportunities" section includes links for Careers, Consultant Registration, and Feedback on the Site. The central text block describes the OAG's role in auditing federal government operations and provides information about the Commissioner of the Environment and Sustainable Development (CESD). A "Features" section highlights the April 2005 Report and the 2004 Annual Report. The footer of the page shows the word "Done".

Office of the Auditor General of Canada
Bureau du vérificateur général du Canada

Français	Contact Us	Help	Search	Canada Site
About Us	Publications	Media Room	Site Map	OAG Home

Office of the Auditor General of Canada

OAG

What's New

Mandate

Reports to Parliament By

- Year
- Federal Institution
- CESD

Reports to Northern Legislative Assemblies

Work Opportunities

Careers

Consultant Registration

Feedback on the Site

The Office of the Auditor General (OAG) audits federal government operations and provides Parliament with independent information, advice and assurance to help hold the government to account for its stewardship of public funds. We are responsible for performance audits and studies of federal departments and agencies. We conduct financial audits of the government's financial statements (public accounts) and perform special examinations and annual financial audits of Crown Corporations.

In 1995, the position of **Commissioner of the Environment and Sustainable Development (CESD)** was created within the OAG. The Commissioner reports to the House on:

- **Environment and sustainable development**
- **Departmental sustainable development strategies and action plans**
- **Environmental petitions** from Canadians asking the government to respond to concerns relating to the environment and sustainable development.

Features

Auditor General

April 2005 Report
(Released on 5 April 2005)

Environment and Sustainable Development

2004 Annual Report
(Released on Oct. 26, 2004)

Audit Methodology

Proactive Disclosure

Travel and Hospitality
Contracts over \$10,000

Notify me about reports

Done

Audit Office – United Kingdom

The screenshot shows a Mozilla Firefox browser window displaying the UK National Audit Office (NAO) homepage. The browser's address bar shows the URL <http://www.nao.org.uk/>. The page features the NAO logo and a navigation menu with links for home, news & press, about us, publications, good practice, contacts, search, about this site, links, bigger text, smaller text, and reset text. The main content area is titled "Welcome to the UK National Audit Office Website" and includes a "What's New" sidebar with articles on EC Law and Defence Estate, a central section on "Helping the nation spend wisely" with a description of the NAO's role and links to "About Us" and "Freedom of Information Publication Scheme", and a section on "Other UK Public Audit Bodies" listing audit bodies in Scotland, Wales, and Northern Ireland.

UK National Audit Office - Home Page - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

<http://www.nao.org.uk/> Go

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UK National Audit Office - Home Page

NAO
NATIONAL AUDIT OFFICE

home news & press about us publications good practice contacts search about this site links bigger text smaller text reset text

Welcome to the UK National Audit Office Website

What's New

Lost in Translation? Responding to the Challenges of EC Law
Defra's record of transposing European legislation into UK law

Managing the Defence Estate
Examining the new plans of one of the UK's largest landowners

See [What's New](#) page for more...

Helping the nation spend wisely

The National Audit Office scrutinises public spending on behalf of Parliament. We are totally independent of Government. The NAO is headed by the [Comptroller and Auditor General](#), Sir John Bourn.

We audit the accounts of all central government departments and agencies, as well as a wide range of other public bodies, and report to Parliament on the economy, efficiency and effectiveness with which they have used public money. Our work saves the taxpayer millions of pounds every year.

For more information about our role see [About Us](#). For an overview of the material on the website, see [About this site](#) and our [Freedom of Information Publication Scheme](#).

Other UK Public Audit Bodies

Information relating to audits carried out in Scotland and Wales since devolution can be found on the [Audit Scotland](#) and [Wales Audit Office / Swyddfa Archwilio Cymru](#) websites. In Northern Ireland, audits are carried out by the [Northern Ireland Audit Office](#). Audits on local authorities are carried out by the [Audit Commission](#).

<http://www.nao.org.uk/home.htm>

Audit Office – United States

The screenshot shows a Mozilla Firefox browser window displaying the homepage of the Government Accountability Office (GAO). The browser's address bar shows the URL <http://www.gao.gov/>. The page features the GAO logo with the tagline "Accountability Integrity Reliability" and a search bar. A navigation menu includes "About This Site", "Contact GAO", "Site Map", and "Help". Below the menu is a banner with various images representing GAO's work. The main content area is divided into three columns: "In the Spotlight", "Reports and Testimony", and "Especially For:".

The Government Accountability Office - Mozilla Firefox
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The Government Accountability Office
Search All
Keyword or Report # Go
About This Site Contact GAO Site Map Help
GAO
Accountability Integrity Reliability
In the Spotlight
▶ Private Pensions: Recent Experiences of Large Defined Benefit Plans Illustrate Weaknesses in Funding Rules
▶ Social Security Reform: Answers to Key Questions
▶ Motor Fuels: Understanding the Factors That Influence the Retail Price of Gasoline
▶ Base Realignment and Closure Reports
▶ 21st Century Challenges: Reexamining the Base of the Federal Government
▶ High Risk Series (Updated)
▶ Reports and Testimony
Help for difficulty viewing PDF files
▶ Legal Products
▶ Featured Issues
▶ Especially For:
▶ The Congress
▶ The Press
▶ The Auditing and Accountability Community
▶ Newcomers
▶ From the Comptroller General
▶ About GAO
▶ Careers at GAO
▶ Subscribe to Updates
▶ FraudNET (Report Fraud, Waste and Abuse)
Done

Estimating sizes of portals (including 'dark matter') of audit offices using capture-recapture technique

	Minimum portal size	Crawlable pages
Canada (OAG)	12K	11 K (96%)
UK (NAO)	4K	3 K (82%)
US (GAO)	43K	14 K (31%)
Australia (ANAO)	5K	0.3K (6%)

Link analysis of audit offices (visibility)

	In-links (from outside domain)	% commercial
UK (NAO)	1029	20%
Canada (OAG)	753	19%
US (GAO)	597	32%
Australia (ANAO)	211	19%

Link analysis of audit offices (outreach)

No of outlinks

US (GAO)	43
Canada (OAG)	23
UK (NAO)	10
Australia (ANAO)	4

● Few external outlinks

- Government averse to endorsing content out of their control
(aiming at authority)
- Portal isolated “Corner of the web”

Open questions

- and how we want to answer them

- How do citizens rank these portals? (e.g. in terms of usefulness)
 - Lab-based experiments
 - Street-based experiments
 - Mystery shopping exercises
- What are the metrics that correlate with human ratings?
- Are there significant differences between country portals?
 - eg linkages to non-gov sites (NGOs, firms)
- What is the content ('dark matter') that can't be crawled from homepages?