

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



Audit Office - Canada

The screenshot shows a Mozilla Firefox browser window displaying the official 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 features a header with the organization's name in English and French, a navigation menu with links like 'Français', 'Contact Us', 'Help', 'Search', and 'Canada Site', and a main content area with a large blue banner. On the left, a sidebar lists various sections: 'What's New', 'Mandate', 'Reports to Parliament By' (with sub-links for Year, Federal Institution, and CESD), 'Reports to Northern Legislative Assemblies', 'Work Opportunities', 'Careers', 'Consultant Registration', and 'Feedback on the Site'. The main content area includes a paragraph about the OAG's role, a section for the 'Commissioner of the Environment and Sustainable Development (CESD)', and a list of key areas: 'Environment and sustainable development', 'Departmental sustainable development strategies and action plans', and 'Environmental petitions'. On the right, there are sections for 'Features' (including the April 2005 Report), 'Environment and Sustainable Development' (including the 2004 Annual Report), 'Audit Methodology', 'Proactive Disclosure', and a 'Notify me about reports' button.

Office of the Auditor General of Canada - Mozilla Firefox

File Edit View Go Bookmarks Tools Help

[http://www.oag-bvg.gc.ca/domino/oag-bvg.nsf/html/menue.html](#) Go

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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

UK National Audit Office - Home Page - Mozilla Firefox

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http://www.nao.org.uk/

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UK National Audit Office - Home Page

 

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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



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?