

UK Information Policy: Opening Government up to Citizens

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Abstract

During the last five years governments around the world, both national and local, have been improving access to their information, opening up their datasets and engaging with social media. This move to transparency may well be a response to concerns about the low level of trust in government, but must nevertheless be welcomed by the information profession.

The UK has been one of the leading pioneers of the open government revolution, but has it gone far enough in helping citizens to access information they need to run their daily lives? The presentation will put the recent developments in the context of overall government information policy, drawing on findings from PhD research at Loughborough University.

The research found:

- a lack of co-ordination of information policy across government
- a need for new skills within government to provide information in the Web 2.0 environment
- uneven progress in the development of citizen-centric services
- lack of information literacy policy at national level
- and low involvement of the information profession in driving forward the developments in the provision of public information.

Whilst the influence of the information profession was disappointing, what was surprising was the extent to which other individuals pushed forward open government, including Sir Tim Berners-Lee, founder of the World Wide Web. This paper will tell their story.

Trust in government

Trust has frequently been an issue in government information policy around the world – this is not a new phenomenon. In the 1997 UK general election campaign the winning Labour Party had two (small) pledges in its manifesto which related to information policy, and these were in the context of improving trust in government: the Freedom of Information Act and making government statistics more independent. Well, ex-Prime Minister Tony Blair famously said in his autobiography after leaving office that he was stupid to have brought in Freedom of Information legislation and wished he hadn't done it. A lot of people asked a lot of awkward questions about what was going on behind

closed doors. There have been attempts to water down the legislation but fortunately for those of us in the information profession, these have been resisted. And reinforcement from the European Union has helped. The genie was out of the bottle and there was no going back.

And what of statistics? A more independent statistical service was set up, but even after that, research I was involved in showed that, in 2004, 68% of the public believed that the government fiddled the figures. More legislation followed and an even more independent service was put in place, which does not hesitate to openly criticise the government if it thinks that ministers have been misbehaving. The impression is that ministers' misuse of figures has decreased, but the UK government and Parliament have got themselves mired in even more scandals so trust continues to plummet. A recent survey from the polling organisation YouGov showed that the British public would be just as happy to be run by a Cabinet of technocrats as it would by elected politicians.

Before the 2010 general election in the UK there was a huge scandal about the amount of expenses that Members of Parliament were claiming – information that had been kept secret but had been leaked to the press. Perhaps if the information had always been available then there would not have been the fuss. But despite the UK having one of the least corrupt governments in the world, the impression was that MPs were all on the take. So trust in politicians fell even further. What to do about it?

One answer that the then government came up with was to be more open with its data to show that it had nothing to hide. Let's be clear here, it was not talking about making any personal data available – that would contravene strict data protection legislation – and it was not about to make policy discussion, correspondence and research documents accessible. These still have to be requested, and sometimes dragged out of government, through invoking the Freedom of Information Act. No, we are talking about the thousands of datasets that the government collects in the course of its work: public sector information (PSI).

This idea did not spring from nowhere. President Obama on his first day in office ordered the US government to make its datasets available through what became the data.gov portal – though funding for this initiative has since been reduced. But he set the bar high and the UK has since set it even higher. The European Union published a directive in 2003 on how governments should provide access to public sector information (PSI) and the UK has been one of the leaders in implementing the regulations. But it didn't happen all at once; many influences were to come into play, including the growth of social networking, people's growing expectations that they would have access to information, and of course the need for governments to show that they were worthy of trust. My research into this opening up of data to the public showed that various individuals were key to making it happen. I would like to tell you their story.

Government information policy

But first let's take a step back and look at government information policy more generally. There is no overall government information policy, at least not in the UK. There were attempts at international and national level up until the turn of the 21st century to develop co-ordinated sets of policies, known as 'national information policies' (NIPs). Unesco still works internationally to encourage NIPs, most particularly in the less-developed countries. Various attempts to bring cohesion to information policies in the UK failed, for example that by the Library and Information

Commission, which no longer exists. The range of policies and departments delivering existing policies is considerable. The table below gives a flavour of the complexity in the UK. Other countries will have similar distributions of responsibility.

Table 1: Departmental breakdown of UK government policies with an information policy component 2012

| | BIS | CO | DCLG | DCMS | DfE | DEFRA | DH | HMT | MoJ |
|--|-----|----|------|------|-----|-------|----|-----|-----|
| Digital engagement, | | ✓ | | | | | | | |
| Government websites, including quality & standards | | ✓ | | | | | | | |
| eGovernment | | ✓ | | | | | | | |
| PSI re-use: EU PSI directive | | | | | | | | | ✓ |
| Trading PSI | ✓ | | | | | | | ✓ | ✓ |
| Open data | | ✓ | | | | | | | ✓ |
| Official statistics policy | | ✓ | | | | | | | |
| Geographic Information: EU Inspire directive | | | | | | ✓ | | | |
| Environmental information: EU directive | | | | | | ✓ | | | ✓ |
| Health information | | | | | | | ✓ | | |
| Freedom of Information | | | | | | | | | ✓ |
| Data Protection | | | | | | | | | ✓ |
| Intellectual property | ✓ | ✓ | | | | | | | |
| Knowledge economy | ✓ | | | | | | | | |
| Digital broadcasting | ✓ | | | ✓ | | | | | |
| Digital inclusion | | | ✓ | | | | | | |
| Public libraries | | | ✓ | ✓ | | | | | |
| School libraries | | | | ✓ | ✓ | | | | |

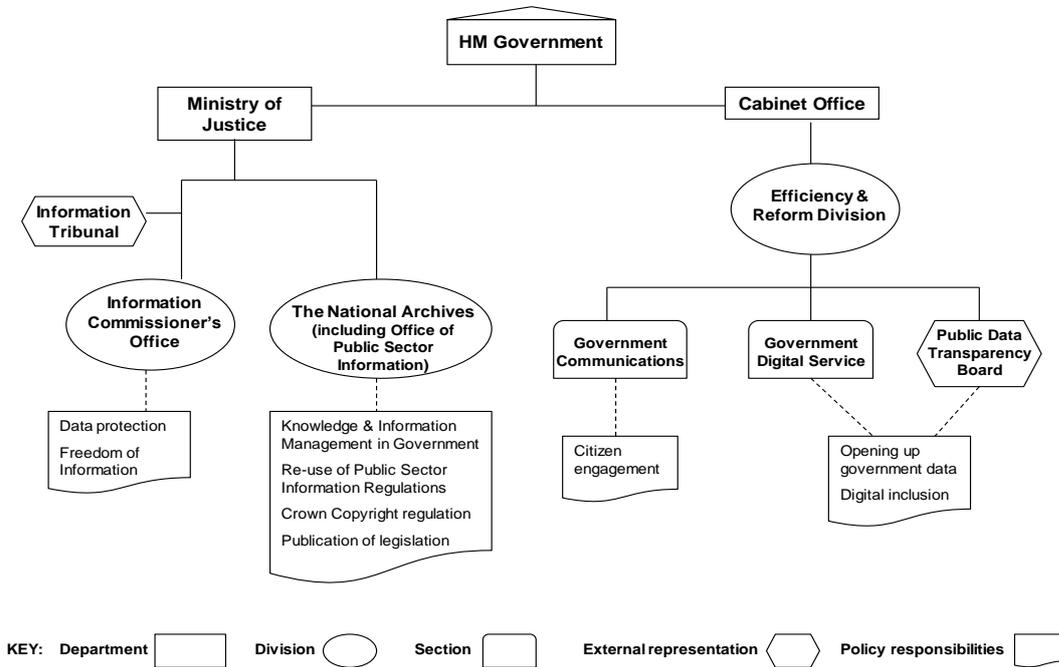
Key:

| | |
|-------|--|
| BIS | Department for Business, Innovation and Skills |
| CO | Cabinet Office |
| DCLG | Department of Communities and Local Government |
| DCMS | Department for Culture, Media and Sport |
| DfE | Department for Education |
| DEFRA | Department for Environment, Food and Rural Affairs |
| DH | Department of Health |
| HMT | Her Majesty's Treasury |
| MoJ | Ministry of Justice |

As you can see from this table, the departments with the most responsibility are the Cabinet Office and the Ministry of Justice. The Cabinet Office supports the Prime Minister and senior ministers, helping to ensure effective development, coordination and implementation of policy and operations across all government departments. The Ministry of Justice has responsibility for the courts, prisons

and probation services, but also information access and rights. Figure 1 shows in more detail what their current responsibilities are regarding information policy.

FIGURE 1: MAIN UK GOVERNMENT DEPARTMENTS WITH AN INFORMATION POLICY BRIEF



Whilst there is some co-ordination within these departments, PhD research that I recently carried out showed that there is no overall co-ordination of information policies across government, nor any central recognition of what policies ought to be co-ordinated. Now is not the time to recommend setting up any new mechanism as the government is trying to slim down, not build itself up. However it is worth considering what policies ought to be co-ordinated, and by whom – possibly a Minister within the Cabinet Office in the case of the UK. Freedom of information/openness of public data and basic literacy/information literacy are two areas that could particularly benefit. Table 2 may give you some ideas for areas of policy that could be co-ordinated and developed within your own countries.

Table 2: Elements of a 21st century Framework of information policies

| | |
|---|--|
| <p>Co-ordination</p> <p>Make it all happen</p> | <ul style="list-style-type: none"> • Co-ordinate development of information policies across government: leadership at the highest level, mechanisms to ensure co-ordination; access to appropriate advice • Co-ordinate roll out of government information policies across the public sector • Evaluate implementation of information policy and co-ordinate action resulting from the evaluation |
| <p>Skills</p> <p>Boost training for citizens and enhance the</p> | <ul style="list-style-type: none"> • Improve information literacy of citizens: through education in schools, through UK Online centres and public libraries and the workplace • Develop the cadre of information specialists within government and throughout the country who can gather and organise public information |

| | |
|--|--|
| information profession | to maximise its usability and use |
| Content Optimise content and quality of information made available | <ul style="list-style-type: none"> • Find out and provide what users need: work with user groups, business, social networking groups; focus groups; surveys • Improve the quality of information: standards for quality of statistical data in place; standards for quality of other information; standardised coding (eg RDF) to enable re-use and linking of data |
| Accessibility Minimise barriers to access and maximise use | <ul style="list-style-type: none"> • Right to data • Core information free at the point of use • Trading funds: Government commissioned review of economics of trading funds: it may be better for the country's economy to make all their information free for re-use rather than charge for key data • Remove barriers for re-use of public sector information • Organise government's preservation of its own documents in both print and electronic form to ensure long-term availability • Maximise channels of access: Directgov and other government websites; use of mobile technology and digital TV; telephone helplines; face-to-face; print; social networks • Enhance social and digital inclusion, including through spread of broadband access • Adhere to interoperability guidelines for digital media to ensure consistency of approach and access, and optimise for search engines • Investigate and trial data sharing between government departments, mindful of implications for public trust/privacy |
| Regulation Target government's legislative impact | <ul style="list-style-type: none"> • Privacy and data protection: role of Information Commissioner, how government regulates itself with recent lapses in security • Intellectual property: crown copyright and other copyright legislation; open government licence • Legal deposit, especially of electronic documents |

Opening up UK government data: Heroes and the occasional heroine

Focussing now on public sector information (PSI), the open data revolution in the UK can be traced back to a large extent to a report commissioned in by the Cabinet Office in 2007 called *The Power of Information Review*. A new pressure on the government was how it should be responding to demands to make use of social networking for communicating with the public – community engagement. Here we meet the first of our open data heroes: William Perrin, a civil servant in the Cabinet Office. He it was who persuaded the government of the potential of social networking for community engagement which led to the *Power of Information Review*, and he went on to become a community information activist who also still advises the government.

The *Power of Information Review* itself made lots of recommendations about the use of social media and about how the government should make available information that it collected that would be useful to others. Hero number two, Tom Steinberg, was one of the authors of that review. He used to be a policy adviser within government who was also good at IT and left to set up MySociety, a

small organisation that pioneered data mashing to provide the public with new, useful – and free – information services. Two of the most well known are TheyWorkForYou, which tells you what your own Member of Parliament (MP) has been doing, and FixMyStreet, which allows you to report problems with the road you live in to your local council. MySociety continued to expand its range of services and influence and Tom Steinberg was asked to advise the UK Conservative Party before the last election about how to open up government data. He continues to act as one of the key advisers about transparency for what is now the elected Conservative/Liberal Democrat Coalition government.

The *Power of Information Review* was well-received within the Cabinet Office and a further Taskforce was set up to develop practical applications and recommendations for making government data more available and usable by others. This brings us to heroes number three and four. Hero number three is MP Tom Watson, who at this time was Minister for Digital Engagement in the Labour administration. He did much to promote the use of new media in government (he was the first Member of Parliament to have his own blog) and the opening up of data, including implementation of the Power of Information recommendations. (He has since become a public hero in a different context as he has been the MP who has done most to uncover wrongdoings by Rupert Murdoch's News International.)

Hero number four is the chairman of the Power of Information Taskforce Richard Allan (now Lord Richard Allan), who had been a member of Parliament and at the time worked for Cisco Systems, although he now works for Facebook Europe. Richard therefore brought both a high-profile political and a technical perspective to the taskforce. Structures for data sets using semantic web technology were recommended, that would encourage third-party use of government data, but the Taskforce also addressed policy and economic issues related to the provision of government information. A particular problem was the number of datasets that required some element of geographic information to maximise their use but these geographic datasets were being sold by government through one of its trading funds, the Ordnance Survey (OS). OS was required to make money to cover its costs and so would not release this geographic data free of charge. We will return to this later.

Another part of government was also grappling with open data issues at the same time and here we meet our first heroine: Carol Tullo, Director of the Office of Public Sector Information (OPSI). Originally a lawyer, she ran Her Majesty's Stationery Office (HMSO), which was and is responsible for publishing official UK government documents, including legislation. When the European Union invoked its Directive on the Re-use of Public Sector Information, Tullo's responsibilities were expanded to include implementation of the EU directive in the UK, setting up and managing the mechanisms for regulating how the UK government makes its information available to third parties, either for free or for a charge. She did such a good job of this that the UK has become the EU country that has most fully implemented the EU's requirements. She has also led the way in simplifying the licensing arrangements for anyone who wants to re-use UK government information for their own purposes.

Tullo did not do this alone of course. One of her strengths has been to pick and nurture a good team of colleagues. Of particular relevance to this story is our next hero, John Sheridan. John has an IT background and is responsible for publishing UK legislation. Over the last few years he has

pioneered the use of semantic web technology for the electronic publication of UK laws – legislation.gov.uk – so that you can chart how the laws have developed and changed over time and follow links to related legislation. With his enthusiasm for the semantic web, he was also co-chairman of the eGovernment panel of the World Wide Web Consortium. This brought him into contact with our next, and probably most famous hero, Professor Sir Tim Berners-Lee, inventor of the World Wide Web, leading light of the WWW Consortium, and supreme advocate of open data. His role would be crucial in the widespread openness of UK government data that we have today, but we need to take a step back to understand why.

The EU Directive on the Re-use of Public Sector Information required the setting up of mechanisms to manage the dissemination of public sector information; it did not require that data should be published. Governments make money out of providing data to third parties who then use the datasets to develop their own information services. It is perhaps understandable that governments would not want to give this data away for free and, in the UK, trading funds were set up to manage the selling of this data. As already mentioned, the most notable of these is the Ordnance Survey, which publishes UK mapping data.

Of course the information industry wants to get hold of government data as cheaply as possible and geo-spatial data, such as geographic boundaries, underpins so much of other data. When I worked at the Statistics Commission, a watchdog on UK statistics, we probably had more complaints about the prohibitive costs of Ordnance Survey datasets than any other issue and my interviews in 2009 confirmed the importance of easy access to geo-spatial data for the development of new information services. *The Power of Information Review* prompted the government to commission a report from Cambridge University into the potential revenue for the country if trading funds' data was made freely available; this showed that this potential was huge. The government was slow to accept the report's recommendations – that is until Tim Berners-Lee stepped in.

We started this paper looking at issues of trust in government. In 2009 the UK government of Prime Minister Gordon Brown was beleaguered. The scandal about MPs' expenses had seriously undermined public trust. Had the information been available and published automatically, it probably would not have caused such a fuss, but the data was kept private until it was leaked to a British newspaper. There are still echoes of the problem today in 2012 with calls for senior politicians to release their tax returns. Meanwhile in the USA President Barack Obama had issued a diktat on his first day in office that government departments should release their datasets free of charge and the data.gov web portal was developed.

Gordon Brown called in Tim Berners-Lee for advice and his answer was: "Open up your data, and I'll help you." So Berners-Lee was taken on as a government adviser and he also brought in our next hero, Professor Nigel Shadbolt from Southampton University, another expert in semantic web technology. Work was done on the practicalities of opening up data and a portal was set up for third parties to access datasets: data.gov.uk. At first Berners-Lee was wary of suggesting that geo-spatial data should be freely published as he knew that the government derived considerable income from it, however he eventually became convinced that it was essential to include geo-spatial datasets for free public use as the potential for exploitation of the other datasets would be severely limited without them. And he convinced Gordon Brown of this too. As a consequence, most Ordnance

Survey datasets were published free of charge, with the cost of their compilation being taken over by the Treasury.

This happened just before the May 2010 UK general election. Unthinkable in the past, information policy was now a big issue in the election campaign. While the current Labour government was being advised by Berners-Lee and Shadbolt, the Opposition Conservative Party took on Tom Steinberg, co-author of the *Power of Information Review*, to advise it on transparency of data. The Conservatives made considerable commitments to opening up even more datasets, particularly those relating to spending, which they have made good on since coming to power. Francis Maude, Minister for the Cabinet Office, is spearheading the initiative, and as he admits, government needs to know the information itself even if it may sometimes be embarrassing. Within the Cabinet Office, there is a whole team dedicated to the transparency agenda, advised by a panel of our heroes – Tim Berners-Lee, Nigel Shadbolt (who is also chairing the Local Government Data Panel to encourage local authorities to open up their data), Tom Steinberg and Rufus Pollock.

Rufus Pollock has already featured in the story as he was one of the authors of the Cambridge University report on the financial benefits of opening up data. However he has another pivotal role as one of the founders of the Open Knowledge Foundation. What started as a small group of enthusiasts for the sharing of knowledge, and open data generally, has now become an organisation with global reach. The Foundation provides an online forum for activists and others to share their experience in developing open data information products and reporting on open data initiatives world-wide (see www.okfn.org). At one of their recent international conferences I was struck by the wide range of people there, not just geographically spread, but from many walks of life: IT enthusiasts, community activists, human rights groups, intellectual property lawyers and legal academics. But as far as I could tell, I was the only person from the library and information profession to attend. Why was that?

One of the issues I raised at the conference, because it is dear to my heart as a librarian, is whether the average person has the skills to make good use of all the information, to manage it, to evaluate it – in other words the necessary information literacy skills – and Tim Berners-Lee agreed that this was a big issue that needed to be better addressed. As my research found, this was still a gap in government information policy. Martha Lane Fox, founder of Lastminute.com, the travel and gifts website, was hired by the Labour government to get find ways of getting as many people as possible using online services. Governments everywhere need to save money and getting the public to use digital services is much cheaper than providing face-to-face or telephone contact. Getting people 'online' is not just helpful for them, it's good for government too.

Lane Fox's important Race 2012 initiative has been continued by the incoming Conservative/Liberal Democrat Coalition government and she is now the UK's 'Digital Champion', but there is still perhaps not enough recognition that just getting people 'online' is not sufficient in itself. Experts, such as those at this Inforum conference, are needed to train everyone in the full range of information literacy skills – and to train the trainers. One of the ideas of Race Online 2012 is to get members of the public to help others get online. Work is also starting on providing more support for those who will never get online: the 'information have nots' and 'information cannots'. Surely this is another area where the library and information profession has a lot to offer.

Good design of web services helps as well of course. Work continues on improving the central UK government portal Directgov, through which the public can get the information they need to help run their lives, and a single interface for all government websites, www.gov.uk is at the beta testing stage. More is also being done to improve the quality of the data being provided and to provide it in better ways for the public to understand.

The latest guru brought in by the UK government in March 2012 to improve interaction with the public is Wikipedia founder Jimmy Wales. His role is not yet fully defined but he will be advising on how policy-making can be opened up to the public and how citizens can interact more fully with government. There are many others who played a valuable role in developing the open government agenda, and the government now has an Executive Director for Transparency and Open Data, but they are standing on the shoulders of the pioneers.

There is one more important heroine who potentially affects the lives of all of us at the conference, but she is Dutch, not British. Neelie Kroes is the EU Vice-President with responsibility for the Digital Agenda for Europe and, as part of that role, she is pushing the open data initiative across Europe with a passion. In March this year she was in Bratislava for the presentation of the Action Plan of the Slovak Republic in favour of Open Democracy. It is clear from her speech that she values the importance of transparency and open data for democracy and economic growth:

Today's economic crisis is a testing time for our democracies. ... We need to bring back the trust in markets, in governments. ... One way to create trust is by increasing transparency in government. Citizens will be more confident if they can verify that the people they have elected inform them about what they do and how they do it. ...

In the digital age, data takes on a whole new value, and with new technology we can do great things with it. Opening it up is not just good for transparency, it also stimulates great web content, and provides the fuel for a future economy. That's why I say that data is the new oil for the digital age. How many other ways could stimulate a market worth 70 billion euros a year, without spending big budgets? Not many, I'd say.

Influence of the information profession

None of these heroes and heroines are from the information profession. As Richard Allan said when I interviewed him for this research, the work is being led by web activists. Why is this? Should it not be the information profession that is leading the way in showing government how it can best serve the information needs of its citizens? Is it that we, as information professionals, are too 'nice', too concerned with looking inwards to help our users rather than looking outwards to identify and push for what is needed at national level? Are we getting the right training and do we have the right skills in this new digital world, including policy skills? Some key opinion-formers that I interviewed suggested that there needed to be a new profession in government to take forward the open data work. And as regards influencing government policy, are we too scattered to speak with a coherent voice to government and do we know how to make the arguments? Are we identifying and training tomorrow's leaders within the profession who can take the message to government? Could we not ally ourselves with the policy champions such as the heroes and heroines identified here?

One of the big gaps I identified in my research was the provision of good training in schools and elsewhere in information literacy – as opposed to computer literacy. The UK government is keen to push computer literacy but has not yet fully grasped the need for information literacy to make best use of the information services provided. Again, this is a role for the information profession.

With these issues in mind, I made a series of recommendations in my research which, though framed for the UK situation, you may also find relevant to your own countries:

- 1. Research should be undertaken to identify what new professional information skills are needed within government and whether a new profession is needed or whether the information profession might have the appropriate skills to fill the gaps.*
- 2. University departments of information and relevant professional bodies should investigate what education and training is required to develop the appropriate skills for taking forward the open government agenda, either within the information profession or in a new profession.*
- 3. Information professionals should consider what wider skills they need to be able to take on less traditional roles in government where an information background would be advantageous, for example information policy-making and managing social networking within departments.*
- 4. A co-ordination mechanism should be set up within the library and information profession to campaign and advise government on specific policies as appropriate and CILIP should take the lead on setting up such a mechanism, although it would not necessarily lead on all issues.*
- 5. Information professional bodies should further encourage leadership within the profession, identifying and working with champions for specific areas of policy.*
- 6. They should also identify and work more with policy champions (whether individuals or organisations) from other disciplines where there is a common purpose.*
- 7. Professional bodies should take a wider approach to policy formulation, looking beyond the boundaries of institutions that provide and manage information.*
- 8. Research should be undertaken into the extent that courses of the schools of information within universities address how information policy is developed within government and also how students are helped to develop skills in influencing government on information policy issues, with a view to building on the courses already available.*
- 9. Finally, the professional bodies and the research community should work together to articulate the value of information to government and develop case studies to show how the profession can be of benefit to information policy-making.*

Conclusion

To conclude, there are two messages that I would like you to take away from this presentation. Firstly, information has become important to government at all levels and the information profession therefore has a wonderful opportunity to raise its profile and expand its influence. Secondly, this can start with you. We may not all be a Tim Berners-Lee or Jimmy Wales, but individuals can make a difference, however small. For example many pioneers in local government have done magnificent work in addressing the local population's needs for information through innovative websites. So think what difference you can make when you go back to your places of

work. Look outwards at the bigger picture, not just inwards at your own service – it's why you come to events like Inforum. Many of the heroes of open data started very small but thought big. So can you.

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Bibliography

BBC. News. *MPs' expenses.*

<http://news.bbc.co.uk/1/hi/in_depth/uk_politics/2009/mps'_expenses/default.stm>, 2010, [accessed 23.11.2010].

Blair, T. *A journey.* London: Hutchinson, 2010.

Braman, S. *Change of state: information, policy, and power.* London: MIT, 2007.

Brown, G. *Speech on building Britain's digital future, 22 March 2010.*

<<http://www.number10.gov.uk/Page22897>>, 2010, [accessed 23.03, 2010].

Cameron, D. *Letter to government departments on opening up new data, 31 May 2010.*

<<http://www.number10.gov.uk/news/statements-and-articles/2010/05/letter-to-government-departments-on-opening-up-data-51204>>

Chatfield, T. Prospect talks to the father of the world wide web. *Prospect Magazine*, 2010, (167), p.3.

Conservative Party (Great Britain). *The tech manifesto will open up government.*

<<http://blog.conservatives.com/index.php/2010/03/13/our-tech-manifesto-will-open-up-government/>>, 2010, [accessed 26.11.2010].

Crabtree, J. & Chatfield, T. Mash the state. *Prospect*, 2010, (167), 42-46.

European Commission. *Re-use of public sector information: review of Directive 2003/98/EC.* SEC(2009)597. Brussels: European Commission, 2009.

European Parliament & Council of Europe. Directive 2003/98/EC of the European Parliament and of the Council of 17 November 2003 on the re-use of public sector information. *Official Journal of the European Union*, 31 December 2003, L 345/90-96.

Fernandez-Aballi, I., ed. *Building national information policies: experiences in Latin America.* Kingston, Jamaica: Unesco, 2007.

Fitzgerald, B., ed. *Access to public sector information: law, technology and policy*. Sydney: Sydney University, 2010.

Free our data [blog]. <<http://www.freeourdata.org.uk/index.php>>, 2008, [accessed 29.07.2008].

Great Britain. *Freedom of Information Act 2000: Elizabeth II*. <<http://www.legislation.gov.uk/ukpga/2000/36/notes/contents>>, 2000, [accessed 25.09.2010].

Great Britain. *The re-use of public sector information regulations 2005*. SI 2005/1515. <<http://www.opsi.gov.uk/si/si2005/20051515.htm>>, 2005, [accessed 26.06.2008].

Great Britain. *Statistics and Registration Service Act 2007*. Elizabeth II. <<http://www.legislation.gov.uk/ukpga/2007/18/contents>>, [accessed 26.09.2010].

Great Britain. Audit Commission. *The truth is out there: transparency in an information age; a discussion paper March 2010*. London: Great Britain. Audit Commission, 2010.

Great Britain. Cabinet Office. *Cabinet Office minister opens up corridors of power*. Press release 31 May 2010. CAB 071-10. <http://www.cabinetoffice.gov.uk/newsroom/news_releases/2010/100531-open.aspx>, 2010, [accessed 11.08.2010].

Great Britain. Cabinet Office. *The Coalition: our programme for government*. London: Great Britain. Cabinet Office, 2010. <http://www.cabinetoffice.gov.uk/media/409088/pfg_coalition.pdf>, [accessed 24.07.2010].

Great Britain. Cabinet Office. *data.gov.uk*. <<http://www.data.gov.uk>>, 2010, [accessed 03.10.2010].

Great Britain. Cabinet Office. *Digital by default proposed for government services*. Press release 22 November 2010. <http://raceonline2012.org/sites/default/files/resources/208-10_-_channel_shift_announcement_final_version.pdf>, [accessed 25.10.2010].

Great Britain. Cabinet Office. *Digital engagement: update on Power of Information*. <<http://blogs.cabinetoffice.gov.uk/digitalengagement/file.axd?file=2009%2f5%2fDigital+Engagemen+t+-+final+-+pdf.pdf>>, 2009, [accessed 17.06.2009].

Great Britain. Cabinet Office. *Future management of Crown copyright*. <<http://www.opsi.gov.uk/advice/crown-copyright/future-management-of-crown-copyright.pdf>>, 1999, [accessed 26.09.2010].

Great Britain. Cabinet Office. *Government launches one-stop shop for data*. [Digital engagement blog of 21.01.2010]. <<http://blogs.cabinetoffice.gov.uk/digitalengagement/2010/01/21/default.aspx>>, [accessed 22.01.2010].

Great Britain. Cabinet Office. *The Government's response to The power of information: an independent review by Ed Mayo and Tom Steinberg (2007)*. Cm 7157. Norwich: The Stationery Office, 2007.

Great Britain. Cabinet Office. *Interim progress report on implementing the Government's response to the Power of information review*. Cm 7157. London: Great Britain. Cabinet Office, 2008.

<http://www.cabinetoffice.gov.uk/~media/assets/www.cabinetoffice.gov.uk/publications/reports/power_information/poi_interim%20pdf.ashx>, [accessed 18.06.2008].

Great Britain. Cabinet Office. *Pioneer of the World Wide Web to advise the government on using data.* Press release 10 June 2009. <http://www.cabinetoffice.gov.uk/newsroom/news_releases/2009/090610_web.aspx> [17.06.2009].

Great Britain. Cabinet Office. *Transformational government – our progress in 2008: delivering better, more efficient services for everyone.* <http://webarchive.nationalarchives.gov.uk/+http://www.cabinetoffice.gov.uk/cio/transformational_government/annual_report2008.aspx>, 2009, [accessed 27.09.2010].

Great Britain. Cabinet Office. Central IT Unit. *Government.direct: a prospectus for the electronic delivery of government services.* London: The Stationery Office, 1996.

Great Britain. Central Office of Information. *Effective public engagement.* <<http://www.coi.gov.uk/guidance.php?page=283>>, 2009, [accessed 27.08.2010].

Great Britain. Central Office of Information. *Engaging through social media.* <<http://www.coi.gov.uk/guidance.php?page=264>>, 2009, [accessed 27.08.2010].

Great Britain. Central Office of Information. *Our information age: the Government's vision.* London: Great Britain. Central Office of Information, 1998.

Great Britain. Department for Communities and Local Government. *Policy options for geographic information from Ordnance Survey – consultation: government response.* London: Great Britain. Communities and Local Government Publications, 2010.

Great Britain. Department for Innovation, Universities and Skills. *World class skills: implementing the Leitch review of skills in England.* Cm 7181. London: TSO, 2007.

Great Britain. Department for Work and Pensions. *Directgov: public services all in one place.* Press release 1 April 2008. <<http://www.dwp.gov.uk/mediacentre/pressreleases/2008/apr/emp071-010408.asp>>, 2008, [accessed 26.06.2008].

Great Britain. Department of Trade and Industry. *The commercial use of public information (CUPI): the government response to the Office of Fair Trading study.* URN 07/929. London: Great Britain. Department of Trade and Industry, 2007.

Great Britain. e-Skills UK Sector Skills Council. *Home.* <<http://www.e-skills.com/>>, [n.d.], [accessed 09.08.2010].

Great Britain. e-Skills UK Sector Skills Council. *Strategic skills assessment for the digital economy.* London: Great Britain. e-Skills UK Sector Skills Council, 2009. <<http://www.e-skills.com/Research-and-policy/2687>>, [accessed 09.08.2010].

Great Britain. Geographic Information Panel. *Place matters: the location strategy for the United Kingdom: a report by the Geographic Information Panel to Baroness Andrews, Minister for the Geographic Information Panel.* London: Great Britain. Department for Communities and Local Government, 2008.

<<http://www.communities.gov.uk/documents/communities/pdf/locationstrategy.pdf>>, [accessed 17.06.2009].

Great Britain. Her Majesty's Stationery Office. *Licensing of crown copyright HMSO regulatory framework consultation*. <<http://www.opsi.gov.uk/advice/crown-copyright/crown-copyright-licensing-consultation-outcome.pdf>>, 2002, [accessed 01.10, 2010].

Great Britain. HM Government. *Government knowledge and information professional skills framework*. <<http://gkimn.nationalarchives.gov.uk/framework.htm>>, 2009, [accessed 22.11.2010].

Great Britain. HM Government. *Open government: code of practice on access to government information*. 2nd ed. London: The Stationery Office, 1997.

Great Britain. HM Government. *Public launch*. [Data.gov.uk blog of 19.01.2010]. <<http://data.gov.uk/blog/public-site-launch>>, 2010, [accessed 03.08.2010].

Great Britain. HM Government. *Putting the frontline first: smarter government*. Cm 7753. London: TSO, 2009.

Great Britain. MH Government. Data.gov.uk. *New Public Sector Transparency Board and public data transparency principles*. <<http://data.gov.uk/blog/new-public-sector-transparency-board-and-public-data-transparency-principles>>, 2010, [accessed 25.11.2010].

Great Britain. HM Treasury. *Building trust in statistics*. Cm 4412. [n.p.]: The Stationery Office, 1999. <http://www.statistics.gov.uk/about_ns/downloads/whitepapertext1.pdf>, [accessed 02.10.2010].

Great Britain. HM Treasury. *Independence for statistics: a consultation document*. London: Great Britain. HM Treasury, 2006. <http://www.hm-treasury.gov.uk/budget/budget_06/other_documents/bud_bud06_odstatistics.cfm>, [accessed 04.07.2008].

Great Britain. HM Treasury. *Independence for statistics: the government response*. Norwich: HMSO, 2006. <<http://www.ons.gov.uk/about/key-documents/statistical-legislation/index.html>>, [accessed 02.10.2010].

Great Britain. HM Treasury. *Statistics: a matter of trust*. Cm 3882. <<http://www.archive.official-documents.co.uk/document/ons/govstat/report.htm>>, 1998, [accessed 02.10.2010].

Great Britain. Library and Information Commission. *Keystone for the information age: a national information policy for the UK*. London: Great Britain. Library and Information Commission, 1999. <<http://web.archive.org/web/20001206171500/www.lic.gov.uk/publications/policyreports/keystone.html>>, [accessed 24.02.2008].

Great Britain. Library and Information Commission. *Keystone for the information age, British Library 16-17 March 2000*. <<http://web.archive.org/web/20001206041700/www.lic.gov.uk/publications/other/keystonereport.html>>, [accessed 25.02.2008].

Great Britain. Library and Information Commission. *Towards a national information policy for the UK*. London: Great Britain. Library and Information Commission, 1997. <<http://web.archive.org/web/20000902115228/www.lic.gov.uk/publications/policyreports/nip.html>>, [accessed 25.02.2008].

Great Britain. Ministry of Justice. *Freedom of information.*
<<http://www.justice.gov.uk/whatwedo/freedomofinformation.htm>>, 2008, [accessed 26.06.2008].

Great Britain. The National Archives. *Open government licence for public sector information.*
<<http://www.nationalarchives.gov.uk/doc/open-government-licence/>>, 2010, [accessed 01.10.2010].

Great Britain. The National Archives. *Public sector information.*
<<http://www.nationalarchives.gov.uk/services/opsi.htm?homepage=im-opsi-b>>, [n.d.], [accessed 26.06.2008].

Great Britain. The National Archives. *Who we are, what we do and how we operate.*
<http://www.nationalarchives.gov.uk/about/whowhathow.htm?source=ddmenu_about1>, [n.d.], [accessed 04.07.2008].

Great Britain. Number 10. *Government spending data published.*
<<http://www.number10.gov.uk/news/topstorynews/2010/11/government-spending-data-published-2-57257>>, 19.11.2010, [accessed 22.11.2010].

Great Britain. Number 10. *One-stop shop for government data launched.*
<<http://www.number10.gov.uk/Page22218>>, 21.01.2010, [accessed 25.01. 2010].

Great Britain. Ofcom. *Ofcom's strategy and priorities for the promotion of media literacy: a statement.* London: Ofcom, 2004.
<http://www.ofcom.org.uk/consult/condocs/strategymedialit/ml_statement/strat_prior_statement.pdf>, [accessed 14.07.2008].

Great Britain. Office for National Statistics. *A brief guide to the new Statistics and Registration Service Act 2007.*
<<http://www.statistics.gov.uk/about/data/independence/downloads/BriefGuidetotheSRSA2007.pdf>>, 2007, [accessed 04.07.2008].

Great Britain. Office for National Statistics. *Framework for National Statistics.*
<<http://www.statisticsauthority.gov.uk/uk-statistical-system/history/key-historical-documents/index.html>>, 2000, [accessed 26.06.2008].

Great Britain. Office of Fair Trading. *The commercial use of public information (CUIPI).* OFT861. London: Office of Fair Trading, 2006. <http://www.oft.gov.uk/shared_oftr/reports/consumer_protection/oft861.pdf>, [accessed 24.03.2008].

Great Britain. Office of Public Sector Information. *The United Kingdom report on the re-use of public sector information 2009.* Cm 7672. Norwich: The Stationery Office, 2009.

Great Britain. Ordnance Survey. *Ordnance Survey launches OS OpenData in groundbreaking national initiative.* Press release 1 April 2010.
<<http://www.ordnancesurvey.co.uk/oswebsite/media/news/2010/April/OpenData.html>>, 2010, [accessed 11.08.2010].

Great Britain. Power of Information Taskforce. *Power of Information Taskforce* [blog]. 2009, <<http://powerofinformation.wordpress.com/>>, [accessed 04.03.2010].

Great Britain. Power of Information Taskforce. *Power of Information Taskforce report.* <<http://poit.cabinetoffice.gov.uk/poit/>>, 2009, [accessed 09.04.2009].

Great Britain. Statistics Commission. *Legislation to build trust in statistics.* London: Great Britain. Statistics Commission, 2004.

Great Britain. Statistics Commission. *Official statistics: perceptions and trust.* London: Great Britain. Statistics Commission, 2005.

Great Britain. UK Statistics Authority. *Code of practice for official statistics.* <<http://www.statisticsauthority.gov.uk/assessment/code-of-practice/index.html>>, 2009, [accessed 19.01.2009].

Great Britain. UK Statistics Authority. *Statistics free of politics: New UK Statistics Authority launches today.* Press release 1 April 2008. <<http://www.statisticsauthority.gov.uk/news/index.html>>, 2008, [accessed 26.06.2008].

Gurstein, M. *Open data: empowering the empowered or effective data use for everyone?* [Open data blog]. <<https://email.lboro.ac.uk/owa/ae=Item&a=Open&t=IPM.Note&id=RgAAAABqK%2f2fHtp9bTpyqGQvcpWS9BwDobPra2fmKvQredNcok7HXbACUIF2WmAADobPra%2fmKvQredNcok7HXbADILXAr9AAAJ>>, 2010, [accessed 10.09.2010].

Hacker, K.L. & Van Dijk, J., eds. *Digital democracy: issues of theory and practice.* London: Sage, 2000.

Hazell, R. & Worthy, B. *Impact of FOI on central government: Constitution Unit end of award report to ESRC, RES 062 23 0164,* <<http://www.ucl.ac.uk/constitution-unit/files/research/foi/projects/ESRCResearchReportSep2009.pdf>>, 2009, [accessed 17.09.2010].

Heeks, R. *Government data: understanding the barriers to citizen access and use.* University of Manchester, Institute for Development Policy and Management, 2000.

Hill, M.W. *National information policies and strategies: an overview and bibliographic survey.* East Grinstead: Bowker-Saur, 1984.

Hogge, B. *Open data study: commissioned by the Transparency and Accountability Initiative.* Soros Foundation, 2010. <http://www.soros.org/initiatives/information/focus/communication/articles_publications/publications/open-data-study-20100519/open-data-study-100519.pdf>, [accessed 04.09.2010].

Horton, F.W. *Understanding information literacy: a primer.* CI-2007/WS/18 – CLD 3008.7. Paris: Unesco, 2008.

Jakubowicz, K. *Statement by Dr. Karol Jakubowicz, chair of the Information for All Programme on the occasion of the World Information Society Day, 2008.* Paris: Unesco, 2008. <http://portal.unesco.org/ci/en/ev.php-URL_ID=26764&URL_DO=DO_TOPIC&URL_SECTION=201.html>, 2008, [accessed 17.06.2008].

Janssen, K. *INSPIRE and the PSI Directive: public task versus commercial activities?* Paper presented at 11th GI & GIS Workshop: ESDI: Setting the framework, 11th GI & GIS Workshop: ESDI: Setting the

framework, 29 June – 1 July 2005, Alghero, Sardinia. <<http://www.ec-gis.org/Workshops/11ec-gis/papers/303janssen.pdf>>, 2005, [accessed 14.06.2010].

Jones, F. & Kelly, M. *Omnibus survey: initial findings on public confidence in official statistics*. London: Office for National Statistics, 2004.

<<http://www.statistics.gov.uk/about/data/downloads/OmnibusInitialFindings.pdf>>, [accessed 04.07.2008].

Kirkpatrick, M. Open government: Berners-Lee and the UK show Obama how it's done. *New York Times*. <<http://www.nytimes.com/external/readwriteweb/2009/06/10/10readwriteweb-open-governemnt-berners-lee-and-the-uk-to-s-19521.html>>, 10 June 2009, [accessed 09.07.2009].

Kroes, N. *From Crisis of Trust to Open Governing*. Speech 12/149, 5 March 2012.

<<http://europa.eu/rapid/pressReleasesAction.do?reference=SPEECH/12/149&format=HTML&aged=0&language=EN&guiLanguage=en>>, [accessed 15.04.2012].

Labour Party (Great Britain). *New Labour because Britain deserves better: Labour Party general election manifesto 1997*. <<http://www.labour-party.org.uk/manifestos/1997/1997-labour-manifesto.shtml>>, 1997, [accessed 28.04.2008].

Lane Fox, M. *Directgov 2010 and beyond: revolution not evolution*.

<http://raceonline2012.org/sites/default/files/resources/martha_letter_to_francis_maude_directgov_2311_acc.pdf>, 2010, [accessed 25.11.2010].

Lane Fox, M. *Directgov review*. <<http://directgovreview.readandcomment.com/>>, 2010, [accessed 21.08.2010].

Leitch, S. *Leitch review of skills: prosperity for all in the global economy - world class skills: final report*. Norwich: TSO, 2006.

Library Association (Great Britain). *Report of the Policy Advisory Group on a National Information Policy, 2002*.

LSE Public Policy Group & Oxford Internet Institute. *Government on the Internet: progress in delivering information and services online: research report*. London: National Audit Office, 2007.

Mayer-Schönberger, V. & Lazer, D., eds. *Governance and information technology*. Cambridge, MA; London: MIT Press, 2007.

Mayo, E. & Steinberg, T. *The power of information: an independent review by Ed Mayo and Tom Steinberg*. <<http://www.opsi.gov.uk/advice/poi/power-of-information-review.pdf>>, 2007, [accessed 15.04.2012].

Miller, P. Tom Steinberg talks with Talis about the work of MySociety. *Nodalities Magazine*, 2009, (8), 15-19.

Morris, E. *Independent review of ICT user skills*. Great Britain. Department for Business, Innovation and Skills, 2009.

<http://www.dius.gov.uk/news_and_speeches/press_releases/~media/3F79A51589404CFDB62F3DA0DEBA69A1.ashx>, [accessed 03.10.2010].

Muir, A. et al. *Report on developments world-wide on national information policy: prepared for Resource and the Library Association.* Loughborough: Loughborough University Department of Information Science, 2001.

Mulgan, G. *The art of public strategy: mobilizing power and knowledge for the common good.* Oxford: Oxford University Press, 2009.

MySociety. [Home page]. <<http://www.mysociety.org/>>, 2010, [accessed 26.11.2010].

MySociety. FixMyStreet. [Home page]. <<http://www.fixmystreet.com/>>, 2010, [accessed 26.11.2010].

MySociety. They work for you. *Overview.* <<http://www.theyworkforyou.com/>>, 2010, [accessed 26.11.2010].

Newbery, D., Bently, I. & Pollock, R. *Models of public sector information provision via trading funds.* London: Great Britain. Department for Business, Enterprise and Regulatory Reform, 2008. <<http://www.berr.gov.uk/files/file45136.pdf>>, [accessed 24.03.2008].

Obama, B. *Transparency and open government: memorandum for the heads of executive departments and agencies.* [21 January 2009]. <http://www.whitehouse.gov/the_press_office/TransparencyandOpenGovernment/>, [accessed 26.11.2010].

Organisation for Economic Co-operation and Development. *Focus on citizens: public engagement for better policy and services.* Paris: Organisation for Economic Co-operation and Development, 2009. <<http://www.oecd/dataoecd/20/3/42658029.pdf>>, [accessed 12.01.2010].

Race Online 2012. *Manifesto for a wired nation.* <http://raceonline2012.org/sites/default/files/resources/manifesto_for_a_networked_nation_-_race_online_2012.pdf>, 2010, [accessed 04.09.2010].

Rhind, D. *APPSI's recommendations to progress the re-use of public sector information. Letter to Michael Wills MP, 21 July 2008.* <<http://www.appsi.gov.uk/reports/minister-letter-ec-submission-07-2008.pdf>>, 21 July 2008, [accessed 14.06.2010].

Rockefeller, N.A. *National information policy: report to the President of the United States submitted by the staff of the Domestic Council Committee on the Right of Privacy; Honorable Nelson A. Rockefeller, Chairman.* Washington, DC: National Commission on Libraries and Information Science, 1976.

Rowlands, I., ed. *Understanding information policy: proceedings of a workshop held at Cumberland Lodge, Windsor Great Park, 22-24 July 1996,* London: Bowker-Saur, 1997.

Selwyn, N. Reconsidering political and popular understandings of the digital divide. *New Media & Society*, 2004, 6(3), 341-362.

Socitm. Local and national government websites could provide much better support for the democratic process, finds Socitm elections 2010 survey. [Press release of 7 June 2010]. <http://www.socitm.net/press/article/142/local_and_national_government_websites_could_provid

[e much better support for the democratic process finds socitm elections 2010 survey](#)>, 2010, [26.08.2010].

Socitm. *Local government sites score better on visit success but central government sites better on satisfaction, says new Socitm analysis of website performance data.* [Press release of 23 August 2010].

<http://www.socitm.net/press/article/147/local_government_sites_score_better_on_visit_success_but_central_government_sites_better_on_satisfaction_says_new_socitm_analysis_of_website_performance_data>, 2010, [accessed 26.08.2010].

Steinberg, T. *Premise: Yes, I'm going to be advising the Opposition on IT.*

<<http://steiny.typepad.com/premise/2009/10/yes-im-going-to-be-advising-the-opposition-on-it.html>>, 04 October 2009, [accessed 03.03.2012].

Stirling, R. *Podcast: Richard Stirling talks about progress on data.gov.uk.*

<<http://data.gov.uk/blog/podcast-richard-stirling-talks-about-progress-datagovuk>>, 27 July 2010, [accessed 03.10.2010].

Telegraph. *Jimmy Wales: Wikipedia chief to advise Whitehall on policy.*

<<http://www.telegraph.co.uk/technology/wikipedia/9137339/Jimmy-Wales-Wikipedia-chief-to-advise-Whitehall-on-policy.html>>, 11 March 2012, [accessed 12.04.2012].

Uhlir, P.F. *Policy guidelines for the development and promotion of governmental public domain information.* CI-2004/WS/5. Paris: Unesco, 2004. <http://portal.unesco.org/ci/en/ev.php-URL_ID=15862&URL_DO=DO_TOPIC&URL_SECTION=201.html>, [accessed 17.06.2008].

Unesco. *Information for All Programme (IFAP).* <http://portal.unesco.org/ci/en/ev.php-URL_ID=1627&URL_DO=DO_TOPIC&URL_SECTION=201.html>, 2008, [accessed 24.07.2008].

Unesco. *Information for All Programme: Information literacy.*

<http://portal.unesco.org/ci/en/ev.php-URL_ID=21293&URL_DO=DO_TOPIC&URL_SECTION=201.html>, 2008, [accessed 27.05.08].

Unesco. *Information policy objectives (UNISIST proposals).* SC/74/WS/3. Paris: Unesco, 1974.

Unesco. *National Information Systems (NATIS): objectives for national and international action: Intergovernmental Conference on the Planning of National Documentation, Library and Archives Infrastructures: report, July 1974.* COM-74/NATIS/3. Paris, Unesco, 1974..

Unesco, International Federation for Documentation & International Federation of Library Associations and Institutions. *Planning of national documentation, library and archives infrastructures: intergovernmental conference: final report, Planning of National Documentation, Library and Archives Infrastructures,* 1974 SEP 23-27 1975. Paris: Unesco, 1975.

Urquhart, D.J. *NATIS (National Information Systems): national information policy.* Paris: Unesco, 1976.

Waller, P., Morris, R.M. & Simpson, D. *Understanding the formulation and development of government policy in the context of FOI. Prepared for the Information Commissioner's Office by The Constitution Unit.* London: University College London. Constitution Unit, 2009.

<http://www.ucl.ac.uk/constitution-unit/files/research/foi/ICO_%20FOlandPolicy.pdf>, [accessed 17.09.2010].

Watson, T. *Power of information: new taskforce. Speech by Tom Watson MP, Minister for Transformational Government, 31 March 2008.*

<http://www.cabinetoffice.gov.uk/about_the_cabinet_office/speeches/watson/080331watson.aspx>, 2008, [accessed 18.06.2008].

Weiss, P. *Borders in cyberspace: conflicting public sector information policies and their economic impacts.* United States. Department of Commerce.

<http://www.epsiplatform.eu/psi_library/reports/borders_in_cyberspace>, 2002, [accessed 19.09.2010].

World Summit on the Information Society. *Declaration of principles: building the information society: a global challenge in the new millennium.* New York: International Telecommunication Union & United Nations, 2003. (WSIS-03/GENEVA/DOC/4-E.).

<<http://www.itu.int/wsis/docs/geneva/official/dop.html>>, [accessed 05.02.2008].

World Summit on the Information Society. *Tunis Agenda for the Information Society.* New York: International Telecommunication Union & United Nations, 2005. (WSIS-05/TUNIS/DOC/6(Rev.1)-E).

<http://www.itu.int/wsis/documents/doc_multi.asp?lang=en&id=2267|0>, [accessed 25.02.2008].