

## CHAPTER SEVEN

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### CHARTING SUCCESS AND NAVIGATING THE CHALLENGES IN THE PSI WORLD

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What do we mean by Public Sector Information? Enshrined in UK legislation by the Re-use of Public Sector Information Regulations 2005<sup>2</sup> which implemented the EU Directive on Re-use<sup>3</sup> on July 1, 2005, Europe set itself the strategic goal of becoming a competitive and dynamic knowledge-based economy. It recognised the enormous value of public sector information (PSI) and the contribution PSI could make to stimulate the development and growth of Europe's information industry. Underpinning the business of government at every level, how we use information shapes everyday activities and responsibilities. Understanding the implications of freeing up access and removing barriers to re-use lies at the heart of the push in the UK to raise awareness of the potential for transforming how the citizen and state interact.

Initiatives in the UK are shaping the PSI agenda, yet we are not complacent. Every public sector organisation that steers work at central and community level plays its part. The initial economic drivers for the Directive are matched by the UK embracing innovative opportunities that allow Government to engage with the citizen. This enables greater efficiency of government through more effective information sharing, and creates services tailored for each community with the user at the centre. As Gordon Brown, British Prime Minister, said in 2007, 'this is the century of information'.

#### THE OFFICE OF PUBLIC SECTOR INFORMATION

The Office of Public Sector Information (OPSI),<sup>4</sup> operating from within The National Archives, is at the heart of information policy in the UK, setting standards, delivering access and encouraging the re-use of PSI. OPSI has responsibility for the management of much of the UK government's intellectual property. OPSI is also the regulator of public sector information holders for their information trading activities. There is renewed focus within Government on challenging how we get the best value from our major official information providers that trade in their information. Providing the conditions for all users to access the richness of the public sector's output across diverse areas of operation brings with it substantial responsibilities to create the right conditions for unlocking the potential of PSI. These priorities are embedded in our objectives to develop policy and advise on PSI re-use; to lead compliance on PSI regulations; to

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<sup>1</sup> © Crown copyright 2008. Reproduced with permission of the Controller of Her Majesty's Stationery Office. It should be noted that this chapter covers the period of 2007–2008 only.

<sup>2</sup> [www.opsi.gov.uk/si/si2005/20051515.htm](http://www.opsi.gov.uk/si/si2005/20051515.htm).

<sup>3</sup> [eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0098:EN:HTML](http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32003L0098:EN:HTML).

<sup>4</sup> [www.opsi.gov.uk/](http://www.opsi.gov.uk/).

deliver efficient and cost effective services including official publishing services; to provide e-services for facilitating and encourage re-use of PSI; and facilitate UK wide access to PSI.

Our vision – to lead and transform information management in government – is taking shape. The full spectrum of information management responsibilities sits within one lead organisation. This brings together Government’s thinking for information exploitation and re-use, while addressing how we make sure that government knows what it controls and manages on our behalf. Shaping policy; pioneering new ways of working with PSI; setting standards across information trading and information management; providing support and guidance; and influencing understanding and culture, OPSI aims to make information easy to find, use, share and trade in.

## INFORMATION HAS POWER

Google PSI and the progress of the last three years in the UK is clear with coverage of initiatives and reviews that continue to define the thinking and innovation in the PSI arena. This really is a dynamic, responsive world that lives up to its title of the power of information to harness the vast capacity for growth and development in innovation, citizen engagement and information provision.

In 2006 the Office of Fair Trading (OFT)<sup>5</sup> conducted an extensive market study of *The Commercial Use of Public Information (CUPI)*.<sup>6</sup> The report focused on the efficiency of PSI markets and how PSI is supplied to users. It highlighted the barriers to the re-use of information, such as pricing structures and licensing regimes; and the need for maintaining the quality of data whilst improving the quality of services provided. The OFT estimated that if these issues were resolved, the economic value of PSI in the UK would double to £1 billion, as a result of innovation and more efficient and improved public services.

The CUPI Report made a number of recommendations, which Government accepted in its Response in 2007.<sup>7</sup> The key recommendations were that:

- public sector information holders (PSIHs) should separate their ‘unrefined’ and ‘refined’ information and allow re-users access to the information at the earliest practicable point
- PSIHs should improve their accounting practices and quality of service, underpinned by improved guidance
- Government Trading Funds (the public sector organisations that trade in information) should operate in a more transparent and fair manner in order to encourage re-use and wider competition. In practice, this could challenge the viability of the current funding model
- OPSI’s regulatory role should be strengthened and resourced accordingly.

Progress against each of the recommendations is reported to the Domestic Affairs (Public Engagement and Delivery of Services) Cabinet Sub-Committee (DA(PED)) every six months, to monitor and track progress.<sup>8</sup>

Following from this study the Government commissioned *The Power of Information Review (POI)*,<sup>9</sup> an independent report by co-authors Tom Steinberg and Ed Mayo. Steinberg and Mayo’s

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<sup>5</sup> [www.offt.gov.uk/](http://www.offt.gov.uk/).

<sup>6</sup> [www.offt.gov.uk/shared\\_offt/reports/consumer\\_protection/of861.pdf](http://www.offt.gov.uk/shared_offt/reports/consumer_protection/of861.pdf).

<sup>7</sup> [www.berr.gov.uk/files/file39966.pdf](http://www.berr.gov.uk/files/file39966.pdf).

<sup>8</sup> [www.opsi.gov.uk/advice/poi/cupi-progress-report-01.pdf](http://www.opsi.gov.uk/advice/poi/cupi-progress-report-01.pdf).

<sup>9</sup> [www.berr.gov.uk/files/file39966.pdf](http://www.berr.gov.uk/files/file39966.pdf).

simple vision was ‘... that citizens, consumers and government can create, re-use and distribute information in ways that add maximum value’. Their belief is that through re-using PSI, better and more innovative services and products can be produced to better enable citizens in their everyday lives. It broadened the case for re-use from unlocking the potential economic value, to releasing economic and social value of PSI and to enabling the delivery of more effective public services. The report was published on 8 June 2007 and the Government responded accepting all 15 recommendations on 24 June 2007.<sup>10</sup>

The CUPI Report helped inform the *Models of Public Sector Information Provision via Trading Funds*,<sup>11</sup> an independent report by a team of Cambridge economists. The Cambridge Report, as it became to be known, was commissioned by HM Treasury as a direct result of the POI Review and examined how the Trading Funds provide and charge for PSI.

These reports begin to build an evidence base that sets out the benefits and significance of making information accessible and available. Understanding the significance to us all of the information market led to a commitment in the Budget Report 2008<sup>12</sup> to undertake a review of the business models of the Trading Funds to ensure the innovation of services and products is not hindered and information is traded fairly, efficiently and in a sustainable manner. The Shareholder Executive,<sup>13</sup> a department within the Department for Business, Enterprise and Regulatory Reform (BERR),<sup>14</sup> undertook this Review to examine the ‘Trading Funds’ governance, business plans and development strategies to assess if any improvements should be made and to define the public task of public sector organisations. The Terms of Reference were published in June 2008<sup>15</sup> and this work is being informed by a number of government departments and Trading Funds.

## CHARTING SUCCESS

Amongst these reports, officials and Ministers have pushed forward the agenda with great enthusiasm to maintain the growing momentum. The Minister for Transformational Government<sup>16</sup> launched the Power of Information Taskforce<sup>17</sup> to secure the success of the POI agenda. The Taskforce began a blog for users to discuss re-use and access issues and also issued guidance for civil servants when using social media. This POI agenda engages citizens and communities in harnessing the potential of new web technologies. An online competition was launched in June 2008, asking the public to ‘show us a better way’<sup>18</sup> aimed at improving how information is communicated to the public. The competition closed on 30 September with over 500 entries and a cash pot of £20,000 for developing the ideas. Judging took place in late October 2008.

In parallel, OPSI created a new information re-use request channel to gather and assess the requests to the re-use of PSI and to enable users to re-use this information to tailor solutions and services in their communities of interest. The channel is called the Unlocking Service<sup>19</sup> – a

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<sup>10</sup> [www.opsi.gov.uk/advice/poi/poir-government-response.pdf](http://www.opsi.gov.uk/advice/poi/poir-government-response.pdf).

<sup>11</sup> [www.berr.gov.uk/files/file45136.pdf](http://www.berr.gov.uk/files/file45136.pdf).

<sup>12</sup> [www.hm-treasury.gov.uk/d/bud08\\_completereport.pdf](http://www.hm-treasury.gov.uk/d/bud08_completereport.pdf).

<sup>13</sup> [www.shareholderexecutive.gov.uk/](http://www.shareholderexecutive.gov.uk/).

<sup>14</sup> [www.berr.gov.uk/](http://www.berr.gov.uk/).

<sup>15</sup> [www.shareholderexecutive.gov.uk/publications/pdf/tradingfunds250608terms.pdf](http://www.shareholderexecutive.gov.uk/publications/pdf/tradingfunds250608terms.pdf).

<sup>16</sup> [www.cio.gov.uk/transformational\\_government/index.asp](http://www.cio.gov.uk/transformational_government/index.asp).

<sup>17</sup> [powerofinformation.wordpress.com/](http://powerofinformation.wordpress.com/).

<sup>18</sup> [www.showusabetterway.com/](http://www.showusabetterway.com/).

<sup>19</sup> [www.opsi.gov.uk/unlocking-service/OPSIpage.aspx?page=UnlockIndex](http://www.opsi.gov.uk/unlocking-service/OPSIpage.aspx?page=UnlockIndex).

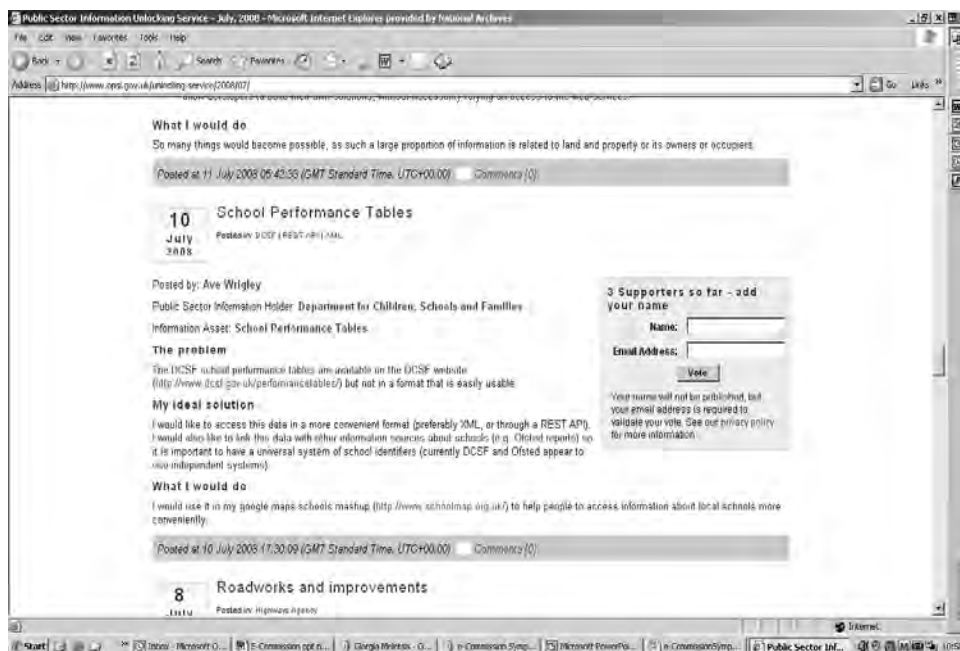
key to unlocking PSI's potential and helping users to access the information they need. The Unlocking Service evolved from its predecessor – a dedicated online discussion forum launched in September 2007 to evaluate the demand for types of PSI. The Unlocking Service is a dedicated instrument for re-users to resolve problems with re-use, for example with charging, licensing or with data standards. OPSI organised three consultative events when developing the Service, to discuss with various sectors of the community, how they envisaged the Unlocking Service would work and what they wanted from it. This helped shape the Service.



The Unlocking Service allows users to fill out a form describing their issue, which is then considered and advanced. The request is posted to a blog style user interface where other users can view the information, add comments or vote to support the information being unlocked. In the first week, 14 requests were made to the service. It is a system that has been proven to work. The Department for Children, Schools and Families is launching a new, re-useable version of its Edubase<sup>20</sup> website making it more accessible for re-use. Edubase was a one-off dump for the Show Us a Better Way competition and also, was one of the first projects to come out of the Unlocking Service. Easier access to education data was one of the requests on the Unlocking Service. The new Edubase website provides self-serve access for the public, so that groups such as Netmums (an online network for parents) can discuss schools and their experiences with education – this can lead to services being built around the base data. These

<sup>20</sup> A database of educational establishments in England and Wales: [www.edubase.gov.uk/home.xhtml](http://www.edubase.gov.uk/home.xhtml).

initiatives shape the direction of travel for Government to succeed with its aim of unlocking the potential of PSI.



The commitment from Ministers, the cross-departmental exchanges and the creation of the Power of Information Taskforce and the Unlocking Service, have all secured the success of this PSI activity. The UK government operates a mixed regime for charging and licensing the re-use of information. Since 2001, over 15,000 holders of online Click-Use Licences<sup>21</sup> illustrate how information crosses traditional boundaries. Click-Use provides a high degree of transparency offering a fast and streamlined licensing model.

The Click-Use Licence originally covered core government material that was at the heart of the government process. In 2004, it was extended to cover value-added material produced by Government, and consequently, a Click-Use Licence system was developed for the UK Parliament, covering the copyright of Parliamentary material. The Click-Use Licence was again extended in 2006, so that non-Crown organisations such as local government and the NHS could make use of Click-Use by mandating us to allow the re-use of their information. Some local authorities have developed their own online licence system, based on Click-Use. The Click-Use licensing system covers many forms of re-use and types of re-users ranging from research to private individuals to commercial publishing. The licences are taken out across the world – proving that information re-use crosses national and geographical boundaries. It is one of the UK's PSI successes and is promoted actively.<sup>22</sup>

All this demonstrates how much more we can deliver with a relaxation of systems and a sound evaluation of risk to show how content rich services can drive economic innovation and also

<sup>21</sup> [www.opsi.gov.uk/click-use/index.htm](http://www.opsi.gov.uk/click-use/index.htm).

<sup>22</sup> Blog of 8 October encourages councils to adopt Click-Use Licence: [powerofinformation.wordpress.com/](http://powerofinformation.wordpress.com/)

empower users. The Information Fair Trader Scheme (IFTS),<sup>23</sup> now expanding across the wider public sector, sets and assesses standards for public sector organisations to encourage the re-use of their information and supports them in reaching standards of fairness and transparency. The full IFTS is aimed at major information traders and Trading Funds. To be accredited, the organisations must make a commitment to five core principles<sup>24</sup> – openness, transparency, fairness, compliance and challenge.

OPSI's role as regulator is enhanced by our complaints and mediation process. With five accredited mediation officers, trained by the Centre for Effective Disputes Resolution,<sup>25</sup> the service was formally relaunched in 2008 and provides effective solutions to issues surrounding licensing and the re-use of PSI. The PSI Regulations contain a statutory complaints process with specified roles for OPSI and the Advisory Panel on Public Sector Information (APPSI).<sup>26</sup> We have a responsibility for investigating complaints under the PSI Regulations underpinned by a review role provided by APPSI. To date, OPSI has investigated three formal complaints, which led to improved service delivery from the public sector organisation concerned. Smarter and more targeted regulation is under review as the UK assesses appropriate controls and sanctions in this developing area.

APPSI was set up in 2003 to advise Ministers and OPSI on the opportunities for the information industry that flow from the greater re-use of PSI, especially those enabled by new technologies. APPSI members are selected for their expertise in the information world and therefore include providers, re-users and consumers of PSI, experts from academia and industry and representatives of producer and consumer groups and the devolved administrations.

*Success has taken many forms allowing us to experiment with different ways of meeting users' expectations.*

## PROVIDE AND ENABLE

Once the barrier of access and availability is overcome, data rich information may not be in reusable formats and is often trapped by poor structures – making it available and making it reusable are two different demands. It is recognised that a government website is not always the most effective place to provide information. It is beneficial that information is where the users are and can be found easily, which means it can be re-used by others on the web. For example, food hygiene inspection reports have greater impact on restaurant review websites than when they are located on local authority websites under obscure headings.

Most government data is published online in text formats with little structure, hindering re-use. Semantic web technology has provided the opportunity to experiment with alternative formats to release poorly structured data and make it re-usable. The UK Government has understood the significance of semantic web technology and the contribution it can make to achieving greater efficiency in information trading and sharing for better public services.

In 2007, we initiated a research project undertaken with a team at the University of Southampton. The project, AKTive PSI,<sup>27</sup> was to show how the use of semantic web technologies could release data within rigid structures. The technical solutions that emerged from AKTive PSI illustrated what could be achieved if PSI was semantically enabled and made available for re-use.

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<sup>23</sup> [www.opsi.gov.uk/ifts/index.htm](http://www.opsi.gov.uk/ifts/index.htm).

<sup>24</sup> [www.opsi.gov.uk/ifts/ifts-principles.htm](http://www.opsi.gov.uk/ifts/ifts-principles.htm).

<sup>25</sup> [www.cedr.co.uk/](http://www.cedr.co.uk/).

<sup>26</sup> [www.appsi.gov.uk/](http://www.appsi.gov.uk/).

<sup>27</sup> [www.aktors.org/interns/2006/aktivepsi/index.php](http://www.aktors.org/interns/2006/aktivepsi/index.php).

The use of Semantic Web Standards is important to ensure information is presented in the most accessible form possible. There are a number of options for enabling this type of re-use, using the web as a platform to deliver data such as application programming interfaces (APIs) for structured data. With new Semantic Web Standards such as RDFa, it is now possible to mark up textual information inside documents, in effect turning a traditional website into an API. The UK Government has been exploring the use of semantic markup inside XHTML documents in order to facilitate access, use and re-use of data.

One main aim of this work was to show the added value of using semantic web technology and standards for publishing and government data. This technology was applied to the London Gazette,<sup>28</sup> the UK Government's official journal and newspaper of record. Published by Authority since 1665, it is a unique source of a wide range of information, including notices grouped by subject, for example, planning, transport, environment, and insolvency. Work to semantically enable the London Gazette had two aims: first, to find a practical way of publishing PSI in a way that maximises its re-use potential, and secondly, to give the London Gazette a new role. Whenever a piece of legislation says that information must be published in the London Gazette, it will in effect ensure that information is made publicly available, in a consistent way and in a re-usable form. It is for users to decide what services are built from unlocking this information and support. Work continues to enable more government information and learn more about semantic web technologies and their applicability.

#### THE CURRENT UK POSITION

The UK Government's Annual Report on PSI<sup>29</sup> in July 2008, three years on from the implementation of the PSI Regulations, details the achievements so far mapping them against the timeline of that period (pages 36 – 39 of UK Government's Annual Report on PSI). The structure of this Report reflects the work at European Union level and so, OPSI grouped the coverage around the key themes under review by the European Commission as it assesses the first three years of operation of the PSI Directive. The UK emerges well in its direction of travel. The timeline contained in the report highlights and tracks activities, events and initiatives in this field. There have been many achievements to date, and the progress in the past year underlines the momentum that has gathered and continues to be a driving force. The acceleration of activity since 2005 is clear.

The Timeline is divided into three sectors – the UK Government, OPSI and external factors that are influencing the PSI field. It depicts the synergies between the public and private sectors and the emerging activities that are informing policy and current thinking.

#### RAISING AWARENESS

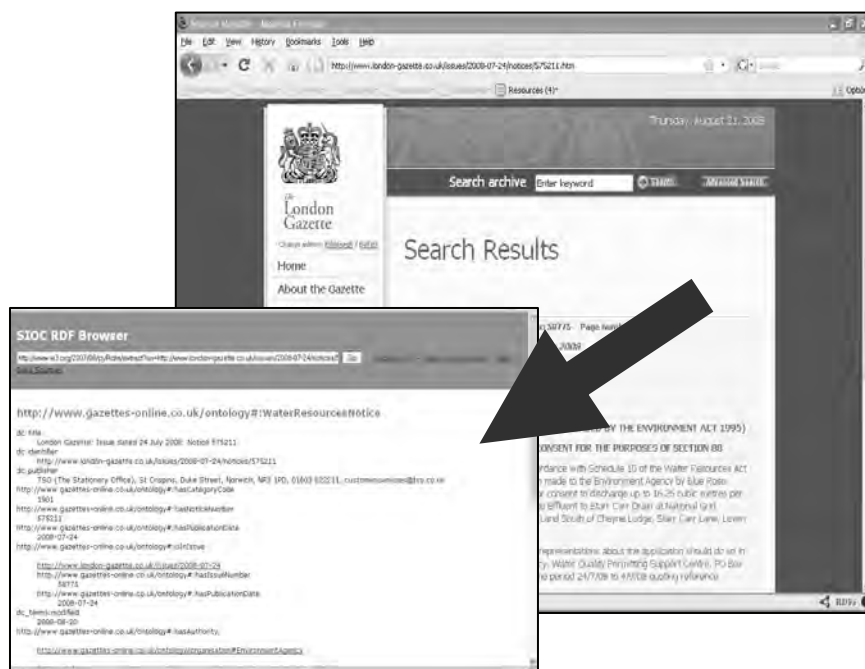
In October 2008, OPSI supported a conference on unlocking the potential of PSI. The aim of the conference was to spread awareness of the UK's concerted activity surrounding PSI in the past year, with a number of reports providing the opportunity to change the current regime. The conference looked at how OPSI will go forward and overcome the current obstacles and also covered the intertwined issues of the Web 2.0 world that rely on information being accessible and available for re-use.<sup>30</sup>

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<sup>28</sup> [www.gazettes-online.co.uk/](http://www.gazettes-online.co.uk/).

<sup>29</sup> [www.opsi.gov.uk/advice/psi-regulations/uk-report-reuse-psi-2008.pdf](http://www.opsi.gov.uk/advice/psi-regulations/uk-report-reuse-psi-2008.pdf).

<sup>30</sup> Interview with Carol Tullo and OPSI contribution: [www.civilservicenetwork.com/features/article-with-intro.html?tx\\_ttnews%5Btt\\_news%5D=56848&tx\\_ttnews%5BbackPid%5D=24&cHash=4ce61aee3e](http://www.civilservicenetwork.com/features/article-with-intro.html?tx_ttnews%5Btt_news%5D=56848&tx_ttnews%5BbackPid%5D=24&cHash=4ce61aee3e)



With more than 100,000 public sector organisations in the UK, there is a constant tension in how we prioritise our activities. Targeted partnership with local government and health organisations is producing centres of excellence but the uptake across this wider public sector is piecemeal. Conflicting demands and priorities mean that we are working hard to extend understanding of the PSI benefits and responsibilities. This is all part of the sound management and stewardship of the information assets that drive the business of the public sector.

## CONCLUSION

The legislative framework we operate has thrown up some challenges as we navigate a route to an optimal, equitable and sustainable information offering across the public sector. Confidence to embrace the opportunities requires clarity and some certainty over the public task of public sector information holders. There are calls to remove ambiguity in operation between upstream and downstream trading activities to encourage innovation. While we take our steer from Europe, we can also share the experiences of colleagues in international jurisdictions who provide constructive debate as we are all facing the same issues. Raising awareness of the impact and the benefits to the UK economy is of particular resonance at present. By making information available and re-usable in flexible ways on the web, new markets and uses can drive innovation. Government at every level is alive to that potential, acknowledging that shared expertise and knowledge is the key to improved and better services. The real questions for us all

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Feature on Tom Watson's speech: [www.civilservicenet.com/news/article.html?tx\\_ttnews%5Btt\\_news%5D=56852&tx\\_ttnews%5BbackPid%5D=29&cHash=cba11e187a](http://www.civilservicenet.com/news/article.html?tx_ttnews%5Btt_news%5D=56852&tx_ttnews%5BbackPid%5D=29&cHash=cba11e187a).

Feature on discussion panel: [www.civilservicenet.com/news/article.html?tx\\_ttnews%5Btt\\_news%5D=56855&tx\\_ttnews%5BbackPid%5D=29&cHash=f7ad77fbb8](http://www.civilservicenet.com/news/article.html?tx_ttnews%5Btt_news%5D=56855&tx_ttnews%5BbackPid%5D=29&cHash=f7ad77fbb8).



are: are you sure you are making the most of the information that you hold? Can you risk not adopting the PSI agenda?

Transformational Government was created to design and deliver public services around the needs of the citizen and to provide more efficient services to the public. It involves providing access to information and delivering services online, using technology as a transformer of the business of government. Since the UK adopted the overarching Transformational Government vocabulary we have seen a true transformation:

This is the time to push forward, faster and on all fronts: open up the system, break down the monoliths, and put the parent and pupil and patient and law-abiding citizen at the centre of it. We have made great progress. Let us learn the lessons of it not so as to rest on present achievements but to take them to a new and higher level in the future. *Tony Blair, Prime Minister 1997 – 2007*

The UK has shifted to putting the user at the centre of services. In this information policy side of the agenda we need also to manage the business information assets that drive services, building resilience and flexibility, without compromising the integrity of the content.

We judge ourselves so far as:

Good progress to date, sound planning and responsive initiatives that augur well but now the UK needs to deliver real change and enabled PSI awareness in the public sector business. We relish the next challenges as momentum is maintained in the UK.

**Editorial Note:** This chapter covers the period 2007–2008. The following is a very brief account of some of the subsequent substantive UK developments. In 2009 the Power of Information (PoI) Task Force delivered its final report,<sup>31</sup> which included key recommendations that government should adopt a highly permissive use ‘Crown Commons’ style licensing regime, and that geospatial data be freed up through ‘urgent reform’ of the Ordnance Survey (OS). In May 2009, the UK Government in its response accepted in principle the recommendation that ‘geospatial data produced by the Ordnance Survey should be opened up and made more widely available’. It also indicated that the Office of Public Sector Information (OPSI) was developing a new licence model that would ‘take the licensing of government content to the next level’ and be compatible with other standard licences such as Creative Commons.<sup>32</sup> In January 2010, Sir Tim Berners-Lee<sup>33</sup> with colleague Professor Nigel Shadbolt launched the UK government initiative [www.data.gov.uk](http://www.data.gov.uk), a portal giving access to a wealth of over 2500 central government data sets available for free re-use. Also, at this time Ordnance Survey launched its related OS Open Data initiative establishing an online portal providing free and unrestricted access to a large range of mapping and geographic information.<sup>34</sup> Both initiatives have adopted the same CC compatible licence terms to facilitate reuse of public sector information. In May 2010, following a general election a new government was formed in the UK and we are expecting further policy announcements in the coming months.

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<sup>31</sup> The POI Task Force Final Report is reproduced in Volume 2, Chapter 22.

<sup>32</sup> UK Government, Digital Enlargement: Update on Power of Information, May 2009, available at [www.ipsiplus.net/reports/uk\\_power\\_of\\_information\\_review/digital\\_enlargement\\_update\\_on\\_power\\_of\\_information](http://www.ipsiplus.net/reports/uk_power_of_information_review/digital_enlargement_update_on_power_of_information).

<sup>33</sup> Co-inventor of the world wide web, and appointed in 2009 as the government's adviser on the delivery of UK public sector information to the public.

<sup>34</sup> [www.ordnancesurvey.co.uk/oswebsite/opendata/licence/docs/licence.pdf](http://www.ordnancesurvey.co.uk/oswebsite/opendata/licence/docs/licence.pdf). The Open Data OS licence in part provides that the terms are ‘aligned to be interoperable with any Creative Commons Attribution 3.0 licence.’