House of Commons
Public Administration Select Committee (PASC)

Statistics and Open Data: Harvesting unused knowledge, empowering citizens and improving public services

Tenth Report of Session 2013–14

Report, together with formal minutes

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The Public Administration Select Committee (PASC)

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Summary

Open data plays an increasingly important role in Government and society. It is data that is accessible to all, free of restrictions on use or redistribution and which is digital and machine-readable so that it can be combined with other data. Today there are unparalleled opportunities to harvest unused knowledge that otherwise goes to waste, which can be used to empower citizens, to improve public services, and to benefit the economy and society as a whole. Deloitte assessed “the value of public sector information to consumers, businesses and the public sector in 2011/12 [as] approximately £1.8 billion (2011 prices).” Deloitte also estimated the “social value” of public sector information “on the basis of conservative assumptions” to be “in excess of £5 billion for 2011/12 (2011 prices).”

Ministers support open data. We welcome the clear lead on open data that has come from successive Governments. However its concept of open data is poorly defined and there are no accepted measures of what is published. Simply putting data “out there” is not enough to keep Government accountable.

The Government needs to recognise that the public has the inherent ‘right to data’, but there is confusion about this concept. The Government should clarify its policy and bring forward the necessary legislation, without delay.

The ‘right to privacy’ must also be recognised. The recent controversy over ‘care.data’ demonstrates the danger that undue or exaggerated concerns about privacy will unduly undermine the case for open data.

There should be a presumption that restrictions on government data releases should be abolished.

Some government data sets are of huge direct value to the economy. The Postcode Address File (PAF) was included in the sale to boost the Royal Mail share price at flotation. This takes an immediate but narrow view of the value of such datasets. PAF should have been retained as a public data set, as a national asset. The sale of the PAF with the Royal Mail was a mistake. Public access to public sector data must never be sold or given away again.

The UK Government was an early mover on government open data, but other Governments, watching the UK with interest, are catching up fast. If the Government does not take the opportunities offered, there is a risk in the UK that businesses with growth potential will be deterred by fees for data, and by legal and administrative barriers, while other countries are developing their data industrial base and stealing a lead over the UK.

The Cabinet Office should be much more active in ensuring Departments maximise the social and economic potential of open data, not least in increasing their own efficiency and effectiveness.

Many civil and public servants lack the skills to interpret data properly and some
servants do not seem to share the Government’s desire for openness. Government should ‘publish early even if imperfect’, as well as being committed to a ‘high quality core’.

There is much to be gained from open data, but the Government’s direction of travel is not clear. There has been a lack of coordination on open data at Ministerial and official level, though this is improving.

To overcome departmental apathy and resistance, open data needs to be treated as a major government programme in its own right, which will only bring substantial benefits if it is subject to active leadership and management.
1 Introduction

1. Open data is playing an increasingly important role in Government and society. It is data that is accessible to all, free of restrictions on use or redistribution and also digital and machine-readable so that it can be combined with other data, and thereby made more useful. This report looks at how the vast amounts of data generated by central and local Government can be used in open ways to improve accountability, make Government work better and strengthen the economy.

Data – some definitions

Data: Qualitative or quantitative statements or numbers that are assumed to be factual, and not the product of analysis or interpretation.

Open Data: Data that is accessible (ideally via the internet) at no more than the cost of reproduction, without limitations based on user identity or intent; in a digital, machine-readable format for interoperation with other data; and free of restriction on use or redistribution in its licensing conditions.

Public Sector Information (PSI): Information and data subject to the Freedom of Information Act 2000 and the Reuse of Public Sector Information Regulations 2005; data and information produced, collected or held by public authorities, as part of their public task.

Open Government Data: Public Sector Information that has been made available to the public as open data (Source for definitions: Open Data White Paper 2012)

2. In this inquiry, we examined progress against a series of major government policy announcements on open data in recent years, and considered the prospects for further development. We heard of government open data initiatives going back some years, including the decision in 2009 to release some Ordnance Survey (OS) data as open data, and the Public Sector Mapping Agreement (PSMA) which makes OS data available for free to the public sector.¹ The 2012 Open Data White Paper ‘Unleashing the Potential’ says that transparency through open data is “at the heart” of the Government’s agenda and that opening up would “foster innovation and reform public services”.² In 2013 the report of the independently-chaired review by Stephan Shakespeare, Chief Executive of the market research and polling company YouGov, of the use, re-use, funding and regulation of Public Sector Information urged Government to move fast to make use of data.³ He criticised traditional public service attitudes to data before setting out his vision:

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¹ Open Data User Group (OD 14) para 2
² Cabinet Office, Open Data White Paper: Unleashing the Potential Cm 8353, June 2012, p 5
To paraphrase the great retailer Sir Terry Leahy, to run an enterprise without data is like driving by night with no headlights. And yet that is what Government often does. It has a strong institutional tendency to proceed by hunch, or prejudice, or by the easy option. So the new world of data is good for government, good for business, and above all good for citizens. Imagine if we could combine all the data we produce on education and health, tax and spending, work and productivity, and use that to enhance the myriad decisions which define our future; well, we can, right now. And Britain can be first to make it happen for real.\(^4\)

3. This was followed by publication in October 2013 of a National Action Plan which sets out the Government’s view of the economic potential of open data as well as its aspirations for greater transparency.\(^5\)

4. This inquiry is part of our wider programme of work on statistics and their use in Government. A full description of the studies is set out under the heading “Statistics” in the inquiries section of our website, which can be found at [www.parliament.uk/pasc](http://www.parliament.uk/pasc). For this inquiry we received 30 pieces of written evidence and took oral evidence from 12 witnesses. We are grateful to all those who have provided evidence and to our Specialist Adviser on statistics, Simon Briscoe, for his assistance with this inquiry.

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\(^4\) As above, p 4

## 2 Improving accountability through open data

### The Government’s aims

5. One main aim of the Government’s policy on open data is to improve the ability of citizens to hold Government to account. The Prime Minister made this clear in 2010:

> We’re going to rip off that cloak of secrecy and extend transparency as far and as wide as possible. By bringing information out into the open, you’ll be able to hold government and public services to account. You’ll be able to see how your taxes are being spent. Judge standards in your local schools and hospitals. Find out just how effective the police are at fighting crime in your community. Now I think that’s going to do great things. It’s certainly going to save us money. With a whole army of effective armchair auditors looking over the books, ministers in this government are not going to be able to get away with all the waste, the expensive vanity projects and pointless schemes that we’ve had in the past.\(^5\)

6. Ministers have regularly restated their support for open data as an aid to accountability; in 2012 the Rt Hon Francis Maude MP, Minister for the Cabinet Office, said:

> “These are the first formative years of this new Age of Open Data. [...] the prize is effective personalised 21st century democracy. Transparency will create empowered citizens that can expose corruption, get the best value out of their governments and have equal access to valuable raw data.”\(^7\)

7. The Open Data White Paper, ‘Unleashing the Potential’, published in June 2012, gave more detail on the Government’s aspirations, including ways in which it could help in “Building a transparent society”\(^8\). Opening up public service data was creating a “living library of information” to help people hold Government to account.\(^9\) The Government called this “a completely different way of governing”, for instance giving anyone in the country the means to challenge public authorities on how public money is being spent.\(^10\) More data would be put into the public domain, there would be significant improvements to the website data.gov.uk, which brings data released by Government together in one searchable website, and amendments to the Freedom of Information Act would make it much easier for citizens to get access to public sector datasets in a useful form.\(^11\)

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6. [Podcast](#) by the Prime Minister, 29 May 2010
7. [Speech](#) to the World Bank by the Rt Hon Francis Maude MP, 30 January 2012
9. As above
10. As above
11. As above pp 11-12
**Good examples**

8. To what extent is this transparent vision becoming a practical reality? There are several examples of the use of data on public services to increase the ability of the public to keep a check on how they are performing. Many witnesses mentioned data.police.uk, which shows reported crimes and their outcomes in detail, down to street level. This has been well-used by the public, with more than 53 million visits from 22 per cent of all family households in England and Wales since its launch in 2011.12 Public debate about a variety of public services has also been informed by other recent releases of open public sector data. Greater public transparency in health spending has, for instance, been created by Mastodon C, a start-up company whose work was welcomed by several of our witnesses.13 One of Mastodon C’s projects looked at GPs’ prescription data and demonstrated that, for example, the NHS could have saved more than £200 million a year if the generic version of statins had been prescribed rather than the patented version.

9. On environmental issues, the greenhouse gas emissions statistics released annually by the Department of Energy and Climate Change were welcomed by Ruth Dixon and Professor Christopher Hood of Oxford University as “a consistent and informative dataset” that allows meaningful comparisons over time.14 Openly Local is a project which is attempting, it says, “to develop an open and unified way of accessing Local Government information” including numerical data. At the time of our inquiry the project offered access to data on spending, councillors’ expenses and planning applications for over 140 local authorities.15

**Barriers to accountability**

10. Along with such promising examples of good practice, we had some evidence that there were barriers to the achievement of greater accountability through open government data. There was some evidence that the Government’s original clear focus on accountability as the key goal of open data had recently been diluted by other priorities. Dr Ben Worthy, a lecturer in politics at Birkbeck, University of London, told us that there was uncertainty about “which of the ‘economic, social and political’ aims [for open data] the Government supports. Observers have noted a shift in emphasis from the democratic aims of government transparency and accountability to the economic aims of encouraging growth.”16

11. Full Fact, an independent organisation which provides advice and information to help people check the facts against claims made by politicians and the media, acknowledged that the Government’s agenda of “open by default” had helped to “set the right ambition for open data generally”.17 But it was critical of much of the

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12 See for instance “The geeky revolution that will change our lives”, The Times, 28 October 2013
13 For example Nick Hurd MP and Rt Hon Michael Fallon MP (OD 28); Open Data Institute (OD 09) para 30; Q21 ff
14 Ruth Dixon and Professor Christopher Hood (OD 04) para 8.2
15 Openly Local website
16 Dr Ben Worthy (OD 27)
17 Full Fact (OD11)
Government’s actual performance in providing greater accountability: “Open data is a
great thing of which we have seen too little, too late, too poorly done. Because it has
been poorly done the take up has been limited.”

12. The Institute for Government observed that “the accessibility, quality, and
presentation of government data varies widely between departments and datasets.”
There is certainly evidence of accuracy and quality issues with some of the data releases.
The UK Data Service (UKDS), a data resource funded by the Economic and Social
Research Council to support researchers, teachers and policymakers, told us that there
were “countless examples of (avoidable) errors” in government data releases. One
example, according to UKDS, was the recent publication by the Treasury of the Bona
Vacantia Unclaimed Estates List, which gives details of property which has passed to the
Crown because the previous owner has died with no will or known family. UKDS noted
that the date of birth of at least 132 people (more than 1% of the total) was “reported as
being after their date of death. (And the marital status of some suggests that other ages
are wrong too – for example, there is a two month old widow!)”. UKDS criticised the
“lack of quality control mechanisms”. Owen Boswarva, a data consultant and open
data activist, who is a non-executive member of the Defra Network Transparency Panel
and submitted his evidence to us in a personal capacity, was critical of what he called
“the indiscriminate dumping of small, low-value datasets on Data.gov.uk” which had
“created the illusion of progress - 9,000 datasets [at the time of writing] sounds like a lot,
but what proportion is that of what total?”

13. Accountability can also be hampered by over-cautious official attitudes, according to
Heather Savory, Chair of the Open Data User Group, which exists to help Government
understand the requirements of people who are using, or could use, the datasets it
collects. Ms Savory told us that there were “perceived risks among civil servants” in
relation to open data, who could be “concerned because their data is not perfect” but,
Ms Savory observed “no data set is perfect.” She also identified “a lack of belief that the
technical community can deal with this stuff” whereas an outsider keen on making use
of open data might say to Government “Just give me big, dirty data. I’ll deal with it.”
Similar points were made by Tom Steinberg, who drew attention to an apparent
inconsistency of approach across Government. He noted that the figure for GDP,
“which is probably the single number that people in Whitehall care about more than
anything else” is frequently published then revised “yet there have been much less
important data sets that have not been released because we cannot make a mistake.”

14. Stephan Shakespeare believed that these dilemmas could be resolved, and his Review
report set out:

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18 As above
19 Institute for Government (OD 17)
20 UK Data service (OD 08) para 18
21 Owen Boswarva (OD 09) para 7
22 Q51
23 As above
24 Q69
a twin-track policy for data-release, which recognises that the perfect should not be the enemy of the good: a simultaneous “publish early even if imperfect” imperative AND a commitment to a “high quality core”. This twin-track policy will maximise the benefit within practical constraints. It will reduce the excuses for poor or slow delivery; it says “get it all out and then improve”.

15. The intention, the Review continued, “is that as much as possible is published to a high quality standard, with departments and wider public sector bodies taking pride in moving their data from track 1 to track 2.” Mr Shakespeare explained in oral evidence to us that this entails identifying:

the data sets that need to be clean and need to be published to certain high standards, and that should be track [two]. All the rest is published as track [one]—quick and dirty, as one might say, so long as one knows that it is dirty—and left to the data scientists to do what they can.

16. **Stephan Shakespeare’s proposal that the Government should adopt a “twin-track” approach to data release is a practical and realistic way of maintaining the momentum on open data, which recognises that “the perfect should not be the enemy of the good: a simultaneous ‘publish early even if imperfect’ imperative AND a commitment to a ‘high quality core’”. Regular publication of imperfect government data will provide Departments with a powerful incentive to improve it. We recommend that the Government should adopt the twin-track approach to data release advocated by Stephan Shakespeare. Government should ‘publish early even if imperfect’, as well as being committed to a ‘high quality core’. As long as Government is clear about its limitations, there will always be a role for data that is imperfect but improvable.**

17. Other witnesses identified limitations with data.gov.uk that made it less accessible, and therefore less useful for the general public. The National Statistician, Jil Matheson, complained that data.gov.uk “does not yet have the functionality that we would like to see for accessing statistics. One of the really important ways of people being able to understand what is there is to be able to visualise it.”

18. **It is very difficult to assess the performance of Government in enhancing accountability through opening up its data. The concept of open data is poorly defined and there are no accepted measures of what is published. This allows supporters of open data to claim the revolution is well under way and the sceptics to say nothing has changed.**

19. **It is often pointed out that more than 13,000 datasets can now be found on data.gov.uk, but it is unclear how many of these represent simple republishing of data already published on other government sites. Some data sets are small and others large. And it is possible for departments to get more data out by publishing it in smaller bundles or updating it more frequently, in such a way that there is little or no extra...**

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25 Shakespeare Review, p 11
26 As above
27 Q94
28 Q226
public benefit. In these circumstances, measuring progress on this important agenda is difficult if not impossible. Simply putting data “out there” is not enough to keep Government accountable.

20. We invite the Government to publish a clear list of open data, indicating when each data series became open in each case.

Outsourcing and transparency

21. Several witnesses argued that the principles of open data should be applied consistently to all organisations that provide public services, including those in the private or voluntary sectors. They observed that, in the new world of frequent outsourcing of public service delivery, this was particularly important.

22. The Information Commissioner, Christopher Graham, told us that he was concerned that outsourcing potentially undermined the principles of understanding, accountability and open data, arguing that “it is important that outsourcing does not lead to a decrease in transparency in public services.”29 Dr Rufus Pollock, Director of the Open Knowledge Foundation, also raised this issue, noting with concern that open data principles are not “embedded in [government] procurement rules”.30 He continued: “One of the biggest risks and dangers we have seen evidence of both in the US and here is that you outsource some service and, bam, all your information is gone.”31 Tom Steinberg also saw this as a key issue for the future, telling us that, there could be “a real problem to public accountability in situations where companies are used to provide public services, instead of government bodies.”32

23. More positively, it was suggested to us that open data could help Government at all levels to improve its performance in commissioning private and voluntary sector providers, ODI arguing that “choice and competition would be enhanced if data on the performance of public service providers were published in a consistent fashion and made available to service users and external experts.”33

24. There was support from the Information Commissioner for the idea of Government releasing detailed data about the performance of private providers in delivering public services. He told us: “Opening this information as fully as possible to public scrutiny would promote efficiency in the use of public funds and also help to build public confidence in outsourcing.”34 The Commissioner welcomed the Government’s commitment in the National Action Plan to “take steps to ensure transparency about outsourced services is provided in response to freedom of information requests.”35

29 Information Commissioner's Office (OD 26) para 16
30 Q40
31 As above
32 Tom Steinberg (OD 24)
33 Institute for Government (OD 17)
34 Information Commissioner’s Office (OD 26) para 15
35 As above
Procurement and Open Data

25. Several witnesses called for the whole range of public sector procurement processes to be reformed to encourage open data, especially in the case of IT contracts. Tom Steinberg for example told us that “open data will only become widespread if its provision is tied to the procurement of information systems.”36 The Information Commissioner made a similar point, telling us that he is encouraging ‘transparency by design’, advising public authorities to “think about open data requirements when they are procuring and designing new IT systems.”37

26. The Cabinet Office Minister, Nick Hurd MP, told us that Cabinet Office is working with the Government Digital Service “on a piece of work to include open data clauses in IT procurement”; money has been made available for Departments, agencies and local authorities to “release data where there are short-term technical barriers—i.e. where someone is saying, ‘We are going to have to charge you to get those datasets out’.”38

27. The ODI went further, calling for open data publication to be “written into every government contract”, whether for IT or not.39 Stephan Shakespeare urged that in government procurement, there should always be, for tendering companies,

a box that says, “What is your open-data strategy?” so they are required to say in advance what their attitude to this is. That could then make them feel that it may be detrimental to their getting the contract if they state that they will not share the data.40

Sir Nigel Shadbolt observed that there was “a stronger view that procurement should have a clause that says, ‘It shall be produced as open data’.”41

28. Open data principles should be applied not only to government departments but also to the private companies with which they make contracts.

29. We recommend that companies contracting with the Government to provide contracted or outsourced goods and services should be required to make all data open on the same terms as the sponsoring department. This stipulation should be included in a universal standard contract clause which should be introduced and enforced across Government from the beginning of the financial year 2015-16.

The right to data?

30. Several witnesses were uneasy with the current position in which the Government and local authorities decide whether to make data available or not. Sir Nigel Shadbolt observed that there are currently “public data principles in the White Paper that are

36 Tom Steinberg (OD 24)
37 Information Commissioner’s Office (OD 12) para 16
38 Q174
39 Open Data Institute (OD 25) para 16
40 Q99
41 As above
endorsed as Government policy. The question is whether they are being implemented routinely."42 Sir Nigel told us that “The presumption to publish has some way to go.”43 In these circumstances, he said “People think it is sufficiently difficult and challenging that you might need to legislate for it.”44

31. There were other suggestions that present arrangements for open data release lacked the necessary clout. Dr Rufus Pollock of the Open Knowledge Foundation was concerned that even the Open Data User Group had to persuade organisations to provide data in an open way: “Heather [Savory] is doing a sterling job, but it was rather interesting that she had to go to persuade the Land Registry to do this or persuade X to do that.”45 He said that in theory “things like that are in FOI, but they should be operationalised more effectively.”46

32. The Information Commissioner’s Office set out its understanding of the current statutory provisions on open data, noting that on 1 September 2013 amendments to FOIA came into force. These are:

intended to enable open data – giving requesters the right to receive datasets in open, re-usable formats (if reasonably practicable) and under an open licence, though public authorities can use a charged licence in certain circumstances. The amendments also place an obligation on public authorities to publish previously requested datasets proactively, as part of their Freedom of Information publication scheme.47

33. But there was some confusion among our witnesses as to what difference this makes to the current legal position of open data. Tom Steinberg raised the issue of whether the Freedom of Information Act should be “expanded ... so that people have similar powers to access data sets to those they have to access paper documents.”48

34. Heather Savory of the Open Data User Group said that she believed that recent legislation had effectively “established an enhanced right to data because it introduces a statutory duty for public authorities to publish their data for re-use.”49 Although she agreed that “we do not have clean legislation [...] if you look at the complex network of legislation that we have, there is already a presumption to publish data and there are duties for public bodies to make their data available for re-use.”50

35. The Information Commissioner considered that open data and the right to information, were “mutually supportive”.51 This was because “there must be a right for

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42 Q103
43 Q103
44 As above
45 Q45
46 As above
47 Information Commissioner’s Office [OD 12] para 6
48 Q43
49 Q48
50 As above
51 Information Commissioner’s Office [OD 26] para 6
the public to ‘pull’ information from government as well as a government commitment to ‘push’ data out proactively.”^{52} Stephan Shakespeare and Sir Nigel Shadbolt both advocated explicit legislation to set out a right to data; Sir Nigel observed that policies come and go but “legislation has a way of sticking around.”^{53}

36. Mr Hurd was clear that there was no statutory right to open data, confirming that he was at the moment “against any further legislation in this area other than evolution of the Freedom of Information Act and the transposition of the EU directive [Directive 2003/98/EC which encourages the re-use of public sector information].”^{54}

37. There is confusion about the concept of the ‘right’ to data held by Government. On the one hand, the Minister told us that there is no right to data, but there is evidence to suggest that, in effect, a presumption already exists that government data will be published in an open format.

38. The Government needs to recognise that the public has the inherent ‘right to data’, like Freedom of Information. The Government should clarify its policy and bring forward the necessary legislation, without delay.

Privacy and open data: managing the risks

39. If there is to be the ‘right to data’, the ‘right to privacy’ must also be recognised. We heard substantial evidence of the risks to individual privacy that could be created by ill-considered open data releases. Full Fact noted the risk that the reputation of open data might be vulnerable to public anxiety over privacy and the state. There will soon be “far greater volumes of far more personal information stored by public bodies than we would have thought possible not long ago.”^{55} Open data would “serve as a constant reminder of this and occasional mistakes will bring it crashing into public debate.”^{56}

40. As we were completing the inquiry, the potential for data release to cause such public concern was demonstrated by the case of Care.data. At the beginning of 2014 there were a number of reports of opposition from campaigners, and in some cases medical practitioners, to the Care.data programme in England.^{57} The programme, as explained by NHS England:

will make increased use of information from medical records with the intention of improving healthcare, for example by ensuring that timely and accurate data are made available to NHS commissioners and providers so that they can better design integrated services for patients. In the future, approved researchers may also benefit. The Health and Social Care Information Centre will link personal confidential data

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52  As above
53  Q108
54  Q172
55  Full Fact (OD 11)
56  As above
57  For example, “NHS Patient Data to be made available for sale to drug and insurance firms” The Guardian, 20 January 2014 and “Four in 10 GPs to opt out of NHS database” The Telegraph, 24 January 2014
(PCD) extracted from GP systems with PCD from other health and social care settings.\textsuperscript{58}

41. The main concerns about Care.data were said to be the risk that personal medical details would become publicly available, and that data collected for public purposes would be exploited for profit by the private sector. Even strong advocates of open data, such as Stephan Shakespeare, were in no doubt about the sensitivity of medical information. Mr Shakespeare, commenting on the general issue of medical data, told us: “I want to make it quite clear that the revealing of personal medical data could be extremely painful to the person and that it is incredibly important to avoid that.”\textsuperscript{59}

42. Sir Nigel Shadbolt observed that young people were sometimes said to be “giving up on privacy” with the spread of social media and other digital developments. However he identified a new caution about privacy among young people, with the development of:

> a very nuanced view of what is available to open and what is not. As they grow up—I have seen this process—from no concern at all to a recognition that this will stay with them in their interview process as they go for jobs in the future, they become much more concerned about the issues and limits of privacy.\textsuperscript{60}

43. Dr Pollock raised the complex issue of crime statistics. He said that in the UK when crime data was first published “there was this whole debate that I could work out where this had occurred—had a rape happened in a house, I would know something very significant personally about someone. There is clearly going to be ongoing debate.”\textsuperscript{61}

44. Dr Pollock accepted that “some of the most interesting data will have a relationship with personal information.”\textsuperscript{62} The default position, he said,

> has to be that we protect privacy in the first instance, but it is important that there are cases where we make public interest tradeoffs. We think that we are entitled to know the directors of public companies; it is not something that is private.\textsuperscript{63}

45. We were assured that there were ways of ensuring privacy is maintained in the right cases. Mr Shakespeare referred to “safe-haven technology, which means you can make data available in a way that you cannot take it out of the box, if you like, and you can access it remotely without removing it from the database.”\textsuperscript{64}

46. Ministers were also confident that a satisfactory balance could be achieved between open data and individual privacy. While re-iterating that “the government’s position is that data should be open by default,” they made it clear that “by definition open data is not personal data. The government takes the issue of privacy seriously.”\textsuperscript{65}

\textsuperscript{58} NHS England, Care.data Guide for GP Practices
\textsuperscript{59} Q120
\textsuperscript{60} Q123
\textsuperscript{61} Q71
\textsuperscript{62} As above
\textsuperscript{63} As above
\textsuperscript{64} Q120
\textsuperscript{65} Nick Hurd MP and Rt Hon Michael Fallon MP (OD 28)
made it clear that “anonymisation techniques mean that data can still be released while providing protection to the individual citizen.”\textsuperscript{66} They give the example of crime data which is “grouped at the level of a few streets to prevent victims being identified.”\textsuperscript{67}

47. When releasing data, it is the responsibility of Government to avoid risk that individuals may be identified against their will. There has been an effective campaign to highlight unease about the release of anonymised NHS patient data for academic and pharmaceutical research as part of the Care.data programme. There is a clear need to reassure the public about personal privacy. However, it is also important to explain what open data can do to make public services more accountable and responsive to the needs of society. The recent controversy over Care.data demonstrates the danger that concerns about privacy will unduly undermine the case for open data.

**Increasing engagement**

48. Some witnesses argued that Government should take bold steps to promote widespread public use of data to hold Government to account. Owen Boswarva for example welcomed the increased availability of spending and performance data in a reusable format, but told us that it was “no substitute for meaningful public consultation and open decision-making.”\textsuperscript{68}

49. Dr Worthy told us that in order to bring about real accountability and participation the data also needed to be linked to “clear and functioning accountability mechanisms.” But what he called the “eye-catching idea” of the “Armchair Auditor” had, he said, failed to become a reality, despite some successes: “there are few signs of a wider ‘army’.”\textsuperscript{69} He says that this is in part because “the information is not yet consistent, so questioning and understanding it is not easy.”\textsuperscript{70} The armchair auditor also, Dr Worthy observes, “needs to be a particular type of person: engaged and interested in local government, with a good grasp of how government works and motivation and skills to dedicate time to it. To have all these traits in combination is rare.”\textsuperscript{71}

50. Involve, a body which promotes wider participation in public life through a mixture of research and practical action, made similar points, telling us that

\begin{quote}
the public currently do not understand how open data applies to them or what they care about; research into public awareness of open data has found that awareness is low in part because open data is perceived as an abstract issue, with unclear benefits to everyday life.\textsuperscript{72}
\end{quote}

\textsuperscript{66} As above
\textsuperscript{67} As above
\textsuperscript{68} Owen Boswarva (OD 06) para 4
\textsuperscript{69} Dr Ben Worthy (OD 03) para 7.1
\textsuperscript{70} As above, para 7.2
\textsuperscript{71} As above
\textsuperscript{72} Involve (OD 10) para 3.9
51. While experts may make extensive use of open data repositories, such as data.gov.uk, such repositories, according to Involve, “are unlikely to be visited by the average citizen.”73 Instead Involve argue that there is “potential for government and civil society to get information to citizens in the places that they already visit – be it online (e.g. paying for their TV licence) or offline (e.g. in a GP surgery waiting room).”74

52. Involve also urged Government to promote a set of data engagement guidelines developed by a group led by Tim Davies, co-director of Practical Participation, and open data research coordinator at the Web Foundation. These are known as the ‘five stars of open data engagement’, a system of rating the usefulness and accessibility of data to the general public.75 If introduced in Government, the system would be intended to encourage publishers of data to make it “accessible [to] all without discrimination” and to make information and data usable in a wide range of ways76. ‘One Star’ engagement indicates where organisations’ releases are driven solely by need and demand, while ‘Five Star’ engagement indicates that there is close collaboration with users and that the organisation is working with other organisations to integrate data sources.

53. It is clear that using open data to encourage engagement is not a simple matter. What appears to some to be neutral can be seen by others as politically motivated, as Dr Worthy warned us “although technology is often presented as a neutral good”, it could be “extremely political.”77 He cited local government spending data, which he saw as “very politicised. It is about local versus central Government.”78

54. There is no sign of the promised emergence of an army of armchair auditors. There is little or no evidence that the Cabinet Office is succeeding in encouraging greater public engagement in using data to hold the public sector to account.

55. Open data is important and touches people’s lives at many points. Yet Government and some of the experts sometimes make too much use of jargon and so can alienate and confuse people who do not have expert knowledge of the technical terms. This can undermine efforts to encourage more people to get involved in holding Government to account.

56. The Government should adopt a star-rating system for engagement, as recommended by Involve, for measuring, and reporting to Parliament on, Departments’ progress on increasing accountability through open data. The Government should expect Departments to set out plans to move towards Five Star Engagement for all their data releases.

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73 As above para 3.10
74 As above
75 Open Data Engagement website
76 As above
77 Q25
78 As above
General conclusions on accountability

57. We welcome the clear lead on open data that has come from successive Governments. There have been some useful moves to improve accountability and engagement in recent years, with positive developments such as the establishment of the Open Data User Group. However there is much still to be done.

58. There should be a presumption that restrictions on government data releases should be abolished. It may be necessary to exempt certain data sets from this presumption, but this should be on a case-by-case basis, to provide for such imperatives as the preservation of national security or the protection of personal privacy.

59. The Cabinet Office must give a much higher priority to ensuring that more interesting and relevant data is made open, and that the release mechanisms encourage people to use it and, where appropriate, hold Government and local authorities to account. Beginning in April 2014, targets should be set for the release of totally new government datasets – not the republishing of existing ones.
Open Data and Economic Growth

The economic opportunity of open data

60. There is considerable evidence of the economic opportunity which could arise for the United Kingdom if more government data were made open. This potential is said to lie both in supporting the growth of new data-based businesses, and in improving the performance of existing businesses of all kinds. It is also acknowledged that wider access to more data and information will be disruptive to the structure of existing markets, leading to some firms winning and some firms losing. But our evidence suggests that, in all probability, consumers will gain.

61. In 2013 an independent Market Assessment of Public Sector Information by Deloitte assessed “the value of public sector information to consumers, businesses and the public sector in 2011/12 [as] approximately £1.8 billion (2011 prices).” Deloitte also said that “the use and re-use of public sector information has much larger downstream impacts affecting all areas of society beyond the direct customer.” The study also estimated the “social value” of public sector information “on the basis of conservative assumptions,” to be “in excess of £5 billion for 2011/12 (2011 prices).”

Understanding the data marketplace – the two cultures

62. If government open data is to stimulate economic growth, it is vital that Government policy is based on a clear understanding of the market place for data as well as the benefits it can bring to the wider economy. Witnesses were clear that the United Kingdom enjoys several economic advantages in the field of open data. Stephan Shakespeare identified two phases in what he called “the digital revolution”. The first had been the creation of “connectivity” between systems, and he said that “Silicon Valley was the huge winner of that first phase”. Now, however, he said that a second phase, based on data, was happening, and the UK “could be the leader in the second phase” because “we have here the most coherent, largest data sets, we have the expertise and we have a desire on the part of everybody to get this done.” Sir Nigel Shadbolt amplified that, saying that because of “the size and the relatively homogeneous nature of the UK, we have a real opportunity to show just how data-driven delivery of both economic and social value can happen.” Sir Nigel contrasted this with the United States which was “somewhat hamstrung by the fact that there is a large federal system; much of the valuable data lives inside states, and state law varies. Therefore, there is [for the UK] a real innovation opportunity.”

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79 Department for Business, Information and Skills, Market Assessment of Public Sector Information, written by Deloitte, May 2013, p10
80 As above
81 As above p11
82 Q9
83 Q90
84 As above
85 As above
63. Mr Hurd said that there was now “an information marketplace” and that “Government is gradually waking up to the fact that we are sitting on something valuable and maybe we should share it.” Mr Hurd and Rt Hon Michael Fallon MP, Minister for Business and Enterprise, set out for us what the Government is doing to stimulate economic growth “through the exploitation of open data”:

The UK’s open data portal, data.gov.uk, is an interactive platform that allows users to engage with the datasets. The Open Data User Group represents the views of a broad community and provides the business case for the release of open data for economic growth.

However our witnesses posed some questions about the usefulness of data.gov.uk to the world outside Whitehall. The Open Data User Group told us that data.gov.uk’s “main focus is on meeting central government departments’ information publishing needs.” ODUG also observed that it was “too early to say how widely this data is used.”

64. It was put to us by several witnesses that the UK Government had not understood the market for open data and the real opportunities which are opening up for the private sector. Sir Nigel Shadbolt was among those who argued for more active Government involvement. Acknowledging that, in some respects, the UK is “world leading” he cautioned that the “publish it and they will come” model is not quite enough. Sir Nigel urged the Government to “generate a vibrant demand for open data.”

65. The Open Data Institute (ODI) was set up by the Government in 2012 with this imperative in mind. It states that its aim is “to catalyse the creation of new economic value from open data”. ODI described itself as “an open data success story that 19 other countries are looking to emulate”. ODI has supported a number of start-up companies in the field of open data, including OpenCorporates, the world’s largest open database of companies, with data on 49 million companies.

66. We were also told that the pace on open data needed to be accelerated if this country were to become the international hub for the new industry. As other countries realise the economic potential of open data they could rapidly catch up with the UK, according to Mr Shakespeare, who said “To be the leader, we have to be very urgent about it.” Heather Savory said that “Government just does not understand the difference in pace between Whitehall [...] and the business world.” Ms Savory expressed frustration at what she called the “glacial” speed with which Government was dealing with the 500 data requests that ODUG had made since 2012: “What these start-up companies want is if it

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86 Q137
87 Nick Hurd MP and Rt Hon Michael Fallon MP [OD 28]
88 Open Data User Group [OD 14] para 7.1
89 Q83
90 As above
91 Open Data Institute website
92 Open Data Institute [OD 09]
93 Q90
is a ‘no’ because of private data issues, it needs to be ‘no’ tomorrow, because then they will go and do something different.” There are, she said, “two cultures there.”

67. There was also evidence that Government was mistaken in trying to guess the direction of the data market. Tom Steinberg told us that:

   the nature of innovation is often to see value where other people just cannot see it. No one saw that there was much value in a list of Harvard undergraduates except Mark Zuckerberg … If the Government are set up to say, “We’ll give it to you if we understand the value,” that is just basically a way of saying, “We wouldn’t like any innovative companies, please.”

68. The Government has set up or supported a number of initiatives and bodies which are intended to help UK business make the most of public sector open data. It is too early to say how effective they will be, but there is evidence that their work will be hampered unless Government acquires a better understanding of trends in the rapidly-moving marketplace for open data, where international competition to realise the economic benefits of key datasets is increasingly fierce.

Charging for data

69. The economic effects of charging for government data have been central to our inquiry. Governments of all parties have a long history of charging for data, and several witnesses accepted that there was an argument for this in some cases. Stephen Shakespeare told us “Things that have a very specific value that may be costly to make available you could charge for, so I do not believe that all data necessarily must always be free”. Sir Nigel Shadbolt acknowledged that “We can imagine the value-added services that people would sell out of the back of good data are certainly chargeable, and the Met Office is a good example. Its advanced climate-prediction models are sought after around the world and paid for.”

70. However, many witnesses argued that the UK economy would only benefit fully from the wider use of government data if charges were reduced or eliminated. Owen Boswarva said that “open data has considerable potential to create fairer markets, by removing information asymmetries and increasing liquidity so that participants can negotiate transactions on a more equal footing”. He believed therefore that “Charging for publicly owned datasets, particularly when the data holder has a monopoly, tends to skew the markets that rely on that data in favour of larger participants that can most easily absorb licensing fees.”

71. Ministers used a number of arguments in defence of current charging policies. Mr Fallon said “there is some very up-to-date information that has a cost in collection that
large companies are perfectly content to pay for because it has been collected by authoritative agencies.” The Minister said he believed it to be “right that the taxpayer should see some reimbursement for those costs.” Mr Fallon also argued that open data could be “immediately swallowed up [...] by big global companies” such as Microsoft and Google with the benefit not accruing to the UK economy. Mr Fallon said that he had not seen any evidence that charges for address data were hampering the growth of SMEs: “these are charges that the market is bearing quite comfortably.”

72. ODI responded to the argument that “companies (particularly big multinational companies) should pay for data that is created by government” by commenting that this was to misunderstand “the modern networked economy and the transformative value of open data. The barriers in the use of government data by all types of organisation are not so much about paying fees as the licensing restrictions associated with closed data.”

73. The ODI continued that “With an early mover advantage, the UK stands to benefit from the adoption and use of its open data by business, including by big multinational companies.” Government should therefore “welcome the exploitation of its free, open data, by large multinationals, because of the investment that also brings.” The ODI also rejected the idea of differential charging between large and small companies because it was

   superficially appealing but fundamentally misunderstands the economics of data. We will get the most benefits from data when it can flow freely to where it is needed, whether that flow takes it through large or small companies.

74. At a time when Government spending is under severe pressure, there is certainly a need to consider how to pay for open data. We heard a suggestion for alternative ways to fund it from ODUG, who said that where data is generated

   as a result of statutory registration, such as: Land Registration, registering to vote, being registered to pay Council Tax or Business Rates, registering a planning application or building regulations consent etc. the cost of registration should include an element used to make the data collected openly available.

75. **A radical new approach is needed to the funding of government open data. Charging for some data may occasionally be appropriate, but this should become the exception rather than the rule. A modest part of the cost to the public of statutory registrations should be earmarked for ensuring that the resultant data - suitably anonymised if necessary - can become open data. Data held by the Land Registry and car registration**

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100 Q192
101 Q193
102 Q194
103 Open Data Institute (OD 25) para 11
104 As above
105 As above
106 Open Data User Group (OD 14) para 5.3
data held by DVLA and, indeed, Care.data held by the NHS are among relevant examples.

Trading Funds – heroes or villains?

76. Many, though not all, of the data charges now levied by Government are the responsibility of Trading Funds – Companies House, Land Registry, Met Office and Ordnance Survey. Trading funds are defined by the Treasury as “public corporations [whose] activities are not consolidated with their sponsor departments’ business. They must finance their operations from trading activity.”107

77. We heard conflicting evidence about the economic impact of these funds in relation to data. Paul Malyon, a manager for Experian plc, the information services group, and a member of the Open Data User Group, but speaking personally, was critical of the impact of trading funds. He called for the trading fund model to be “abandoned.”108

78. Tom Steinberg argued that “the significant role the trading funds play in the modern economy should mean that they are regulated independently, by a powerful equivalent to an entity such as Ofgem or Ofcom.”109 He believed that “independent, robust regulation is necessary because the senior management of trading funds face systemic incentives to behave in a manner that is bad for the wider economy.”110 The ODI commented that “However well regulated, licensing public sector information on commercial terms necessarily restricts its use, curtails innovation and distorts competitive markets downstream.”111

79. Mr Fallon later provided the Committee with details of the fees charged and revenue received by the trading funds who are members of the Public Data Group (PDG).112 These depended on a variety of factors but examples given included £264 a year charged by the Ordnance Survey for data to help an estate agent to map properties and analyse sales trends and between £500 and £5000 for various types of access to the patent or trade mark databases of the Intellectual Property Office. For data supporting a four hectare building development in central London the charge quoted is £45. Revenues for data in 2012-13 ranged from £43,342 for the Intellectual Property Office to £140 million for the Ordnance Survey, of which we were told “a limited amount” is revenue from services as well as data.113

80. Despite their financial imperatives, Trading Funds give some limited help to a number of small businesses by making data available either free or at reduced rates. Ministers cited individual cases of Trading Fund support for SMEs and applications developers, including the Ordnance Survey’s Developer Licence for its paid-for

107 HM Treasury, Managing Public Money, July 2013, para 7.8
108 Paul Malyon (OD.15) para 26
109 Tom Steinberg (OD.24)
110 As above
111 Open Data Institute (OD.09) para 5
112 Department of Business, Innovation and Skills (OD.30)
113 As above
products.\textsuperscript{114} We were told that since April 2011 over 600 organisations had taken one of the OS’s suite of developer licences to explore a range of paid-for datasets for free. Despite its concerns about charging, ODI believed that the Trading Funds were moving towards “an open model, supported through registration fees.” The ODI concluded “There is no inherent reason why Trading Funds can’t also be leaders in open data.”\textsuperscript{115}

**The value of core reference data**

81. We repeatedly heard evidence that, despite the best efforts of government Departments and public bodies, much more needed to be done to encourage the use of public sector data in support of economic growth. Many witnesses urged action on data which can help link up other information and make innovation easier. ODU\textgreek{G} explained that “While the release of individual data sets is valuable, some data is essential to make other data sets meaningful. This is sometimes referred to as “Core Reference Data”, items of data which will be used across many data sets as identifiers to show what a record relates to.”\textsuperscript{116} The examples given by ODU\textgreek{G} included: addresses with postcodes and geo-coordinates; geographical codes for statistical or administrative areas; company registration numbers; VAT numbers; and NHS numbers.

82. Stephan Shakespeare said that of “things that are of value potentially to everybody, there is a very strong case for making them free.”\textsuperscript{117} Sir Nigel Shadbolt gave us an historical example of what he believed to be the transformative economic value of such core material – the release by the United States of its meteorological data, which he said had encouraged the creation of the secondary insurance market for weather data in the US, now worth $8 billion.\textsuperscript{118} Jil Matheson, the National Statistician, emphasised the special value of a reliable and comprehensive national address register, saying that it was “fundamental to effective statistics and to open data—and lots of other purposes too—that there is a high-quality, widely used, available and accessible address register.”\textsuperscript{119}

83. Many witnesses reserved special criticism for government policy in relation to the postcode address file (PAF) which was privatised recently with the Royal Mail. Sir Nigel Shadbolt explained its importance, saying that the file “was, potentially, a common good [...] Almost every conceivable new advance in delivery of services uses digital capability; everything happens somewhere, everything gets delivered somewhere, whether it is blue light services or commercial innovation.”\textsuperscript{120} The Danish Government, which released their address file as open data, estimated the return on investment of making theirs publicly and openly available as “up to 40 times what it is costing them to release it.”\textsuperscript{121}

\textsuperscript{114} Nick Hurd MP and Rt Hon Michael Fallon MP (OD 28)
\textsuperscript{115} Open Data Institute (OD 25) para 17
\textsuperscript{116} Open Data User Group (OD 14) para 3.3
\textsuperscript{117} Q95
\textsuperscript{118} Q93
\textsuperscript{119} Q237
\textsuperscript{120} Q91
\textsuperscript{121} Q92
84. ODUG said that the decision to allow Royal Mail to take the PAF into private ownership as a commercial data set, and for Ordnance Survey to participate in the creation of GeoPlace LLP as a trading Value Added Reseller of PAF, appeared to “fly in the face of any Government commitment to Open Data.”\(^{122}\) Ms Matheson said that her interest as National Statistician was “to make sure that the PAF is maintained and is available and accessible to us, of course, but, beyond that, to all users.”\(^{123}\)

85. Mr Fallon defended the Government’s decisions on the PAF, saying that it was “an integral part of the Royal Mail; it is a fundamental operating asset on which the business depends. It is the Royal Mail that collects the data and makes sure it is up to date.”\(^{124}\) Mr Fallon went on: “Royal Mail incurs considerable costs in collecting and maintaining this data and keeping it up to date. It is only reasonable that they should be able to recover some of those costs from the companies that use this data.”\(^{125}\)

86. Ministers noted that in July 2013 Royal Mail announced that it would allow “independent micro-businesses to have free access to the PAF for one year [...] In extending this offer to micro-businesses, Royal Mail will already be reaching 83% of UK SMEs.”\(^{126}\)

87. Jacqui Taylor, CEO of FlyingBinary, a company closely involved in open data work across Government, doubted the value of this package, saying that “a free PAF for micros SMEs is no help.”\(^{127}\) This they say is because “it can take months to bring a product like this to market and there is no guarantee on future prices of PAF data once Royal Mail is in private sector hands.”\(^{128}\)

88. Some government datasets are of huge direct value to the economy. Ministers and the Royal Mail have made a number of promises about the continued accessibility to small businesses and others of the Postcode Address File (PAF). Evidence we have received casts doubt on the credibility of such assurances. The Postcode Address File (PAF) was included in the sale to boost the Royal Mail share price at flotation. This takes an immediate but narrow view of the value of such datasets. The PAF should have been retained as a public data set, as a national asset, available free to all, for the benefit of the public and for the widest benefit of the UK economy. Its disposal for a short-term gain will impede economic innovation and growth. This was an unacceptable and unnecessary consequence of privatisation, and is at odds with the Minister’s general argument that open data should not be “swallowed up [...] by big global companies.”

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122 Q93
123 Q240
124 Q148
125 Q151
126 Nick Hurd MP and Rt Hon Michael Fallon MP [OD 28]
127 FlyingBinary Ltd [OD 18] para 6
128 As above
89. The sale of the PAF with the Royal Mail was a mistake. The Government must never make a similar mistake. Public access to public sector data must never be sold or given away again.

Licensing restrictions

90. Licensing restrictions on government data were seen by some as hampering business growth. Several witnesses emphasised the importance to businesses of government making data fully available for re-use, via the arrangements for open licensing. Heather Savory said that “There are a lot of published data sets that, until you actually go and look at them, you think you are going to find under the open government licence, and then you find they are not or they are not quite. [...] they are not fully open for use and re-use. It means they are not free. It means that there are licensing conditions attached to them.” Dr Rufus Pollock said that unless the Open Government Licence was used to release data “there is this silly thing where you get the data, but you are not allowed to give it to anyone else without permission [...] you get something under FOI and you are not allowed to give it to others, which is bizarre.”

91. There was also some evidence of frustration in the private sector about access to key government data being restricted or denied altogether. The Demographics User Group represents 14 major commercial companies which “make extensive use of government statistics and geographical data to understand local markets and consumers”. The Group noted the arrangements made through the Public Sector Mapping Agreement for public sector bodies to have free access at the point of use to Ordnance Survey’s mapping and the National Address Gazetteer, as well as the PAF. But the Group described as “iniquitous” the fact that the agreement does not extend to other users such as business, or charities.

Ensuring fair access

92. Access was also an issue in relation to the four new Administrative Data Research Centres, set up with Department for Business, Innovation and Skills funding to enable research based on linked data between government departments. At present access is to be limited to academics only. We asked Mr Fallon whether private and other bodies could have access to it in future. The Minister said that “I think you could make a case for allowing access to anonymised Government-held data to inform commercial decisions and improve, for example, the effectiveness of business investment.”

93. There is concern about the attitudes of the research councils, and academic researchers in general, to government data. The Government needs to make the case for giving privileged academic access to the new government data, when it should be more widely available. It has, after all been funded by tax payers.

129 Qq 57-8
130 Q45
131 Demographics User Group (QD 05)
132 As above para 7.2
133 Q173
General conclusions on open data and economic growth

94. The UK Government was an early mover on government open data, but other Governments, watching the UK with interest, are catching up fast. If the Government does not take the opportunities offered, there is a risk in the UK that businesses with growth potential will be deterred by fees for data, and by legal and administrative barriers, while other countries are developing their data industrial base and stealing a lead over the UK. It is short-sighted in the extreme for Government to seek to maximise fee income from data while those fees penalise in particular small companies that can prove the most innovative, and which could establish the UK as global leader in this new economic sector.

95. Core data needs to be released fast and, above all, free so that businesses (for example apps developers) can use it along with other data to make progress. To this end the Government should in particular pledge that the data held by GeoPlace LLP, a company owned by Ordnance Survey and the Local Government Association, will remain in public ownership.

96. Departments should be required to list all the surveys conducted and administrative systems in operation to allow the public to see what data might be produced, and should provide to Parliament and the public a prompt and clear account of all revenues from any data sale.

97. The Government must work closely with business and nurture new open data enterprises by providing the environment they need to grow. The Open Data Institute is a welcome recent development. It has worked to help develop some start-up businesses based on open data and has been a hub for knowledge, but its impact is far from clear and now needs to be felt more widely.
4 Improving Government through open data

Openness and government efficiency

98. Some witnesses urged Government to seize the opportunities offered by open data to improve its own performance and its understanding of public service issues. The Institute for Government pressed a wide-ranging case for openness as an aid to efficiency, telling us that “When data is presented clearly to the public in a way that makes comparisons possible, it also encourages better use of data and enables better decisions inside government.”134 The ODI said that the benefits of open data to government itself included “enabling external collaboration to increase data quality, efficiencies in reducing duplication of effort and savings through not having to pay the private sector for information that government holds”.135 ODI observed that starting to estimate the potential savings “would provide the basis of the business case [within Government] for more decisive action towards more open data.”136

99. Stephan Shakespeare said that “One of the reasons for making data available [...] is that the expertise that comes to bear on it when you open up data is vastly increased.”137 Sir Nigel Shadbolt cited as an example of good practice a site run by the Department for Communities and Local Government (DCLG) that is “comparing and interlinking data statistics from across all local authorities.”138 He said that this was “sufficiently well done that the Department is starting to consume its own representation of this data in lots of other reporting that it is doing.”139 Sir Nigel also mentioned the Public Health England site “Longer Lives”, which assembles information about mortality and disease rates in a way that is “very accessible to the public”.140 He said that on this site “open data has been brought to life and begun a very interesting debate around variations in disease rates, death rates, mortality rates, up and down the country.”141

100. Ministers told us that “Increasingly we are seeing Departments consume their own and other Departments’ data to drive their policies and programmes.”142 They gave the example of the Department for Transport which “uses a mixture of its own data and private data to support projects such as Transport Direct and an initiative to understand the impact of better information about incidents on the A4.”143 Another example was the Department for Communities and Local Government’s Whole Place Community

134 Institute for Government [OD 17]
135 ODI [OD 09]
136 As above
137 Q94
138 Q113
139 As above
140 As above
141 As above
142 Nick Hurd MP and Rt Hon Michael Fallon [OD 28]
143 As above
Budgets and Troubled Families programmes which, Ministers told us “have shown that information sharing is key to designing and delivering services and achieving better outcomes for vulnerable people.”

**Missing opportunities to improve effectiveness**

101. Yet we heard evidence that Government was missing some significant opportunities to make use of open data in this way. Jacqui Taylor of FlyingBinary described the difficulties encountered by a Tech City company she mentored, which had requested the Department for Environment, Food and Rural Affairs data via ODUG to enable them to “challenge” the CAP levy paid by the UK which is due to be renegotiated in 2014. Ms Taylor said that the analysis they produce “could be of huge benefit to UK PLC.” However, “This data has not yet been released by DEFRA although ODUG are attempting to get this data released as soon as possible.”

102. Another barrier to improved Government was said to be the licensing arrangements for some datasets. ODUG believed that the flow of useful data around Government was discouraged by the fact that important core datasets such as addressing and geospatial data are “essentially re-purchased from the data holders exclusively for the Public Sector”. In such cases “public funds are used to repurchase data which was originally funded from the public purse for the delivery of a public task.” This data has been “paid for twice by the taxpayer”, but access to it is still restricted.

103. There is little evidence to suggest that the Government is consistently making the most of the opportunities to improve policy and performance via the use of its own data. Departments need to make full use of the records and information they possess to ensure they are running effectively. Opening up that data to other departments will boost the Government’s evidence base and can improve policy making. The benefits of making data open include not just an increase in openness and accountability, but also the opportunity for outside experts to verify, and suggest improvements in the quality and accuracy of, the data itself.

104. The Cabinet Office should be much more active in ensuring Departments maximise the social and economic potential of open data, not least in increasing their own efficiency and effectiveness. To this end, it should:

a) require Departments to produce, by the end of 2014, a detailed and timetabled plan for using data to enhance their performance,

b) ensure that the data which is used to underpin policy work in all public announcements is published alongside the policy statements, and

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144 As above
145 FlyingBinary Ltd ([OD 18](#)) para 6 (c)
146 Open Data User Group ([OD 14](#)) para 9.4
147 As above
148 As above
c) bring an end, by January 2015, to the outdated and wasteful practice whereby Departments have to pay for access to data that has been produced by Government itself.

105. The Office for National Statistics, directed by the UK Statistics Authority Board, should also be at the forefront of this movement and show the way forward by example.
5 Moving faster to make a reality of open data

106. This chapter examines what might be needed to help the Government achieve all three of its main aspirations for open data. It asks why there is not more open government data, why it is not more accessible and why it cannot be released faster.

Public service skills in dealing with data

107. We heard some evidence of a shortage of data skills among public servants. Sir Nigel Shadbolt acknowledged that the Government had made “substantive investment in the area of big data,” but that “much of this is in the area of hardware [...] the human skills you need to drive this are essential.” Neither the public nor the private sectors had people with enough of these skills, and more needed to be done to take advantage of “the inherent strength we have to exploit this emerging data market”.149

108. Sir Nigel said that within the Civil Service there is “a real challenge” which went beyond “the well tried notion that it is largely PPE graduates”.150 Nevertheless the numbers required to improve matters were not seen as overwhelming; one or two role models within Departments were “producing extraordinarily high-quality data [...] Four or five people across 15 Departments of State would make a huge difference”.151

109. FlyingBinary, a company with a lot of experience of working with government Departments, said that “data literacy is very low across the Civil Service.”152 Action is needed, they told us, to “educate and inform the Civil Service at large and create a culture change which affects behaviour.”153 If senior officials give the impression of not being interested in seeing evidence, using it to improve policy and outcomes, and learning from departmental experience, the open data movement was seen as being unlikely to take off. Heather Savory detailed some of these cultural issues. For instance she said civil servants sometimes perceive the risks in releases of open data, “which is natural because they have been brought up in a world where they are [...] protective of the public.”154

110. Mr Hurd and Mr Fallon outlined the actions being taken by Government to increase data capability and capacity for both private and public sectors. In October 2013 the Department for Business, Innovation and Skills published “Seizing the Data Opportunity: a strategy for UK data capability”. The strategy contains a range of actions for Government, industry and academia around three key areas:

- building human capital – developing a strong skills base in the UK

149 Q100
150 As above
151 As above
152 FlyingBinary Ltd (QP 18) para 7
153 As above
154 Q51
• developing the UK’s data infrastructure, software and research
• facilitating data sharing and linking

111. Measures being taken to develop skills within Government include work by the Government Chief Scientific Adviser, Professor Sir Mark Walport, and scientists and engineers across Government to “increase the use made of data and analytics in analysing and tackling big policy challenges.”155 The Government Innovation Group of the Cabinet Office is “leading new work on open policy making which will consider new policy tools and techniques, including the effective use of data in policy and service delivery.”156

The role of statisticians

112. The role of statisticians was seen by several witnesses as crucial to success on open data. ODI told us: “Statisticians are vitally important for opening up data, and those engaged in open data have a lot to learn from them. But [statisticians’] outputs are currently focused on people rather than programs.”157 To encourage outsiders to make full use of statistical material, ODI said that “Re-users need access to anonymised versions of the underlying data.”158 Sir Andrew Dilnot, Chair of the UK Statistics Authority, said that the Authority “expects all data underlying official statistics to be published”, but cautioned that this should happen only “where this is practicable and does not put confidentiality at risk.”159 He stressed the need for statisticians to ensure quality and provide context in data, warning that “Data dumping” can be inimical to transparency and good government. It is the job of official statisticians, and a requirement of the National Statistics Code of Practice, to produce official statistics which are understandable and readily accessible, with objective and impartial commentary.”160

113. Money was cited as a barrier to progress on open data; the UK Statistical Authority said that “Across the Government Statistical Service the work on transparency and opening up data is typically being accommodated within existing resources and this may limit the pace of progress.”161 Jil Matheson said that, despite the constraints, the GSS was already “one of the primary sources of data that appears on data.gov.uk.”162

114. Full Fact suggested that Government statisticians could contribute more to open data work: “Official statistics should be open data and more than open data. With the

155 Nick Hurd MP and Rt Hon Michael Fallon MP (OD 28)
156 As above
157 Open Data Institute (OD 09)
158 Open Data Institute (OD 09)
159 UK Statistics Authority (OD 19)
160 As above
161 As above
162 Q211
capabilities of our expert official statisticians behind them, they should lead the field. As yet, they do not.”\footnote{Full Fact (0D.11)} Statisticians, according to Full Fact:

should not be gatekeepers who determine what statistics we can see and what we can do with them. They must be enablers, priding themselves on openness and how their work, including as the Committee has emphasised, their communication work, empowers others to do whatever it is they want to do.\footnote{As above}

115. To support this, Full Fact suggested a one-star to five-star scheme for assessing the reusability of open statistics, building on Sir Tim Berners-Lee’s scheme for assessing the reusability of open data generally.\footnote{As above} One-star statistics would for instance include basic metadata, such as the geographical scope of statistics and whether or not financial time series are inflation-adjusted. Five-star statistics would provide much more, including context via links to other relevant data.

116. Many civil and public servants lack the skills to interpret data properly and some civil servants do not seem to share the Government’s desire for openness. While bearing fully in mind the needs of national security and personal privacy, civil servants need to be much more aware of the presumption to publish. They should stop being gatekeepers, guarding government data, and become enablers encouraging its wider use; key to this will be the development of a wider understanding of data issues among policy staff.

117. Government statisticians have the skills to do much more with government data, for example, through producing new series of statistics. But statisticians have chosen to adopt a low profile when they need to be active in producing new data sets and collaborating with their colleagues in other Civil Service professions to bring more sense and usability to open data initiatives. Government statisticians should become champions of open data.

118. We recommend above that the Government adopt the “five-star” system along the lines proposed by Involve, for open data engagement. A second “five-star” rating system, developed by Full Fact for assessing the usability of government statistics, would support the efforts of statisticians to play a more active role in open data. This system should also be adopted by the Cabinet Office in assessing departmental progress on open data.

119. The Government needs to move fast to encourage training of more data scientists. We therefore recommend that the Government should bring forward a practical timetable for training data scientists, with target numbers, to be announced before the end of July 2014. The Government should also include data skills and open data awareness sessions in the training of the policy profession in the Civil Service.
6 A strategic approach to open data?

Government plans for open data

120. Some of our witnesses were encouraged by progress on Government open data. The ODI for instance said that “the UK has a justifiable reputation as a world leader in open data.”166 ODUG noted with approval the number of datasets that are now available on data.gov.uk, calling them “positive results.”167

121. But what of the future? In October 2013 the Government published a National Action Plan on Open Government which included actions intended to promote further progress on open data.168 Among the main open data elements of the Plan were:

- moves to improve data quality standards in healthcare to, among other things, help comparisons between healthcare providers, “to support engagement in the design and quality of healthcare”;

- publication of a revised Local Authorities Data Transparency Code, requiring local authorities to publish key information and data;

- the creation of “a comprehensive, accessible and timely paper and digital record of UK government available to the citizen.”169

122. At the same time the Government published the first iteration of a National Information Infrastructure, setting out “the datasets which are likely to have the broadest and most significant economic and social impact if made available”.170 The ODI concluded that this represented “a reasonable first attempt” at creating such a structure.171

123. Several witnesses felt that recent documents had failed to set out a convincing strategy for open data. While recognising that the Cabinet Office Open Data White paper and the subsequent Shakespeare Review made “cogent and compelling cases for Open Data”, ODUG concluded that “neither can be regarded as a strategy.”172 In particular, the release of government data sets had not been carried out “according to any discernible strategic framework.”173 The Group concluded that “In order for the country to gain the maximum utility and economic advantage from Open Data a more strategic response is needed.”174

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166 Open Data Institute (ODI 09)
167 Open Data User Group (OD 14) para 9.1
169 As above
170 Cabinet Office, National Information Infrastructure, October 2013, p 3
171 Open Data Institute (OD 25) para 3
172 Open Data User Group (OD 14) para 2.9
173 As above
174 As above para 2.10
124. There are many things to consider. The UK Data Service, a resource for social science researchers, indicated that a strategy was needed to “deal with some of the [...] more complex requirements about providing access to data.” 175 In particular the UKDS believed that the strategy was required “to ensure that the best use is made of the data which are provided”, calling for “reasonable and pragmatic solutions” so that released data are “as fine-grained as possible and that the rights of persons or businesses who may be included within the data are guaranteed.” 176

125. The ODI believed that the National Information Infrastructure as published in October 2013 was “too broad and too rooted in the status-quo, rather than based on an assessment of what’s now needed.” 177 They saw a risk that the focus was “too diffuse”, and called for “a more thorough analysis” of what a National Information Infrastructure needs to contain. The ODI describe the UK’s National Action Plan as “a collection of loosely related initiatives and commitments,” each individually “laudable”, especially the use of legislation to provide a guaranteed supply of local government data. 178 However, ODI said that, as a set of commitments, the National Action Plan “does not come together to give the UK the truly coherent Open Data Strategy the country needs.” 179

Taking tough decisions on open data

126. The ODI attempted to trace some of the complexities of the road ahead for open data. The country, it told us, “has attained its leading position by doing several relatively easy things for Government. The challenge is now to start to do some of the harder things”. 180 These included publishing currently closed data as open data, increasing the quality of publication of important datasets and investing in training civil servants “to support that publication and to understand how to use open data for policy benefit”. 181

127. One fundamental problem, a lack of clear strategic focus, was summarised by Professor Helen Margetts, Director of the Oxford Internet Institute, who said that

‘Open data’ is an interesting term and it gets many terms bundled into it. In some ways, open data is a bit like the little white bunny of government. It means something nice, warm and good that will aid democracy. It is a confused term, though, because it implies that it is just opening data up for public use. 182

128. We heard a number of suggestions aimed at giving greater focus and impetus to the Government’s open data work. The ODI for example set out the key elements it would look for in a coherent open data strategy, which would:

175  UK Data Service (OD 08) para 9
176  As above para 10
177  Open Data Institute (OD 25) para 4
178  As above para 7
179  As above
180  As above
181  As above para 9
182  Q1
• cover open data as part of a wider strategy on sharing and using data
• ensure that government collects the data that it and wider society needs
• develop business models that can support the publication of open data
• commit the Government Digital Service (GDS) to develop a world-class data publishing platform for the public sector to use, as part of GOV.UK
• ensure that government itself benefits from open data publication, by equipping civil servants with the skills they need to make best use of available open data
• reach beyond the government’s own publication of data, including embedding open data into government’s procurement process, to encourage a growing capability around the use of open data within the UK.\(^\text{183}\)

**Who is responsible for making the Government’s open data plans work?**

129. We sought throughout this inquiry to understand who in Government was responsible for progress on open data. Mr Hurd told us that “under the leadership of the Prime Minister and with the rigour of the leadership shown by the Minister for the Cabinet Office, what we are trying to establish—and I think we have succeeded—is an open-by-default culture”\(^\text{184}\).

130. Stephan Shakespeare welcomed what he called the “good understanding [of open data] across Government” and an “obvious palpable desire to do the right things.” He said “You do not come across any significant defensiveness or obstruction to try to stop this agenda.”\(^\text{185}\)

131. However, ODUG were among those who felt that overall direction was lacking, telling us that the mechanisms available to hold departments and other public sector bodies to account for progress on open data were “weak, hampered by a disparate legislative framework with responsibilities spread across multiple bodies and the pace of delivery is relatively slow.”\(^\text{186}\) Jacqui Taylor of FlyingBinary believed that “the delivery of this [open data] agenda is still dependent on Cabinet Office being adequately supported by both the Department for Business Innovation and Skills and HM Treasury.”\(^\text{187}\)

132. On the same topic, Tom Steinberg suggested that there was a lack of support within Government for the principle of open data: “the enthusiasm that has been shown has come from a pretty small part of the Government—basically one or two Ministers” with

\(^{183}\) Open Data Institute [OD 09] para 7  
\(^{184}\) Q167  
\(^{185}\) Q81  
\(^{186}\) Open Data User Group [OD 14] para 9.1  
\(^{187}\) FlyingBinary Ltd [OD 18] para 3
“resistance from all the other Ministers.” 188 This had meant that there had been little or no “meaningful legislative change” on the open data front. 189

133. Owen Boswarva said that there was “a disconnect between the Cabinet Office’s rhetoric on open data and practical implementation by key delivery departments.” 190 As an example, he cited the Ministry of Justice as having “successfully fought off European proposals to strengthen the PSI [Public Sector Information] Directive.” 191 Mr Boswarva also told us that BIS had so far protected most of the “crown jewels” of public data from open data release.

134. According to a number of our witnesses, the influence of the Treasury could be seen behind some of the Whitehall reluctance to embrace open data and its potential to disrupt established markets and build new economic opportunities. Sir Nigel Shadbolt told us that

> the Treasury has, in the past, simply not been convinced or persuaded or had enough instruction in the fact that this is a new opportunity. I do not think they get much of the opportunity of the digitally disruptive economic abundances that can flow from data. 192

Dr Pollock agreed, referring to the Treasury as “a blocker.” 193

135. As well as the Ministers and their officials, there are a number of public bodies, some created recently to help the Government to promote open data or act as consultative forums. Asked which body is responsible for increasing access to public sector information, Stephan Shakespeare told us:

> There is no single body that does that. We did have the Data Strategy Board that was sort of doing some of that and looking at it from the accountability side but much more the economic case—the business case. We have lots of people across Government all committed to the agenda and adding to it really well, but we do not have one author, one body, that is driving this in a joined-up way. 194

136. Heather Savory listed the bodies which have some responsibility for open data:

> you have the Cabinet Office Public Sector Transparency Board and you have BIS, with information economy, growth and the Public Data Group, which is the four trading funds. Then you have the MOJ and National Archives, which are doing all the legislative side, and then you have the Information Commissioner’s Office.
She asked rhetorically “Do they work together? Yes. Do they work together well? Most of the time.” Stephan Shakespeare called for “a single authority” to ensure that open data becomes a reality more quickly.

137. The Information Commissioner’s Office drew an interesting parallel between the performance of public services in relation to the open data agenda and the experience of the Office with the Freedom of Information Act (FOIA), suggesting that interest in open data might soon fade:

The Commissioner has previously monitored FOIA publication scheme compliance across the public sector. He recognises the trend of early, enthusiastic work on publication which then starts to slip back. This often happens when job responsibilities are not passed on or re-assigned from an early champion of openness.

138. There is much to be gained from open data, but the Government’s direction of travel is not clear. The ODI has set out some important elements of a more considered and coherent approach, and it is a foundation for the Government to use as the basis for further work towards a strategy. The National Action Plan provides little incentive for the wider public to get involved in open data.

139. There has been a lack of coordination on open data at Ministerial and official level, though this is improving. No clearer indication of the lack of strategy on open data is required than the inconsistency of the decision to sell the Postcode Address File with the Royal Mail. The Cabinet Office leads on the policy, but its mechanisms to hold Departments to account are weak. The sale of the PAF with the Royal Mail demonstrates that important Departments such as the Treasury and BIS do not appreciate the value of open data. Despite the enthusiastic rhetoric emanating from the Cabinet Office, our evidence indeed indicated something more serious – a lack of understanding of open data among most Ministers and apparently most officials.

140. The Information Commissioner described how the public sector’s commitment to the Freedom of Information Act slackened over time. Under present arrangements, it is all too possible to foresee a repeat of this experience in the case of open data, with the issue slipping gradually down the list of public sector priorities as apparently more pressing matters come to the fore. The stakes on open data are arguably higher than those on freedom of information, and the UK has great opportunities if it gets it right – but Government needs to take a determined lead or the opportunities will slip away.

141. There is an unwieldy plethora of open data bodies which tends to slow both decision-making and consultation. The structure of the government web sites also make it very difficult to see what government policy is towards open data, and to identify the progress being made.

195 Q54
196 Q166
197 Information Commissioner’s Office (OD 12) para 29
142. To overcome departmental apathy and resistance, open data needs to be treated as a major government programme in its own right, which will only bring substantial benefits if it is subject to active leadership and management by Ministers and officials. The Minister for the Cabinet Office should be given explicit responsibility for all aspects of open data policy, including the commercial aspects. We believe that Civil Service accountability for progress needs to be much clearer, and that the Cabinet Secretary should be given the overall responsibility for pushing open data through Whitehall and beyond. A single Senior Responsible Owner should be appointed at Deputy Secretary level in the Cabinet Office, to be directly and personally responsible for delivering the benefits of the open data strategy. The Public Sector Transparency Board is too large to be effective in driving progress. A small group from that Board should work as a Programme Implementation Board.

143. The Government should, by the end of June 2014, submit to the Committee a detailed report on progress on the actions related to open data. This should include a list of all plans and actions from recent relevant documents, reports and committees on open data, including but not limited to the Open Government Partnership Action Plan and the National Information Infrastructure. The Cabinet Office should report to Parliament at least every six months on progress made with a consolidated list of actions.

Conclusion

144. Today there are unparalleled opportunities to harvest unused knowledge that otherwise goes to waste, which can be used to empower citizens, to improve public services and to benefit the economy and society as a whole.
Conclusions and recommendations

Barriers to accountability

1. Stephan Shakespeare’s proposal that the Government should adopt a “twin-track” approach to data release is a practical and realistic way of maintaining the momentum on open data, which recognises that “the perfect should not be the enemy of the good: a simultaneous ‘publish early even if imperfect’ imperative AND a commitment to a ‘high quality core’”. Regular publication of imperfect government data will provide Departments with a powerful incentive to improve it. We recommend that the Government should adopt the twin-track approach to data release advocated by Stephan Shakespeare. Government should ‘publish early even if imperfect’, as well as being committed to a ‘high quality core’. As long as Government is clear about its limitations, there will always be a role for data that is imperfect but improvable. (Paragraph 16)

2. It is very difficult to assess the performance of Government in enhancing accountability through opening up its data. The concept of open data is poorly defined and there are no accepted measures of what is published. This allows supporters of open data to claim the revolution is well under way and the sceptics to say nothing has changed. (Paragraph 18)

3. It is often pointed out that more than 13,000 datasets can now be found on data.gov.uk, but it is unclear how many of these represent simple republishing of data already published on other government sites. Some data sets are small and others large. And it is possible for departments to get more data out by publishing it in smaller bundles or updating it more frequently, in such a way that there is little or no extra public benefit. In these circumstances, measuring progress on this important agenda is difficult if not impossible. Simply putting data “out there” is not enough to keep Government accountable. (Paragraph 19)

4. We invite the Government to publish a clear list of open data, indicating when each data series became open in each case. (Paragraph 20)

Procurement and Open Data

5. Open data principles should be applied not only to government departments but also to the private companies with which they make contracts (Paragraph 28)

6. We recommend that companies contracting with the Government to provide contracted or outsourced goods and services should be required to make all data open on the same terms as the sponsoring department. This stipulation should be included in a universal standard contract clause which should be introduced and enforced across Government from the beginning of the financial year 2015-16. (Paragraph 29)
The right to data?

7. There is confusion about the concept of the ‘right’ to data held by Government. On the one hand, the Minister told us that there is no right to data, but there is evidence to suggest that, in effect, a presumption already exists that government data will be published in an open format. (Paragraph 37)

8. The Government needs to recognise that the public has the inherent ‘right to data’, like Freedom of Information. The Government should clarify its policy and bring forward the necessary legislation, without delay. (Paragraph 38)

Privacy and open data: managing the risks

9. When releasing data, it is the responsibility of Government to avoid risk that individuals may be identified against their will. There has been an effective campaign to highlight unease about the release of anonymised NHS patient data for academic and pharmaceutical research as part of the Care.data programme. There is a clear need to reassure the public about personal privacy. However, it is also important to explain what open data can do to make public services more accountable and responsive to the needs of society. The recent controversy over Care.data demonstrates the danger that concerns about privacy will unduly undermine the case for open data (Paragraph 47)

Increasing engagement

10. There is no sign of the promised emergence of an army of armchair auditors. There is little or no evidence that the Cabinet Office is succeeding in encouraging greater public engagement in using data to hold the public sector to account. (Paragraph 54)

11. Open data is important and touches people’s lives at many points. Yet Government and some of the experts sometimes make too much use of jargon and so can alienate and confuse people who do not have expert knowledge of the technical terms. This can undermine efforts to encourage more people to get involved in holding Government to account. (Paragraph 55)

12. The Government should adopt a star-rating system for engagement, as recommended by Involve, for measuring, and reporting to Parliament on, Departments’ progress on increasing accountability through open data. The Government should expect Departments to set out plans to move towards Five Star Engagement for all their data releases. (Paragraph 56)

General conclusions on accountability

13. We welcome the clear lead on open data that has come from successive Governments. There have been some useful moves to improve accountability and engagement in recent years, with positive developments such as the establishment of the Open Data User Group. However there is much still to be done. (Paragraph 57)

14. There should be a presumption that restrictions on government data releases should be abolished. It may be necessary to exempt certain data sets from this presumption, but
this should be on a case-by-case basis, to provide for such imperatives as the preservation of national security or the protection of personal privacy. (Paragraph 58)

15. The Cabinet Office must give a much higher priority to ensuring that more interesting and relevant data is made open, and that the release mechanisms encourage people to use it and, where appropriate, hold Government and local authorities to account. Beginning in April 2014, targets should be set for the release of totally new government datasets – not the republishing of existing ones (Paragraph 59)

Understanding the data marketplace – the two cultures

16. The Government has set up or supported a number of initiatives and bodies which are intended to help UK business make the most of public sector open data. It is too early to say how effective they will be, but there is evidence that their work will be hampered unless Government acquires a better understanding of trends in the rapidly-moving marketplace for open data, where international competition to realise the economic benefits of key datasets is increasingly fierce. (Paragraph 68)

Charging for data

17. A radical new approach is needed to the funding of government open data. Charging for some data may occasionally be appropriate, but this should become the exception rather than the rule. A modest part of the cost to the public of statutory registrations should be earmarked for ensuring that the resultant data - suitably anonymised if necessary - can become open data. Data held by the Land Registry and car registration data held by DVLA and, indeed, Care.data held by the NHS are among relevant examples. (Paragraph 75)

The value of core reference data

18. Some government datasets are of huge direct value to the economy. Ministers and the Royal Mail have made a number of promises about the continued accessibility to small businesses and others of the Postcode Address File (PAF). Evidence we have received casts doubt on the credibility of such assurances. The Postcode Address File (PAF) was included in the sale to boost the Royal Mail share price at flotation. This takes an immediate but narrow view of the value of such datasets. The PAF should have been retained as a public data set, as a national asset, available free to all, for the benefit of the public and for the widest benefit of the UK economy. Its disposal for a short-term gain will impede economic innovation and growth. This was an unacceptable and unnecessary consequence of privatisation, and is at odds with the Minister’s general argument that open data should not be “swallowed up [...] by big global companies.” (Paragraph 88)

19. The sale of the PAF with the Royal Mail was a mistake. The Government must never make a similar mistake. Public access to public sector data must never be sold or given away again (Paragraph 89).
Ensuring fair access

20. There is concern about the attitudes of the research councils, and academic researchers in general, to government data. The government needs to make the case for giving privileged academic access to the new government data, when it should be more widely available. It has, after all been funded by tax payers. (Paragraph 93)

General conclusions on open data and economic growth

21. The UK Government was an early mover on government open data, but other Governments, watching the UK with interest, are catching up fast. If the Government does not take the opportunities offered, there is a risk in the UK that businesses with growth potential will be deterred by fees for data, and by legal and administrative barriers, while other countries are developing their data industrial base and stealing a lead over the UK. It is short-sighted in the extreme for Government to seek to maximise fee income from data while those fees penalise in particular small companies that can prove the most innovative, and which could establish the UK as global leader in this new economic sector. (Paragraph 94)

22. Core data needs to be released fast and, above all, free so that businesses (for example apps developers) can use it along with other data to make progress. To this end the Government should in particular pledge that the data held by GeoPlace LLP, a company owned by Ordnance Survey and the Local Government Association, will remain in public ownership. (Paragraph 95)

23. Departments should be required to list all the surveys conducted and administrative systems in operation to allow the public to see what data might be produced, and should provide to Parliament and the public a prompt and clear account of all revenues from any data sale. (Paragraph 96)

24. The Government must work closely with business and nurture new open data enterprises by providing the environment they need to grow. The Open Data Institute is a welcome recent development. It has worked to help develop some start-up businesses based on open data and has been a hub for knowledge, but its impact is far from clear and now needs to be felt more widely. (Paragraph 97)

Missing opportunities to improve effectiveness

25. There is little evidence to suggest that the Government is consistently making the most of the opportunities to improve policy and performance via the use of its own data. Departments need to make full use of the records and information they possess to ensure they are running effectively. Opening up that data to other departments will boost the Government’s evidence base and can improve policy making. The benefits of making data open include not just an increase in openness and accountability, but also the opportunity for outside experts to verify, and suggest improvements in the quality and accuracy of, the data itself. (Paragraph 103)
26. The Cabinet Office should be much more active in ensuring Departments maximise the social and economic potential of open data, not least in increasing their own efficiency and effectiveness. To this end, it should:

a) require Departments to produce, by the end of 2014, a detailed and timetabled plan for using data to enhance their performance,

b) ensure that the data which is used to underpin policy work in all public announcements is published alongside the policy statements, and

c) bring an end by January 2015 to the outdated and wasteful practice whereby Departments have to pay for access to data that has been produced by Government itself. (Paragraph 104)

27. The Office for National Statistics, directed by the UK Statistics Authority Board, should also be at the forefront of this movement and showing the way forward by example. (Paragraph 105)

The role of statisticians

28. Many civil and public servants lack the skills to interpret data properly and some civil servants do not seem to share the Government’s desire for openness. While bearing fully in mind the needs of national security and personal privacy, civil servants need to be much more aware of the presumption to publish. They should stop being gatekeepers, guarding government data, and become enablers encouraging its wider use; key to this will be the development of a wider understanding of data issues among policy staff. (Paragraph 116)

29. Government statisticians have the skills to do much more with government data, for example, through producing new series of statistics. But statisticians have chosen to adopt a low profile when they need to be active in producing new data sets and collaborating with their colleagues in other Civil Service professions to bring more sense and usability to open data initiatives. Government statisticians should become champions of open data. (Paragraph 117)

30. We recommend above that the Government adopt the “five-star” system along the lines proposed by Involve, for open data engagement. A second “five-star” rating system, developed by Full Fact for assessing the usability of government statistics, would support the efforts of statisticians to play a more active role in open data. This system should also be adopted by the Cabinet Office in assessing departmental progress on open data. (Paragraph 118)

31. The Government needs to move fast to encourage training of more data scientists. We therefore recommend that the Government should bring forward a practical timetable for training data scientists, with target numbers, to be announced before the end of July 2014. The Government should also include data skills and open data awareness sessions in the training of the policy profession in the Civil Service. (Paragraph 119)
Who is responsible for making the Government’s open data plans work?

32. There is much to be gained from open data, but the Government’s direction of travel is not clear. The ODI has set out some important elements of a more considered and coherent approach, and it is a foundation for the Government to use as the basis for further work towards a strategy. The National Action Plan provides little incentive for the wider public to get involved in open data. (Paragraph 138)

33. There has been a lack of coordination on open data at Ministerial and official level, though this is improving. No clearer indication of the lack of strategy on open data is required than the inconsistency of the decision to sell the Postcode Address File with the Royal Mail. The Cabinet Office leads on the policy, but its mechanisms to hold Departments to account are weak. The sale of the PAF with the Royal Mail demonstrates that important Departments such as the Treasury and BIS do not appreciate the value of open data. Despite the enthusiastic rhetoric emanating from the Cabinet Office, our evidence indeed indicated something more serious – a lack of understanding of open data among most Ministers and apparently most officials. (Paragraph 139)

34. The Information Commissioner described how the public sector’s commitment to the Freedom of Information Act slackened over time. Under present arrangements, it is all too possible to foresee a repeat of this experience in the case of open data, with the issue slipping gradually down the list of public sector priorities as apparently more pressing matters come to the fore. The stakes on open data are arguably higher than those on freedom of information, and the UK has great opportunities if it gets it right – but Government needs to take a determined lead or the opportunities will slip away. (Paragraph 140)

35. There is an unwieldy plethora of open data bodies which tends to slow both decision-making and consultation. The structure of the government web sites also make it very difficult to see what government policy is towards open data, and to identify the progress being made (Paragraph 141)

36. To overcome departmental apathy and resistance, open data needs to be treated as a major government programme in its own right, which will only bring substantial benefits if it is subject to active leadership and management by Ministers and officials. The Minister for the Cabinet Office should be given explicit responsibility for all aspects of open data policy, including the commercial aspects. We believe that Civil Service accountability for progress needs to be much clearer, and that the Cabinet Secretary should be given the overall responsibility for pushing open data through Whitehall and beyond. A single Senior Responsible Owner should be appointed at Deputy Secretary level in the Cabinet Office, to be directly and personally responsible for delivering the benefits of the open data strategy. The Public Sector Transparency Board is too large to be effective in driving progress. A small group from that Board should work as a Programme Implementation Board. (Paragraph 142)

37. The Government should, by the end of June 2014, submit to the Committee a detailed report on progress on the actions related to open data. This should include a list of all plans and actions from recent relevant documents, reports and committees on open
data, including but not limited to the Open Government Partnership Action Plan and the National Information Infrastructure. The Cabinet Office should report to Parliament at least every six months on progress made with a consolidated list of actions. (Paragraph 143)

Conclusion

38. Today there are unparalleled opportunities to harvest unused knowledge that otherwise goes to waste, which can be used to empower citizens, to improve public services and to benefit the economy and society as a whole. (Paragraph 144)
Formal Minutes

Tuesday 11 March 2014

Members present:

Mr Bernard Jenkin, in the Chair

Paul Flynn
Robert Halfon
Kelvin Hopkins

Greg Mulholland
Lindsay Roy
Mr Andrew Turner

Draft Report (Statistics and Open Data: Harvesting unused knowledge, empowering citizens and improving public services), proposed by the Chair, brought up and read.

Ordered That the draft Report be read a second time, paragraph by paragraph.

Paragraphs 1 to 144 read and agreed to.

Resolved That the Report be the Tenth Report of the Committee to the House.

Ordered That the Chair make the Report to the House.

Ordered That embargoed copies of the Report be made available (Standing Order No. 134).

[Adjourned till Monday 17 March at 4:15pm]
Witnesses

The following witnesses gave evidence. Transcripts can be viewed on the Committee’s inquiry page at www.parliament.uk/pasc.

**Tuesday 8 October 2014**

**Professor Helen Margetts**, Director, Oxford Internet Institute, and **Dr Ben Worthy**, Lecturer in Politics at Birkbeck College, University of London

**Tom Steinberg**, Director, MySociety, **Heather Savory**, Chair, Open Data User Group and **Dr Rufus Pollock**, CEO, Open Knowledge Foundation

**Tuesday 22 October 2014**

**Professor Sir Nigel Shadbolt**, University of Southampton and Chair, Open Data Institute and **Stephan Shakespeare**, Chief Executive, YouGov and member of the Public Sector Transparency Board

**Monday 11 November 2013**

**Michael Fallon MP**, Minister of State, Department for Business, Innovation and Skills and **Nick Hurd MP**, Minister for Civil Society, Cabinet Office

**Jil Matheson**, National Statistician, UK Statistics Authority, **Glen Watson**, Director General, Office for National Statistics and **Sean Whelams**, Head of Statistics Profession, HM Revenue and Customs
List of printed written evidence

The following written evidence was received and can be viewed on the Committee’s inquiry’s web page. OD numbers are generated by the evidence processing system and may not be complete.

1. A G Baker (OD 22)
2. Benjamin Worthy (OD 03)
3. Benjamin Worthy (OD 27)
4. Campaign Against Arms Trade (OD 07)
5. Demographics User Group (OD 05)
6. Department for Business Innovation and Skills (OD 30)
7. FlyingBinary Limited (OD 18)
8. Full Fact (OD 11)
9. Information Commissioner’s Office (OD 12, 26)
10. Institute for Government (OD 17)
11. Involve (OD 10)
12. Nick Hurd MP and Michael Fallon MP (OD 28)
13. Open Data Institute (OD 09, 25)
14. Open Data User Group (OD 23, 29)
15. Owen Boswarva (OD 06)
16. Paul Malyon (OD 15)
17. Research Councils UK (OD 16)
18. Ruth Dixon (OD 04)
19. Stephan Shakespeare (OD 21)
20. Tom Steinberg (OD 24)
21. UK Data Service (OD 08)
22. UK Statistics Authority (OD 19)
## List of Reports from the Committee during the current Parliament

The reference number of the Government’s response to each Report is printed in brackets after the HC printing number.

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HC 313

**Third Special Report**  
Strategic thinking in Government: without National Strategy, can viable Government strategy emerge? Government Response to the Committee’s Twenty Fourth Report of Session 2010–12  
HC 573

**Fifth Special Report**  
The Prime Minister’s Adviser on Ministers’ Interests: independent or not? Government Response to the Committee’s Twenty Second Report of Session 2010–12  
HC 976

**First Report**  
The Big Society: Further Report with the Government Response to the Committee’s Seventeenth Report of Session 2010–12  
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