

# Further Detail on Open Data Measures in the Autumn Statement 2011

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## About

- This document presents further detail on the measures on Open Data published in the 2011 Autumn Statement. The Chancellor's full Autumn Statement can be accessed [here](#).

## Overview

- The internet has evolved to change the way we live, work and manage business processes within increasingly global marketplaces. Open Data is the next phase of this ICT revolution, enabling new systems, processes, products and markets to emerge, and supporting a whole raft of complementary innovations across the economy. The potential prize is considerable. A recent report estimated the current total direct and indirect economic value of public sector information at €140 billion per year for the EU27 (Vickery/ EU Commission, 2011)<sup>1</sup>. This suggests that similar information in the UK is already worth in the region of £16 billion a year.
- Consultation with industry would indicate that this emerging market is set to grow considerably. Demand for public sector data and information is significant across an expanding array of enterprises - including multi-million dollar Thomson Reuters, Bloomberg and Experian. Examples of these economic opportunities are already emerging in the UK, particularly amongst SMEs and high value sectors in which Britain has global competitive advantage, some of the most high profile of these being based in 'Silicon Roundabout' and TechCity in East London. Release of public sector information is designed to support growth and encourage the next Skype or Apple to come out of the UK.
- In brief, the measures in the Open Data work stream of the Growth Review are to:
  - **Boost growth in UK life sciences by transforming access to health and care data:** with unprecedented data linking services to support enterprise and innovation;
  - **Empower local business growth and new markets with local transport data:** real-time transport information will be released which will promote enterprise and improve access to public transport;
  - **Transform high tech consumer information markets through provision of online citizen access to personal data:** all NHS patients can access their personal GP records online by the end of this Parliament and new procurement arrangement for school information and learning services in spring 2012 which supports the exchange of data between systems and aims to increase competition; and
  - **Support the growth of high-value businesses and make access to data easier for startups:** Government is making available for free a range of core reference datasets. In addition it is announcing the creation of a Data Strategy Board and a Public Data Group which will maximise the value of data the public sector buys from Met Office, Ordnance Survey, the Land Registry and Companies House.
- These measures have been developed in collaboration with nearly 120 existing commercial enterprises – from GlaxoSmithKline, Experian and SAS UK, to Action 4 Employment and high-tech digital start-ups.
- The effective use of public sector data is vital to the growth of the UK's knowledge economy. Much of this information has a high value, both in terms of the economic as well as social benefit that can be realised through its use. Recent developments in technology and analysis techniques give other organisations, and even individuals, the opportunity to exploit this data in ways which government could not be expected to foresee

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<sup>1</sup> [Review of Recent Studies on PSI Re-Use and Related Market Developments \(2011\)](#)

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or undertake itself. Traditionally, government has sought to realise this value through charging for some of this information. More often than not, large tracts of public sector information remain unanalysed and under-used in Departments due to resource constraints, low awareness of value, and cultural unwillingness to make this data available.

- Put simply the mechanisms for growth through opening up government data are proposed to be:
  - **building data and analytics markets** – through releasing data, organisations specialising in providing analysis can grow by providing a range of intermediary products and services for use by other businesses across a range of sectors;
  - **expanding existing market opportunities** – the insights garnered from a broader analysis of government data allows entrepreneurial organisations to transform current products and services and to target them more effectively to the appropriate audience/market; and
  - **helping create new products and services** – as well as producing efficiencies for business in their current markets, analysis of government data allows entrepreneurial organisations to develop new and innovative products, many of which link to one another (creating positive network effects) and support the growth of complementary digital technologies (with spillover effects across the wider economy).
- The Open Data work strand in the Growth Review sets out an ambitious package of measures. By making access to public data assets possible, these measures will support high-value, high-growth enterprise in a range of sectors – particularly among SMEs.

## Measures

**1. Linking primary and secondary healthcare datasets** - The Government will provide a service to link primary and secondary healthcare datasets from September 2012 to reinforce the UK's position as a global centre for research and analytics and boost UK life sciences.

- To encourage innovation and investment in UK life sciences, the Health and Social Care Information Centre will set up a secure data linkage service as part of its core delivery service, and by September 2012 will deliver data extracts, using linked data from primary and secondary care and other sources, on a routine basis at an unidentifiable, individual level. This service will also be used and commissioned by the specialist research service (CPRD – see below) for their specific research purposes. The service will be available to all users of health and care information in order to drive improvements in care, enterprise and innovation, and will operate on a self-financing basis where users would pay the cost of the linking process.
- It will be informed by work that Government will progress to develop a programme with industry and academia, identifying specified datasets for open publication and linkage as well as championing emerging data-based innovations in health and life sciences.
- In addition, a complementary new secure data service, the Clinical Practice Research Datalink (CPRD), will be established within MHRA to service the specialised needs of the research and life sciences communities. Plans to establish this were published on 31 October.

**2. Publishing prescribing data** - The Government will publish further prescribing data by September 2012 and additional health and social care datasets by September 2013 to support health and social care data-based product and analytics markets.

- Data is the lifeblood of health and care services as well as life sciences firms, which rely upon precision, insight and intelligence to develop, test and market effective interventions safely. These measures will increase the breadth and granularity of health and social care data available through the Health and Social Care Information Centre, NHS Choices and data.gov.uk. This data will be published by September 2013 unless otherwise stated. With the exception of prescribing data (which will be available subject to a review of charging regimes) all other datasets will be accessible for free:
  - Practice level prescribing data at presentation level, giving quantity prescribed, by September 2012 - subject to further analysis of costs, benefits and affordability issues;
  - GP reference data (e.g. locations of practices, their list sizes and demographics);
  - The Care Quality Commission's Provider Profile Reports - CQC will also consider the scope for making available information that routinely feeds into these provider profiles;
  - Choose and Book usage at GP practice level; and,
  - DH will work with Local Authorities to develop further Local Accounts in adult social care with the aim of ensuring the accounts provide citizens with relevant information in a way that allows comparison between councils. DH will also continue to support the development of wide comparable social care metrics (in accordance with the Zero Based Review of social care data, Information Strategy, Social Care White Paper and Future Forum work).

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**3. Train and bus data** - The Government will work with the transport industry to make available by April 2012 timetable and real-time train and bus information to support the development of innovative applications to improve passenger journeys.

- This measure will support the development of a real-time transport information market, helping passengers make better travel decisions and businesses to better predict logistics and travel needs. This measure will release under the Open Government Licence (OGL) comprehensive timetable and real-time train and bus information as machine-readable and machine-processable data, as well as locational information about the rail network and its railway stations. Unless otherwise stated, the commitments to release this data will be for April 2012.
- DfT will work with the Transport Industry to make available the following rail data sets:
  - Rail timetable information on a weekly basis (December 2011)
  - Real-time running data from Network Rail
  - Location data about Great Britain Rail network
  - Location data about GB rail network stations
- DfT will also work with Traveline to release the following data relating to buses:
  - Traveline National Dataset on a weekly basis (Great Britain buses); and
  - Next Buses API of planned and real-time information at 350,000 GB bus stops (April 2012).

**4. Rail fares data** - The Government will consult in early 2012, through the Fares and Ticketing Review, on providing open access to rail fares data, giving passengers and business better information and enabling them to make the most cost-effective travel choices.

- DfT will work with the rail industry to ensure that full data on rail fares is made available to passengers and business. DfT will consult as part of its Fares and Ticketing Review on how the rail industry could provide this data in a way that protects passengers against potential misinterpretation of complex data on fares levels and restrictions. In addition, DfT will set out a way forward for Rail Transparency including Open Data in the forthcoming Rail Command Paper.
- Releasing this data will boost the market for fare finding and comparison services such as online search engines or mobile apps. This could also include comparisons between different modes of transport. We would expect this to result in savings for passengers and business.

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**5. Civil Aviation Authority - The** Government plans to legislate to give the Civil Aviation Authority the power to publish data on the performance of aviation service providers, to enable users of air freight and passenger services to make the most cost-effective choices.

- In order to support growth, this measure will create a new duty for the CAA to publish (or arrange for others to publish), in an open format which permits comparisons, information as it consider appropriate to assist users of air transport to compare services.
- The CAA must consult on its policy for carrying out these new functions and have regard to a cost-benefit principle. The CAA will be able to require the industry to provide this information and it has the power to impose penalties when a person fails without reasonable excuse to comply. This will help service users to make more informed travel choices.
- In parallel DfT will work with CAA, airlines and airport operators to identify appropriate data that could be released as Open Data to demonstrate the performance of air service providers and airports.
- It is noted that the Open Data community has identified flight arrival and departure times and delays as the most desirable dataset and this will be considered as part of the process.

**6. Highways and traffic data - The** Government will release from March 2012 a range of highways and traffic data, including on road works, to help reduce congestion and enable business to make more predictable travel and logistics decisions.

- This measure will release data under the Open Government Licence (OGL) as machine-readable and machine-processable relating to highways and traffic in the UK.
- DfT will work with the Highways Agency, Local Authorities and others to deliver a package of data releases on the road network throughout 2012, including:
  - Underlying location data from the Highways Agency HAPMS system covering the English Strategic Road Network – initial version in March 2012, followed by complete version later in 2012
  - Roadworks data held by local authorities (December 2012)
  - Unplanned disruption on English Strategic road network (March 2012)
  - Data from Urban Traffic Management Systems (end 2012)
  - Automatic traffic counter data on an annual basis – rolling programme of release (end 2012)
  - Historic road condition data to 2010 (March 2012).

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**7. Fit note data** - The Government will consult on the content of anonymised fit note data to be published from 2012 to drive innovation in the occupational health sector and improve management of sickness absence.

- It has been estimated that sickness absence costs UK Plc at least £10bn each year. Current data on causation of sickness absence and certification are scarce. DWP estimate that the overall economic benefit of the introduction of Fit Notes would range between £41m to £137m per annum. Releasing this data would have significant enterprise value as a driver of innovation in employee support, including occupational health, by enabling the development of new products and services to improve management of sickness absence outside the welfare system.
- DWP will consult on the release of anonymised aggregate Fit Note data with the aim of beginning publication in 2012.

**8. Universal Credit data** - The Government will design the Universal Credit ICT system so that aggregate benefits data can be published during the first year of live running of the system.

- Universal Credit is an integrated working-age credit that will provide a basic allowance with additional elements for children, disability, housing and caring. It will support people that are in or out of work and replace a number of tax credit and allowances that are currently available.
- DWP will ensure that the Universal Credit ICT system will support the production of aggregate data for use and re-use by industry and academia through open publication during the first year of the live running of the system.
- The ICT system will be designed from the beginning with open-data considerations in mind. The design criteria support this policy. Releasing these data are expected to have negligible additional costs at most.



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**9. Linking welfare data** - The Government will consider opportunities for linking welfare datasets to other government and commercial datasets to increase their value to industry.

- DWP and CO will set up a sector board with user interests and academia to identify opportunities to link DWP data sets with other government and commercial data sets for societal and economic benefit, reporting through the DWP business plan in 2012.
- Industry consultations have indicated that many data sets held by DWP have a high market value. However, this value would be enhanced in combination with commercial and other public data sets. The DWP-Cabinet Office sector board will identify where the greatest opportunities lie in order to prioritise data sets for linking.

**10. Open Data Institute** - Government will provide up to £10 million over five years, with match-funding from industry and academia, to establish the world's first Open Data Institute to help business exploit the opportunities created by release of public data.

- Establish a world-leading Open Data Institute (ODI) to innovate, exploit and research the opportunities for the UK created by the Government's Open Data policy.
- Co-directed by Professor Sir Tim Berners-Lee and Professor Nigel Shadbolt and involving business and academic institutions, the ODI will be based in Shoreditch in East London and focus on (i) business innovation (ii) commercialisation (iii) developing Web standards to support the Open Data Agenda (iv) world leading research (v) a UK national training centre, and (vi) providing expert advice for Government.
- In view of the commercial and social priority of Open Data, the Government is to commit up to £10m over five years with match funding from industry and academic centres to support the Open Data Institute through the Technology Strategy Board. The implementation plan will be published by April 2012.

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**11 Releasing reference data – The Government will establish a Data Strategy Board and a Public Data Group that will maximise the value of the data from the Met Office, Ordnance Survey, the Land Registry and Companies House. It will make available for free a range of core reference datasets from these bodies to support the development of high-value data businesses.**

- Delivering on its commitment to establish a Public Data Corporation, Government is announcing the establishment of a Data Strategy Board (DSB) which will seek to maximise the value of data from the Public Data Group (PDG) of Trading Funds for long-term economic and social benefit, including through the release of data free of charge.
- Sending a clear signal of the DSB's mandate, Government is announcing the release of additional core reference datasets for unrestricted use from the PDG, including, for the first time, weather observation and detailed weather forecast data and core data from the Companies Register.
- The PDG currently includes Ordnance Survey, Met Office, HM Land Registry and Companies House. The Group will identify and deliver efficiencies and synergies to reduce the cost of data for users and re-users of data and provide additional funding for making data freely available.
- This change clearly separates the commissioning and provision functions of public data, rebalancing the incentives to release more data for free, as well as strengthening the capability of Government to commission data for its own needs.

### **Detail of the initial data package**

- This announcement signals a significant step towards making additional core reference data from the Met Office, Ordnance Survey, HM Land Registry and Companies House available and free at the point of use.

- As a tangible immediate step, the Government is announcing that the following core reference data sets will be made available free at point of use:

### ***Met Office***

- The Met Office will, from today and for the first time, release under the Open Government Licence (OGL) as machine-readable and machine-processable for unrestricted use, the following Public Weather Service weather forecast and real-time observation datasets, which together represent the largest volume of high quality weather data and information made available by a national meteorological organisation anywhere in the world:
  - Forecast data of: weather type, temperature, wind speed, wind direction, wind gust, visibility, humidity, probability of precipitation, feels like temperature and UV index at 3 hourly intervals out to 5 days for 5,000 UK locations, updated hourly;
  - Forecast data of: maximum daytime temperature, minimum night time temperature, midday and midnight: wind speed, wind direction and wind gust, humidity, and visibility and for each 12 hour day/night period: probability of precipitation, prevailing weather type and maximum UV index for 5 days for 5,000 UK locations, updated hourly; and
  - The last 24 hours of observed weather, temperature, wind speed, wind direction, wind gust, visibility, pressure, pressure tendency for approximately 150 UK sites.
- Met Office will also run a competition to design a Met Office API solution which will help developers create new and innovative applications using Met Office data.

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- The DSB and Met Office will also work together with the aim of creating and releasing for re-use under the OGL over the next 12 months data which represents other services provided to the public as part of the Public Weather Service, subject to receipt of an acceptable business case.

### **Land Registry**

- From 1 March 2012 Land Registry will make available "Price Paid information" showing all residential property sales in England and Wales at address level. This will be downloadable for re-use, in a re-useable format under the OGL, and updated monthly.
- Land Registry will also make available for free, downloadable for re-use in an accessible and re-useable format under the OGL the following data, updated monthly:
  - a. Number and types of applications by customer by month;
  - b. Number and types of transactions for value by customer by month; and
  - c. Number of applications in England and Wales, by region and local authority district (or equivalent) by month; and
  - d. Number of searches by month (which can be a leading indicator of housing market movements).

### **Ordnance Survey**

- Ordnance Survey has committed to amend its derived data restrictions on Local Authorities' "Public Rights of Way" data, enabling this to be released more easily as Open Data.
- Ordnance Survey has also committed to work with Natural England to make available as part of OS OpenData a dataset of National Trails, for delivery in April 2013.

### **Companies House**

- Companies House will develop a free downloadable bulk data file for open re-use which includes Company name, number, registered address, registration date, filing status and SIC code. The Data Strategy Board and Companies House will also consider subsequent release later in 2012 of directors' and office-holders' details.

### **National Address Gazetteer**

- From Autumn 2011, data from local authorities, Ordnance Survey and Royal Mail has been brought together to form the National Address Gazetteer, a single, definitive address register. This is the first time that the England and Wales has had an authoritative source of spatial address data.
- Postcode information can be downloaded for free re-use via OS OpenData (CodePoint-Open).
- Any user can access data from the National Address Gazetteer for free to initially test, evaluate and develop into new and innovative products.
- The Government has asked Ordnance Survey and Royal Mail to:
  - a. simplify and align their licence terms for development & testing
  - b. provide greater support and ease of access for developers & innovators.
- The Government has also asked Ofcom, the new regulator of postal services, to review the pricing and licensing structure of the postcode address file (PAF).

### **Structure and Governance**

- The PDC Transition Board will agree the Terms of Reference for both the DSB and the PDG

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detailing their full responsibilities by 31 January 2012. At the moment the current responsibilities of the DSB and the PDG are as follows:

### **Data Strategy Board**

- The DSB will have responsibility for the commissioning and purchasing of data for free release to the public and ensuring that this represents good value for taxpayers. The DSB will receive funding of no less than £7m in this Spending Review period for the purchase of additional data for free release. It is envisaged that in the next spending review period, the DSB will seek to agree a proportion of dividends from PDG, as additional funding for Open Data. There needs to be a principle of transparency between the DSB and PDG in order for the DSB to be in a position to commission Open Data effectively and undertake informed negotiation regarding its share of PDG's ongoing dividend stream for the next Spending Review period. To this end DSB will be able to audit PDG member accounts relating to public sector contracts.
- The DSB will also have responsibility for commissioning and purchasing data and services on behalf of the public sector from the PDG, leveraging expertise of existing customer groups (Public Weather Service Customer Group and the Geographic Information Group). This includes responsibility for the existing £170m p.a. funding for these data and services.
- Data users from outside the public sector, including representatives of commercial re-users and the Open Data community, will represent at least 30% of the members of DSB, ensuring the widest possible user community is involved in the commissioning of data for free release to the public. It will also incorporate existing public sector customer groups who will continue to provide sector expertise around the commissioning of weather services and geographic information for the public sector. The DSB will have an Independent Chair.

### **Public Data Group**

- Government has charged the PDG with:
  - the aggressive pursuit of individual and cross-asset efficiencies, delivering lower prices to all users of data, including the DSB, maintaining the commercial stability of its member companies and ultimately in order to enhance the funding available to the DSB. This will particularly benefit SMEs and not-for-profit organisations for whom price of data may be a barrier;
  - the establishment of cross-organisational working groups (for example in areas such as IT infrastructure, licensing, etc) to build on best practice across the organisations. An example of this has already been undertaken in the formation of a working group to identify synergies between the surveying functions of Ordnance Survey and Land Registry; and
  - the pursuit of collaborations across the wider public sector to deliver efficiencies through better data sharing.
- The Government will consider, on a case by case basis, the options for greater involvement of the private sector in the longer term delivery of these public services. This could take the form of partial sale, joint ventures with commercial partners, accessing private capital to support investment or the introduction of alternative management structures or expertise to drive efficiency. The Government will also consider the advisability of alternative delivery models such as turning any of its member Trading Funds into Companies Act companies.

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**12. Personal data** - The Government will ensure all NHS patients can access their personal GP records online by the end of this Parliament. The Government will publish a new procurement arrangement for school information and learning services in spring 2012 to improve parents' and pupils' access to education data and increase competition in provision of learning services.

- These measures will help to position UK companies in the development of a personal information market, which is likely to be the next stage of development on from the growth of social networks. Online access to one's own personal data enhances personal control and participation in public services. It also fuels innovation and growth in the supporting technology and data markets.
- All patients in the NHS will have online access - where they wish it - to their personal GP records by the end of this Parliament. GP practices that can already provide online access are encouraged to do so as soon as possible. NHS Choices will publish an interactive map at the earliest opportunity, subject to the successful passage of provisions in the Health and Social Care Bill relating to the powers of the Information Centre for Health and Social Care to require the supply of the necessary data. The Information Strategy for health and social care in England, to be published by April 2012, following consultation earlier this year as well as further advice anticipated from the NHS Future Forum, will publish details of the timetable.
- In education, Government will encourage greater value, choice, competition and innovation in the education data and learning platform markets by publishing a new procurement arrangement for school Information Management and Learning Services (IMLS) in spring 2012. Framework suppliers will need to ensure that education data is exportable in open and interoperable formats and that other developers (including SMEs) can access their APIs at little or no cost. They will need to ensure that their systems enable information about pupils to be shared

electronically with parents, where schools choose to do so. DfE and BIS will also work with industry to agree common information standards for education and encourage their widespread adoption.