Public Data Group (PDG) meeting

30th April 2015

Published agenda, minutes and papers

Attendees:

Claudia Arney CA (Chair, Public Data Group) Tim Moss TM (CEO, Companies House) Andrew Trigg AT (Head of Data, Land Registry) Rob Varley RV (CEO, Met Office) Neil Ackroyd NA (Acting CEO, Ordnance Survey) Ceri Smith CS (Director, Shareholder Executive)

Additional attendees:

Amanda Brooks AB (Director, Innovation, BIS) Ollie Buckley OB (Deputy Director, Transparency and Open Data Team, Cabinet Office) Philip Lawrence PL (Chief Executive, Coal Authority) Mike Patterson MP (Chief Operating Officer, British Geological Survey) Iain Rolfe IR (ShEx PDG Secretariat) Leo Geddes LG (ShEx PDG policy lead)

Apologies:

John Peaden (Interim CEO, Land Registry

Agenda:

1. Welcome, introductions and minutes from last meeting	Claudia Arney
(5 minutes)	
2. Chair update	Claudia Arney
(5 minutes)	
3. Update from PDG members	All
(20 minutes)	
4. Overview of data policy issues for British Geological	Mike Patterson and
Survey and Coal Authority – followed by discussion	Philip Lawrence
of PDG insights	
(30 minutes)	
5. An update on the work of the Knowledge and	Amanda Brooks
Innovation Directorate with plans for the future	
(20 minutes)	
6. Discussion of PDG engagement with OS Innovation	All
Hub and other activity	
(15 minutes)	
7. Planning for the new Parliament – thoughts from CO	Ollie Buckley/All
and wider discussion	-
(20 minutes)	
8. Conclusion / any other business (5 minutes)	

Item 1 Welcome, introductions and minutes from last meeting

1. CA opened the meeting. Minutes from the previous meeting were agreed.

Item 2 Chair update

- 2. CA fed back from her meeting with Martin Donnelly earlier that morning. She noted that he was appreciative of the work of PDG and was considering the role of BIS in data policy more widely.
- 3. CA noted her recent correspondence with Matthew Hancock and drew attention to his support for the ongoing work of PDG and his desire for it to continue to increase the impact its actions were having.
- 4. CA thanked PDG members for their support in getting the PDG Spring Statement published and also flagged that a version of PDG minutes from previous Boards was now online.
- 5. CA fed back from the round table that took place following the recent PDG survey of how businesses were using its data. The roundtable involved representatives from all PDG bodies as well Cabinet Office, The National Archives, the Open Data Institute and two businesses using PDG data – Doorda and GeoLytix. It was good and useful session with some clear actions around communications and improvements to licencing and the momentum from this should be maintained.

Item 3 Update from PDG members

- 6. NA provided an update on Ordnance Survey's recent move to a GovCo and made the point that it would allow it to be more flexible in a rapidly changing market. This was followed by a wider discussion on the geospatial market.
- 7. NA also updated the group on the February open data package OS announced. This had been well received with over 55,000 individual downloads from 2,600 unique domains to date. The data was already being used in wide range of applications from the property sector to green energy to social enterprises. NA made the point that the data sets offered was still only in beta and that OS would be looking to improve it as feedback was provided.
- 8. AT highlighted the work that LR was undertaking around Local Land Charges and that as this would involve centralising a large amount of Local Authority data this was a data modelling challenge. He also noted that LR are continuing to provide their open data in a financially sustainable way. The National Spatial Data Set is being trialled with

certain organisations and this will be supported by a number of industry days to get feedback.

- 9. TM noted that work was continuing on CH's move to make all their digital data free of charge and that usage of their existing data offer was up from last year with 300m downloads compared to 240m. CH are also developing a new API to help make their data accessible. TM also highlighted that there is a growing range of businesses using CH data in different ways with one example being 'Core Filing' who are able to provide business sector analysis based on CH accounts data.
- 10. CH are also working to implement the changes brought about by the Small Business Act which will involve their collection on information on individuals of significant control from April 2016.
- 11. RV provided an overview of the Environmental Science to Service Partnership and its work on Data Spring – a new portal service that will provide access to a range of environmental data sets from multiple organisations using common APIs and licences.
- 12. This was then followed by a discussion around the organisation and funding of such a project.

Item 4 Overview of data policy issues for British Geological Survey and Coal Authority – followed by discussion of PDG insights

- 13. PL gave an overview of the work of the Coal Authority. He explained that they offered a mixed economy of open and paid for data. Data was available at 1 1: 25,000 scale for free and then there commercial options. They are examining their licencing regime.
- 14. There then followed a wider discussion on the CON29 process as well as the GDS 'Government as a platform' approach.
- 15. MP gave an overview of the work of the British Geological Survey. BGS's data also comes in an open and a commercial form. Their open data is released under an OGL and includes things such as the logs of bore holes and geochemical analysis. Their commercial data covers their value added information services.
- 16. There was then a discussion of how their data was being used and the market's positive reception of their approach.

Item 5 An update on the work of the Knowledge and Innovation Directorate with plans for the future

17. AB provided an overview of innovation policy and the work of InnovateUK and the challenges and issues they faced. She highlighted the Science and Innovation Strategy as well as the Big Data Strand of the Industrial Strategy.

18. There was then a wide ranging discussion of the challenge of defining 'Big Data' and what issues policy was trying solve. The discussion also covered how PDG build on the existing co-operation with InnovateUK and the Catapults.

Item 6 Discussion of PDG engagement with OS Innovation Hub and other activity

- 19. NA provided the group with an update on OS's plans for their Innovation Hub. This has attracted international interest as it is the first specifically geographical innovation hub in the world. OS are exploring the scope for a 'sponsorship model' approach and are in discussions with various businesses.
- 20. There then followed a discussion on the Hubs engagement with PDG and other organisations. NA explained that their first event would involve the ODI and that the Hub was actually based in the Cities Catapult. If other PDG members had specific challenges or issues that they would like to involve the Hub in then OS would happy to engage.

Item 7 Planning for the new Parliament – thoughts from CO and wider discussion

21. OB presented his thoughts on the possible issues likely to be priorities for the range of possible Government formations. OB also highlighted the appointment of Mike Bracken as Chief Data Officer and the role of GDS. A discussion then took place on issues and challenges facing HMG around data policy.

	14/15 Deliverables	Current work	Status and action for Board
Increas	ing PDG's influence on Government's data policy ag	genda so that it reflects relevant expertise and experience:	
1.	Paper on PDG engagement with business submitted to Digital Task Force (Oct 2014)	Paper submitted.	COMPLETE
2.	Formal engagement process with Public Sector Transparency Board established (Nov 2014)	Agreement with MCO for Claudia to attend when PDG discussed.	COMPLETE
3.	Relevant BIS Directors join PDG Board and provide feedback (Dec 2015)	This has been subsumed within the wider BIS Performance Finance and Risk Committee work on better integrating BIS data policy. Amanda Brooks attending April PDG Board.	COMPLETE
Increas	ing awareness of PDG data to increase its usage and	d positively change perceptions:	
4.	Increased PDG presence at events e.g. 'Big Data for Business', InnovateUK events (on-going)	PDG supported an FE Hack Day at BIS and attended the TechUK engagement with business event in February.	ON-GOING
5.	PDG 'developer licence' survey on awareness, usage and issues using BIS, PDG and other partner organisation's networks (Oct 2014)	Survey launched in December.	COMPLETE
6.	Summer Statement refreshed (March 2015)	Spring Statement intended for publication in March setting out how PDG data is used by businesses and what steps they are taking to increase that based on existing activity and commitments arising from the recent survey.	COMPLETE
Increas	ing and stimulating usability of PDG data to maximi	se its value in supporting UK growth:	
7.		Roundtable with PDG members, The National Archives, Cabinet Office, the Open Data Institute and SMEs took place in March. Actions arising set out in Spring Statement.	ON-GOING: Encouraging continuing support for work on simplifying developer licences and improving communication of data
8.	Increasing Linked data offering following Linked Data workshop (Oct 2014 onwards)	Workshop not taken place but CH have been awarded funding by the Breakthrough Fund to link their data to OS so their data will be geo-spatially linked.	ON-GOING

April Update on PDG deliverables

9. A series of events, challenges and targeted	LR/OS GeoVation challenge successfully provided £101, 000 funding for three finalists. Future	ON-GOING: Encouraging
support for developers and SMEs (on-going)	options being developed around:	continuing support and
	 Potential water based GeoVation which could bring in a range of other bodies 	indication for any priorities
	Working with Environmental Science to Services Partnership, Natural Hazards	
	Partnership, Public Weather Service and Public Mapping Service Agreement and	
	the Digital Catapult	
	A hack based on the CH release in the summer	
	Also continuing to explore co-operation with ODI on their new business support programme	
	and communicating BIS finance to PDG data users.	

Environmental Science to Services Partnership

Briefing Note for PDG

Short overview – The Environmental Science to Services Partnership (ESSP) is a partnership of six leading UK public sector environmental science and delivery organisations sharing a common goal of delivering benefit and economic growth from their capabilities.

To achieve this we are developing DataSpring, an underpinning capability to deliver a curated data service as the authoritative source of environmental information. Having produced a proof of concept prototype managing access to samples of environmental datasets from across ESSP, we are preparing to explore the huge potential this brings in reducing barriers to innovation and stimulating economic growth. More details overleaf.

ESSP's collective purpose is to develop ways to translate and apply the world-leading environmental science we each generate, to support the delivery and improvement of products and services for society, private enterprise and government.

- ESSP is made up of British Geological Survey (BGS), Centre for Ecology & Hydrology (CEH), Environment Agency (EA), Met Office (MO), Natural Environment Research Council (NERC) and Ordnance Survey (OS). The Partnership is led by the Met Office.
- A Memorandum of Understanding signed in February 2014 provides a legal framework to work together and seize opportunities to benefit from capabilities across the Partnership.
- In addition to these six partner bodies Defra have a seat on the Partners' Board.

ESSP aims to optimise the development and delivery of multi-disciplinary products and services that meet defined user needs in both public and private sector by combining their environmental science, data, information and knowledge. These will support decision-making and stimulate economic growth while ensuring the best possible outcomes for the environment. We will:

- Advance the translation and application of existing and newly developed environmental science, knowledge and expertise
- Demonstrate effective collaborative working and improving efficiency within and across the Partnership
- Maximise partners' potential to secure or generate revenue
- Explore collaborations with other organisations including the private sector

More Information

See the ESSP website www.bgs.ac.uk/ESSP/home.html

or contact Simon McLellan, Head of ESSP, Met Office simon.mclellan@metoffice.gov.uk 01392 886617 07887 628955













Ordnance

ESSP DataSpring

In order to meet its overarching vision the ESSP is currently developing DataSpring - a single signon, one-stop shop of environmental datasets that we'll make easy to find, easy to understand, easy to use and easy to integrate.

- With ever increasing volumes of data becoming available, users want help to know what data is relevant to their situation - and how to use it. The ESSP partners are in a unique position to provide reliable, quality assured and authoritative environmental data sets.
- DataSpring can support an ecosystem of tools where developers focus on the needs of their • user and DataSpring provides a unified source of data from the partners under simplified licensing terms and conditions through a single sign-on web service. Such an underpinning information service layer enables developers to easily discover, access, use and integrate multi-disciplinary data from the partners allowing them to visualise and analyse these interoperable data in new or existing systems and platforms.
- DataSpring could be used to promote innovation and underpin UK economic growth in the environment sector and facilitating the use of environmental data and knowledge in others.
- Pre-packaged data bundles, created and curated for specific use cases by ESSP, will give developers a head start. This will improve knowledge transfer, pull-through our world-leading science from research, and remove some of the data-related barriers to innovation, potentially leading to new information and knowledge being derived from existing data.
- By accessing static and 'real time' environmental datasets together through a single, robust • and reliable web service DataSpring enables rapid data access to support integrated interaction, analysis, visualisation, scenario planning and decision-making.
- Initially starting with open data, DataSpring will be extended to improve access to the paid-for premium datasets offered by the partners, with appropriate licensing arrangements enabled through registration and sign-on credentials.
- It will be easy for 3rd party data owners to use DataSpring to expose their data. Our federated • approach allows suppliers of datasets to retain responsibility and control of their data. This could enable access to crowd sourced data linking into citizen science and Internet of Things.
- DataSpring is well aligned to government drivers and policies eg based on open source API Management software; engaging with government's Open Data initiatives; using consistent and open OGC data standards; INSPIRE compliant cataloguing and metadata.
- The DataSpring roadmap is well aligned with partners' data strategies. By positioning this as a • template architecture, opportunities exist to standardise data services across Government.

Having proved the DataSpring concept we are now starting to engage potential users on the data they would find useful. We have increasing engagement with Natural Hazards Partnership, ResilienceDirect, GO-Science, BIS, InnovateUK and are exploring possible links with Digital Catapult's Environmental Data Exchange. We are seeking use cases that will promote DataSpring and commitment to establishing a robust operational service.

Working with PDG partners and others on a hack event would provide such an opportunity.

Agency











Ordnance



Gateway to the Earth

British Geological Survey

Mike Patterson Chief Operating Officer



British Geological Survey

- Founded in 1835
- Part of the Natural Environment Research Council (NERC)
- Part-funded by Government, but has significant external income through commissioned research
- Offices at Keyworth, Wallingford, Edinburgh, Belfast, Cardiff and London

"UK's premier provider of objective and authoritative geoscientific data, information and knowledge for wealth creation, sustainable use of natural resources, reducing risk and living with the impacts of climate change"



BGS Data Policy – Dual approach

"Environmental Data"

- Any data we collect in our day to day running of a geological survey, e.g.
 - Boreholes
 - Geological maps
 - Geochemical analysis
- Delivered under the Open Government Licence

"Information Products"

- Data that has an added level of interpretation and value added to it, e.g.
 - Risk products for the insurance sector
 - Identifying land suitable for sustainable drainage
- Delivered under commercial terms





- Web portal for "Environmental data"
- Everything delivered under the Open Government Licence
- We're continually adding to this as resource allows

Current highlights:

Onshore geology map viewers/WMS of Britain Offshore geology map viewers/WMS of UK and adjacent European waters BGS maps portal - over 6000 scans of our printed maps Borehole locations and logs - over 1,000,000 scans Geochemical data - Soil and stream sediment chemistry data from our latest surveys Geophysical data - magnetic and gravity data for Britain BGS photo archive - over 30,000 photos available for download









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Information Products – Data highlights

Including:

- Subsidence risk model for the Insurance Sector
- GeoSure ground stability maps for conveyancers and home buyers
- Shallow geological models for aiding tunnel construction
- Deep geological models for identifying shale gas horizons
- Maps identifying land suitable for infiltration suds aimed at property developers
- Engineering geology datasets for the construction industry (e.g. engineering strength and excavatability)



Information Products – Licences

- Internal Business Use Licence
- Data Partner Licence (value-added resellers and licenced data resellers)
- Innovation Agreements (for evaluating data at no cost, no obligation)
- Emergency Use Licence (for the resilience community)





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For a comprehensive information of the Geology at

this point, please use the BGS GeoReport Service at http://shop.bgs.ac.uk/GeoReports/

BGS Groundhog® © NERC 2011. All rights reserved.

NEXTMAP Britain elevation data from Intermap Technologie

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constraints:

Drainage summary:

Drainage

None found

Opportunities for

> 5 m below ground

bespoke infiltration SuDS

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External data solutions & collaborations



Innovate UK





FLOOD SOLUTIONS

GroundSure

GroundSure

GeoInsight

Commercial

Brought to you by GroundSure



CATAPULI Future Cities

OS OPENDATA

OS OpenData

OS first launched OpenData in 2010. In March 2015 OS launched four new Open Data Products.

The new OS OpenData Products provide greater detail and enables analysis of data.







OS Open Map – Local A new 'street level' dataset designed to b most detailed open data mapping produfor Grat Britain from OS



OS Open Rivers A generalised network product for Great Britain's rivers and watercourses.



A search gazetteer showing the most up to da

place names, road names/numbers and postcode



OS Open Roads A generalised road network product, enabling high level network queries and the sharing of data.

10,000 55, DOWNLOADSIN 0RE 1,24 0S HOURS 0S



OVER 1 MILLION ORDERS OF OS OPENDATA PRODUCTS 2010 - 2015 OS OpenData Products Ordered by Sector



OS OpenData attracts a broad cross section of customers

BLUE CHIP

PUBLIC



OS OPENDATA USE CASES

OS Open Map – Local



OS Open Map – Local

parallel

OS Open Map

The newly-released OS Open Map data buildings and functional sites.



Mapbox: mapbox.com Ordnance Survey Open Map: ordnancesurvey.co.uk

make contact Round Foundry Media Centre 0113 394 4566 · studio@p LEEDS



Parallel are aiming to produce

Webapps for:

- The Department of Health
- SHAPE
- ProCure21+
- Health Facilities Scotland The Health and Social Care
- Information Centre
- QOF
- MHMDS online
- Indicator Previewer (not publicly-accessible)

Interactive maps for:

- Department of Health: Dementia Challenge
- NHS Choices: Hospital Food Ratings
- Royal College of Psychiatrists: National Audit of Memory Clinics
- York 1852

OS Open Rivers

Defra Digital Exploring 'Rivers of Data'

The blue network lines are from the OS Open Rivers product and the pink dots are Environment Agency monitoring stations. We were also able to query the data behind individual monitoring stations.







Foundry Stree

Leeds LS11 5QR

find us

Smaller websites for: • 2H Architecture

- ActiveMedicine
- Community Investment Coalition
- The Jackdaw

What are people saying so far?

OS NOMINATED FOR NEXT GEN DIGITAL CHALLENGE

"GAMECHANGER FOR UK"

defradigital.blog.gov.uk/2015/03/27/

OS Innovation <u>Diagram 1. Overview OS Geovation Hub – Engagement Model</u>



Page 1 of 2



OS Open Innovation Partner



Page 2 of 2



Coal Authority 27 April 2015 Unrestricted

Philip Lawrence CEO





Discussion Points

The Authority owns raw and value added on the legacy of coal mining and operates a licensing framework which comprises:

- The standard Open Government Licence allows unrestricted use and reuse free of charge, and applies only to data served through the interactive viewer;
- An innovation licence allows innovators/developers to use our data free of charge;
- A non-commercial use licence allows academics/researchers, charitable organisations etc. to use our data for strictly non-commercial purposes free of charge;
- A standard re-use licence for commercial re-use; and
- A 'use' licence is being developed to allow others to create their own mining reports to compete with CON29M.



Detailed analysis

We resolve the impacts of mining

Long history of coal mining some of which is unrecorded

7 million properties (25% of all) lie within coalfields.1.5 million coalfield properties sit on shallow coal workings (<30m deep)

172,000 recorded mine entries. 130,000 properties lie within 20m of at least one mine entry. 1,800 schools with mine entries.

Working relationships with 178 local authorities

100 discrete blocks of coal with 800 water monitoring points

Coal mining legacy affects the public, planners, developers and landowners



The Coal Authority



Importance of mining information

Density of mine entries in typical urban setting







Commercialisation Strategy

Our Corporate Plan explains our strategy of working towards becoming

a world leader in resolving the impacts of mining

and so become

more self sufficient by realising the economic value in our people and our information

Towards the end of our five year plan we will be in a better position to assess whether our delivery model is still fit for purpose.

Our strategy focuses on:





From historic plans to digital data



- Over 4 million mining objects
- Dynamic data-sets, updated daily

Value added by:

- digital capture and georeferencing,
- detailed interpretation and feature abstraction by mining surveyor teams,
- integration with additional data from separate sources,
- daily, dynamic update, QA/QC,
- commercial licensing arrangements to include data-set version control, user documentation and 'after-sales' support





- UK national coverage of coal-mining related hazards e.g. >172,000 mine entrances, surface and underground workings, gas emissions etc.
- Available at 1:25K scales as OGL open data *via* web viewer and WMS
- Risk data supplied free of charge to local authorities for planning



The CON29M mining search report

CON29M search report – recommended in Law Society conveyancing guidance and considered by the conveyancing market to be 'essential'

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Brine Compens	ation District	No			
Information from the Coal Authority					
Underground coal mining					
Any ground movement from these In addition the property is in an ar- the surface. This coal may have Present The property is not in the likely zo All rights reserved. You must not reproduce, sto permasten. 9 The Cae Automaty Residential Cael Automaty Merg Report – 51000044	Approximate position			R ILLUSTRATION RPOSES ONLY	Current
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