#### Minutes

## Thursday 21 July 2016 Boardroom, London

### Present

### **UK Statistics Authority**

Sir Andrew Dilnot (Chair) Professor Sir Adrian Smith (Deputy Chair) Ms Sian Baldwin Dame Colette Bowe Dame Moira Gibb Professor David Hand Mr Ed Humpherson Dr David Levy Ms Nora Nanayakkara Mr John Pullinger

#### Also in attendance

Mr Robert Bumpstead Mr Alistair Calder (for item 13) Mr Stuart Coleman (for item 11) Mr Joe Cuddeford Ms Pam Davies (for item 12) Mr Barry Jeffreys (for item 13) Mr David Johnson (for item 10) Mr Richard Laux (for item 9) Mr Johanna Hutchinson (for item 9) Ms Heather Savory

#### Apologies

Mr Jonathan Athow Professor Jonathan Haskel Mr Glen Watson

## 1. Apologies

1.1 Apologies were received from Mr Athow, Professor Haskel and Mr Watson.

## 2. Declarations of Interest

2.1 There were no new declarations of interest.

## 3. Minutes and matters arising from previous meetings

- 3.1 The Chair reported on the topics discussed at the meeting of the non-executive directors that had taken place prior to the start of the Board meeting. The non-executives had discussed:
- i. membership of the Audit and Risk Assurance Committee of the Authority Board;
- ii. ways of keeping the Public Administration and Constitutional Affairs Select Committee informed of the work of the Authority Board; and
- iii. plans to enhance the regulatory function of the Authority.
- 3.2 The minutes of the previous meeting held on 28 June 2016 were agreed. The meeting heard that progress was being made with setting up an economic statistics high level working group, with the first meeting provisionally due to take place in October.
- 3.3 The meeting discussed the use of official statistics during the EU referendum campaign. Other organisations with relevant remits during referendum campaigns were considered. The Chair would be meeting with the Electoral Commission in due course to consider whether there was scope for closer working.

## 4. Report from the Authority Chair

4.1 The Chair reported on his recent activities which included a visit to the Ministry of Justice and a discussion with Lord David Willetts.

## 5. Reports from Committee Chairs

### Administrative Data Research Network (ADRN) Board

5.1 Professor Hand reported on the meeting of the ADRN Board held on 12 July. The midterm review of the ADRN was underway. A recent Gateway review had given an overall confidence assessment of Amber/Red, noting that the key risk related to the availability of UK-wide data. Professor Hand and the Deputy Chair of the ADRN, Ms Sharon Witherspoon, had presented on the ADRN to the Government Data Leader's Network to make clear the benefits of the ADRN and encourage departments to share data with the ADRN.

## Regulation Committee

5.2 Professor Sir Adrian reported on the meeting of the Regulation Committee held on 14 July. The meeting had considered the recent Health and Social Care Conference, which had been successful in creating a community of practice between researchers, users and producers who recognised the problems surrounding health statistics. The Committee had also considered proposals for an enhanced regulatory function, which would be discussed later in the meeting.

## 6. Report from the Chief Executive [SA(16)24]

- 6.1 Mr Pullinger provided an overview of activity and issues for July.
- 6.2 The executive team had been developing a plan to address the various implications of the EU referendum result, both in terms of delivery of statistics and in terms of the relationship between ONS and colleagues in the European Statistical System and across the world. The following comments were made in discussion.
- i. It was likely that key ONS outputs would be under high scrutiny as the first data from the period following the EU referendum was published, particularly economic

indicators. The first substantive releases covering this period would begin in September.

- ii. Producers of statistics would need to consider what improvements or enhancements should be made to outputs to meet new and emerging user needs in the post referendum context.
- iii. The impact on recruitment of EU nationals with specialist skills was not yet clear but would be closely monitored.
- 6.3 The executive team would be considering progress and challenges across the office to deliver necessary change, particularly where a substantial ramp up was required to deliver, while also meeting the requirement to deliver value for money. Further briefing would be provided to the Board over the summer.
- 6.4 The Board noted that Labour Force Survey (LFS) response rates were not showing signs of improvement. Information about the redesign of the Labour Market Statistics would be provided to the Board.

### 7. Report from the Director General for Regulation [SA(16)25]

- 7.1 Mr Humpherson provided an overview of recent regulatory activity. The recent Health and Social Care Conference event had put the issues on the table and secured positive engagement, but concrete action was now required. The next steps would be to approach the main bodies and invite them to create action plans.
- 7.2 The Board considered the devolved nature of health policy. It was noted that, within Wales and Scotland, health statistics were more coherent than within England; though at a UK-level it was very difficult to make comparisons, in part due to differing definitions.
- 7.3 It was suggested that the solution would require input from users and political will.

### 8. Plans for an enhanced regulatory function

- 8.1 Mr Humpherson provided an overview of emerging plans for an enhanced regulatory function. Mr Humpherson's team had been developing plans in discussion with stakeholders and in light of the Bean review.
- 8.2 The Board discussed the relationship between, and respective roles, of the regulatory team, ONS and the Authority and the importance of the statutory separation of functions. The meeting emphasised that the focus should be on increased impact and what new products and services the team would deliver, and how. The Board welcomed the update and agreed that thinking should continue, with delivery plans to be presented by Mr Humpherson to the next Board meeting.

### 9. Stocktake of the Code of Practice for Official Statistics [SA(16)26]

- 9.1 Mr Laux introduced a paper which outlined emerging recommendations from the Code of Practice stocktake. Following further discussion and engagement over the summer, the team planned to bring final recommendations to the Authority Board in October.
- 9.2 The Board agreed that the work was moving in the right direction. It was agreed that the Code stocktake and the development of the regulatory function should be rolled together into a single project. A public consultation on an updated code would be required, and this should follow after the establishment of the new arrangements for the regulatory function. It was noted that the Code was for statistics, rather than for statisticians, and that therefore all civil servants and ministers were required to comply.
- 9.3 The Board emphasised that the Code of Practice was central to the Authority and the UK statistical system. A special Board meeting would be organised in the autumn to look in depth at the proposals for change.

### 10. Data Campus [SA(16)29]

- 10.1 Mr Johnson introduced a paper which outlined the development of the ONS Data Science Campus.
- 10.2 The establishment of the Campus was both important and exciting, but would not be easy to accomplish. The Board noted that impressive progress had been made in a short space of time. It was being established as a fast start-up, with light touch governance which allowed quick progress to be made. One of the likely challenges would be recruitment of the best people, which was central to success but had proved difficult for other similar endeavours. It was important to choose carefully when deciding which other organisations to partner with.
- 10.3 The Board commended Ms Savory and Mr Johnson on this work.

### 11. Income generation [SA(16)28]

- 11.1 Mr Coleman introduced proposals for how the ONS could initiate, develop and secure dedicated capability to generate new income in ways that were aligned with the organisation's broader public service mission.
- 11.2 The Board agreed that the approach outlined had merit and welcomed the work. It was agreed that some resource should be invested to test the proposals.

### 12. Talent management [SA(16)27]

- 12.1 The Chair introduced Ms Davies and noted that this was an area which the Board wanted to focus closely on. Ms Davies provided an overview of how talent is currently managed within the organisation.
- 12.2 The following comments were made in the discussion.
- i. The model used in the Authority and ONS was the standard model used across the Civil Service. A key requirement for its success was ensuring that, where individuals are identified as high potential, the development opportunities which are promised to those individuals are followed through on. This meant ensuring sufficient investment.
- ii. Mentoring and access to inspiring leaders were very important.
- iii. One useful development opportunity was for staff to move to other departments to develop broader experience. It was noted that the geographical location of ONS's staff was to some extent a limiting factor in this regard, though private sector secondments were also encouraged.
- iv. The civil service grading structure was sometimes seen as a restraint on development, with length of service taking prominence over talent and potential.
- 12.3 It was agreed that:
- i. the Board would consider talent again in the autumn;
- ii. real case studies of the development of high potential staff would be provided;
- iii. Board members could act as mentors and would be happy to meet high potential staff to discuss development; and
- iv. talented junior staff should be invited to present to Board meetings.

### 13. Address and business registers [SA(16)30]

- 13.1 Mr Calder and Mr Jeffreys provided a demonstration of the work currently being carried out within ONS on developing registers or indexes for Addresses and Businesses.
- 13.2 The Chair thanked Mr Calder and Mr Jeffreys, and noted that registers were the basis for many critical outputs. It was noted that ONS had positioned itself as a critical national provider in this space. There remained legal and cultural barriers to ONS accessing the data it needed to take this work to the next level, but early signs of the potential for increased efficiency and insights were very promising.

**14.** Forward agenda14.1 The forward agenda was noted.

**15.** Any other business
15.1 There was no other business. The Authority Board would meet next on Friday 23 September at 10:30 in London.

## Agenda

## Thursday 21 July 2016 Boardroom, Drummond Gate, 10:30 – 16:00

## Chair:Sir Andrew DilnotApologies:Mr Jonathan Athow and Professor Jonathan Haskel

## 10:30 to 11:00 – Non-executive session

1	Minutes and matters arising from previous meetings	Meeting of 28-06-16
	Declarations of interest	
2	Report from the Authority Chair	Sir Andrew Dilnot
	Reports from Committee Chairs	
3	i. ADRN Board	Professor David Hand
4	ii. Regulation committee	Professor Sir Adrian Smith
5	Report from the Chief Executive	SA(16)24
6	Transformation on a page	Mr John Pullinger
7	EU referendum	
8	Report from the Director General for Regulation	SA(16)25
		Mr Ed Humpherson
9	Plans for the Independent Regulation and Evaluation	Discussion
	Office	Mr Ed Humpherson
10	Stock take of the Code of Practice for Official Statistics	SA(16)26
		Mr Richard Laux

## 13:00 to 13:30 – Lunch

11	Talent management	SA(16)27
		Ms Pam Davies
12	Income generation	SA(16)28
		Mr Stuart Coleman
13	Data Campus	SA(16)29
		Mr David Johnson
14	Address and business registers	SA(16)30
		Mr Alistair Calder and
		Mr Barry Jeffreys
15	Forward agenda	Secretariat
16	Any other business	

Next meeting: Friday 23 September 2016, 10:00 to 15:30, London

SA(16)24

## Chief Executive's Report, July 2016

#### Purpose

1. This report provides the Board with an overview of activity and issues for July.

#### Summary

2. We have been doing detailed work this month to explore the implications of the EU referendum result and also to review progress on delivery of transformation plans within ONS.

#### **Review of recent activities**

- 3. The executive team has developed a plan to address the various implications of the EU referendum result, both in terms of our domestic delivery of statistics and our relationships with colleagues in the European Statistical System and across the world. Whilst we must now adapt to a new reality, for many staff, especially those from other EU countries, the result has had a significant impact which we need to respect and recognise.
- 4. In recent months we have been pushing hard to deliver the change necessary to meet our ambitions for transformation. The executive team has been reviewing progress and challenging teams across the Office, especially those where a substantial ramp up in resourcing is required to deliver the scale and pace of change we are seeking. There is more work to do on this to ensure we make the most of the opportunity for change whilst also meeting the requirement to deliver value for money both in our reform and transformation activities and our business as usual.
- 5. Other important developments in recent weeks include the following.
  - i. The best ever response to the ONS excellence awards (129 entries) with a wonderful event held in Titchfield to celebrate the winners, runners up and all who took part. This awards ceremony was followed by the RSS awards evening in London where the winners of the RSS awards in official statistics were recognised.
  - ii. Economic Statistics colleagues are working closely with HM Treasury and Bank of England to ensure we meet their data needs to manage the economy after the referendum. We are also establishing when significant economic data related to the post-referendum period is likely to be published: while there will be some limited data in August and September, economy-wide statistics will only be available in October.
  - iii. Our Better Statistics, Better Decisions event on health statistics has provided a useful platform for improving delivery in this important area.
  - iv. A well attended international Census research conference in Winchester provided an opportunity to showcase what we are doing and to learn from sister organisations around the world as well as UK academics and others. Alongside this we held a Census challenge day where external speakers were invited to challenge us about the future social and technological environment within which we will be delivering the next Census.
  - v. Our 21st GSS methodology conference drew a wide range of papers demonstrating the breadth of innovative work being done. This shows that we

have a good platform from which to innovate as we move to implement the review of methodology led by Andy Garrett.

- vi. To accompany the introduction of the Digital Economy Bill into Parliament we have published a suite of documents setting out our policies and practices on the handling of data.
- vii. At the end of the month 140 individuals will leave the organisation as the ONS severance programme is completed.
- viii. The annual pay business case for ONS has been approved by the Cabinet Office. Following consultation with the Trade Unions we anticipate implementing this in the early autumn.

#### **Future look**

5. In the next few weeks we will be releasing a raft of statistics which we can expect will be closely scrutinised for signals about how the economy and society is responding to the referendum vote and its consequentials.

#### John Pullinger, 8 July 2016

## DG Report for Regulation

#### Purpose

1. This paper provides an update on regulation activity since the last meeting in June.

#### Recommendation

2. Members of the Authority Board are invited to note the activities and proposed actions.

### Discussion

#### Australia and New Zealand

- 3. I missed the last Board meeting because I was in Australia and New Zealand at the invitation of Statistics New Zealand and the Australian Bureau of Statistics. I made several presentations about the approach and structure of the Authority, and there was a good deal of interest in our regulatory and governance model. In return, I learnt a huge amount. Key highlights included:
  - i. Both statistical systems are far more developed in their use of administrative data than the UK, New Zealand particularly so Statistics New Zealand take in and integrate 14 major datasets across Government on a routine basis through its Integrated Data Infrastructure.
  - ii. Both offices are focussed on transformation, and seeking to deliver the sort of strategic and cultural change that the ONS is aspiring to achieve. There is plenty to learn from both environments, including the emphasis on renewal of infrastructure in Australia as well as a focus beyond a traditional output culture; and the strategic emphasis on customers, data stewardship and answering society's questions in New Zealand to accompany the significant improvements in data infrastructure.
  - iii. Measuring the economy featured prominently in both countries, with a focus on the digital economy and the productivity puzzle in Australia, and on using scanner/webscraped data for economic statistics in New Zealand.
- 4. I'd be very happy to expand on any of these points, or to share the short paper I produced for colleagues in ONS, should any member be interested.

#### Blueprint for an independent regulatory office

5. Developing the blueprint has been a major focus over the last month. It is the subject of a separate paper for this Board meeting. I would like to emphasise to the Board that this has been the product of an extensive cross-team effort, and my team have been fully engaged in the creation and iteration of the blueprint.

#### Code of Practice stock take

6. The stock take, the other key area of focus over the last month, is also the subject of a separate paper.

### Core activities

7. Alongside these strategic developments, we have progressed core work. I have attached a more comprehensive summary by key sector for the first time this month. Key points to pick out from this:

- i. Brexit: as the Board knows we were active in commenting on the use of statistics in the referendum campaign. Following the campaign we are considering the lessons learned: whether we made the right kind of interventions in a timely way and whether there is more we might have done. In addition we are following up on a number of issues, most importantly the quality of statistics on benefits received by migrant households. Rather than responding to the specific complaints we have received, we are proposing a more consolidated response highlighting the challenges to HMRC, DWP and ONS in this area and highlighting too the need for continued collaboration.
- ii. Health statistics in England: we held a successful Summit on health statistics on July 8. It was well attended by users, researchers and producers of statistics, and featured keynote presentations from me, John Pullinger, Hugh Pym of the BBC and Juliet Whitworth of the Local Government Association. The Summit coalesced around a series of challenges, but it is clear that, in the absence of single focal point of leadership, we will have to continue to press producers to collaborate, consolidate what they produce and work towards a more coherent set of statistics.
- iii. Income and earnings: I wrote to John Pullinger in June noting (again) the slow progress and asking for an action plan. His reply is at **Annex B**. We generally feel encouraged by this response; it covers more and is more concrete on how things might be delivered than previous responses to the income and earnings review. In particular:
  - a. we are very pleased that ONS has committed dedicated resource by consultants to investigate the options for self-employment income, and committed to publish something in September.
  - b. We like the look of the proposed central hub (through the planned web based Guide to Sources) to bring related statistics and analysis together, in a way that informs users rather than confuses them (given the large number of statistics in this field)

I will write back to John in positive terms.

- iv. Reporting of errors: ONS does a very good job of reporting to us the corrections that are made to published statistical bulletins and datasets. In the year to date, we have been notified of 65 minor corrections. While none of these has been significant enough to warrant an intervention from us in its own right, we think that there would be merit in ONS reviewing the cases for common themes in order to learn wider lessons for the organisation.
- v. School performance tables: we published a response to a long-running set of issues raised on the National Statistics status of and access to school performance tables for England. I am pleased with the way our response highlights gaps in the data provided on pupil attainment, but also clarifies the relevance of the National Statistics brand in the context of statistics that measure performance against targets and standards.

### Challenges

- 8. As last month, the main challenges include:
  - i. *Independent regulatory office:* moving from blueprint to external engagement and implementation.

- ii. *Post referendum:* we are likely to have further important judgements to make, particularly around the analysis published by DWP and HMRC of benefits received by migrant households. And the concerns around the use of statistics in the referendum are part of a broader debate on whether we are seeing a 'post truth' society. We need to participate in these debates, explaining the importance of appropriate use of statistics to democratic debate.
- iii. *Health and social care:* moving beyond the Summit to enabling the collaboration and leadership of change.

### Ed Humpherson, Director General for Regulation, 15 July 2016

### List of Annexes

Annex A	Regulatory Activities June
Annex B	Letter from John Pullinger to Ed Humpherson

## Annex A - Regulatory activities June-July 2016

Economy	Health and social care	Business and energy	Crime and justice				
<ul> <li>CPIH, trade, construction: Continue to work with ONS teams on meeting requirements for National Statistics designation on trade, CPIH and construction statistics</li> <li>National Accounts, Public Sector Finances: reviewing how far ONS has met requirements in recent assessment reports (both are continued National Statistics)</li> </ul>	<ul> <li>Health and Care: Summit on 8 July, focusing on opportunities for significant improvement in coherence and value of health and care statistics</li> <li>Standardised Hospital Mortality Indices (SHMI) and Hospital Aquired Infection about to be confirmed as National Statistics</li> <li>DG met with the new chair of NHS Digital, Noel Gordon</li> </ul>	No significant activity	<ul> <li>Crime recording (England and Wales): Continue to work with ONS on evidence of improved recording of crime by police forces</li> <li>Crime recording (Scotland): working with Scottish Government on redesignation of crime statistics</li> <li>Working with Chris Lewis (Portsmouth University) on international approaches to crime measurement</li> </ul>				
Labour market	Culture, society and government	Education and skills	Agriculture and environment				
Income and earnings: Published letter to John Pullinger requesting action plan; received positive response	• Freedom of Information: reassessment of FOI statistics, proposing re-designation following change in responsibility from MoJ to Cabinet Office	• School performance: published review confiming National Statistics status of DfE's school performance tables, following complaint from Simon Briscoe	Agriculture: Removed National Statistics from Defra's milk price statistic because of misleading inclusion of bonuses to dairy farmers				
Population	Defence	Housing, planning, local services	Transport				
Brexit/Migration: Continued to review No 10 analysis of benefits paid to migrant households in the light of correspondence from Jonathan Portes and Michael O'Connor	No significant activity	<ul> <li>Housing: initiated work with Cambridge University's Centre for Housing Policy Research on coherence and availability of data on housing</li> <li>Homelessness: On 30 June, CLG published consolidated statistics on homelessness for the first time, following assessment report</li> </ul>	Road freight: presented reassessment of DfT's road freight statistics, proposing re-designation following a change in data sources				

## Annex B Letter from John Pullinger to Ed Humpherson

This document has been published on the UK Statistics Authority website.

To see this Document go to:

https://www.statisticsauthority.gov.uk/wp-content/uploads/2016/07/Letter-from-John-Pullinger-to-Ed-Humpherson-080716.pdf

SA(16)26

## Stocktake of the Code of Practice - Emerging Recommendations

This document will be published on the UK Statistics Authority website in due course.

The document will be available at:

https://www.statisticsauthority.gov.uk/monitoring-and-assessment/code-of-practice/

## Talent Management in the UK Statistics Authority and ONS

### Purpose

1. This paper provides information on how talent is currently managed within the UK Statistics Authority, including the ONS, and sets out proposals for the future for the Board's consideration and advice.

#### Recommendations

2. Members of the Authority Board are invited to:

- i. note the way talent is currently managed within the organisation;
- ii. consider the proposals; and
- iii. offer advice on our approach to talent management

#### Background

- 3. At the May Board meeting it was agreed that the July agenda would include an item on talent management, to support the Board in considering its role in promoting capability and talent management.
- 4. This paper sets out how talent is managed in the Authority, and includes a plan for a clear 'offer' to individuals in the SCS, to support them in developing their career. The offer to those at Grade 6 and Grade 7 levels is currently under development, and is expected to be very similar to that for the SCS. We have similar ambitions for managing talent across the wider GSS, and we have recently launched a talent management framework for the GSS. The GSS framework is closely aligned with the plans set out here, although there is added complexity due to the fact that individuals are employed by their department, and so we have less direct influence over their career and development.

#### Discussion

- 5. Talent Management is often defined as the systematic attraction, identification, development, engagement, retention and deployment of those individuals who are of particular value to an organisation, either in view of their 'high potential' for the future or because they are fulfilling business critical roles.
- 6. The value of a tailored, organisation-wide talent management strategy is that it provides a focus for investment in human capital. It can also contribute to other strategic objectives, including:
  - building a high performance workplace;
  - encouraging a learning organisation;
  - adding value to the 'employer of choice' and branding agenda; and
  - contributing to diversity management.
- 7. Some organisations adopt an inclusive approach to talent management creating a 'whole workforce' approach to engagement and talent development. Others develop a more exclusive approach, focussing talent management processes on key or high-potential individuals. The Authority, like many other organisations, uses a blended approach in practice, with attention paid to employees as a talent group as a whole, but with special focus given to those employees who have been identified as having high potential. The current range of Authority talent management activities can be found at Annex A.

- 8. The mission of our talent management strategy is to help people grow and understand not just what they can achieve but what they want to achieve; and to ensure the organisation has a continuous supply of highly productive individuals in the right job, at the right time. We will:
  - plan our talent needs;
  - attract and retain the best talent;
  - use talent management information to identify and develop high potential employees;
  - build a large and diverse pipeline of talented professional people to be our future leaders across the Civil Service; and
  - facilitate the movement of talent to where it can have the most impact within the organisation.
- 9. The Civil Service Refreshed Talent Action Plan 2016 sets out concrete measures to remove barriers to the most talented civil servants succeeding. The vision for this work is to:
  - recruit and retain the very best civil servants, irrespective of their background;
  - develop talent management processes that allow every civil servant to reach their full potential; and
  - create an open, inclusive and fair culture which is driven from the top, and mirrored throughout the corporate talent pool.
- 10. If the actions in the Civil Service plan are effective, it is expected that it will be reflected in the diversity of the corporate talent pool, encompassing the Future Leaders (at Grade 6/7), the Senior Leaders (SCS 1), and the High Potential Development (at Director level) Schemes. The Authority currently has seven individuals on the 2016 intake of the schemes one woman on the SLS, and four men and two women on the FLS.
- 11. One of the most commonly used tools in identifying potential senior leaders is the 'nine-box grid': a matrix measuring performance and potential. This is the standard approach used across the Civil Service. We are working with Civil Service Talent to source the information we would need to benchmark Authority 9-box grid assessments against the wider Civil Service.
- 12. In line with other parts of the Civil Service, the Authority is planning to take a broader and deeper approach to corporate talent management; an overview of our planned approach is set out at Annex B. More information on the details of the 'offer' for SCS individuals is provided at Annex C. The expected roles and responsibilities for the various key stakeholders in this process are provided at Annex D. The outcomes we expect this refreshed approach to deliver, together with key success measures are provided at Annex E.

### Julia Carr and Pam Davies, GSS Professional Support Team, ONS, 14 July 2016

### List of Annexes

- Annex A Current Talent Management activities
- Annex B An overview of our proposed talent offer
- Annex C SCS Talent Offer 2016/17
- Annex D Talent Management roles and responsibilities
- Annex E Talent Management outcomes and key success measures

## **Current Talent Management activities**

Our current Talent Management activities include:

- mapping our talent at G7 and above on the 9 Box Grid to assess the strength of the talent pipeline and to identify any risks;
- analysing our talent data to inform decisions on targeted development and creating a diverse, inclusive talent pipeline;
- identifying critical posts at G6 National Statistician and identifying emergency and longerterm successors for those posts; formulating succession plans to ensure business continuity and inform talent management decisions;
- designing and delivering our own internal Leadership Development programmes for G7 SCS;
- providing advice and guidance across the organisation for succession planning activities;
- agreeing and actioning managed development moves for the SCS;
- proactively managing our Fast Stream community;
- promoting and participating in the Civil Service High Potential Talent Schemes;
- arranging loans and secondments, including participating in the Civil Service High Potential Secondments Scheme;
- designing and delivering bespoke leadership development activities for individual teams / Directorates;
- identifying leadership development opportunities with partners such as the Whitehall and Industry Group; Harvard; the Windsor Leadership Trust; Mind Gym; and Civil Service Learning; and
- providing mentors and Executive Coaches for high potential individuals.

## An overview of our proposed Talent offer

**All** leaders know how to identify talent in an inclusive way; **Everyone** has the opportunity to realise their potential; **High potential individuals** have access to accelerated development and support.

Diverse and inclusive development for all	Leadership and capability	Insight and Expertise	Operational Frameworks
We enable diverse and inclusive development for all	We raise the capability of everyone to manage talent more effectively	We provide talent expertise & insight to enable effective talent management	We provide clear processes and frameworks to build leadership pipelines for SCS roles
<ul> <li>Increasing the diversity and inclusivity of talent schemes and talent pipelines through coaching programmes; mentoring; guidance and support.</li> <li>Promoting the benefits of talent development via targeted communications</li> </ul>	<ul> <li>Building awareness and capability of leaders to role model and embed effective talent management through masterclasses and toolkits.</li> <li>Using new and existing leadership development channels to support and develop our current and future leaders.</li> <li>Raising the profile of talent management and its role in improving business delivery through collaborative showcase events and communications.</li> </ul>	<ul> <li>Using evidence and insight to identify talent issues, risks and challenges.</li> <li>Providing talent information to senior stakeholder teams</li> <li>Providing business areas and professions with Talent expertise and latest talent thinking to identify those generic and specific challenges.</li> <li>Proposing generic and bespoke solutions to influence decisions and actions.</li> </ul>	<ul> <li>Providing / promoting straightforward succession planning and talent assessment tools and toolkits, resulting in consistent , effective talent management.</li> </ul>

## SCS Talent Offer 2016 /17

High Potential	Excellent	Star
<ul> <li>Senior coach / mentor</li> <li>Action Learning Set</li> <li>Senior Leaders Scheme</li> <li>Coach and mentor others</li> <li>Corporate challenge</li> <li>LD events eg CSL; Whitehall &amp; Industry Group</li> <li>Corporate annual SCS LD event</li> </ul>	<ul> <li>Senior coach / mentor</li> <li>Action Learning Set</li> <li>Senior Leaders Scheme</li> <li>Loan / Secondment</li> <li>Coach and mentor others</li> <li>Corporate challenge</li> <li>LD events eg CSL; Whitehall &amp; Industry Group</li> <li>Managed move (critical post)</li> <li>Corporate annual SCS LD event</li> </ul>	<ul> <li>Senior coach / mentor</li> <li>Action Learning Set</li> <li>Loan / Secondment</li> <li>Coach and mentor others</li> <li>Corporate challenge</li> <li>LD events eg CSL; Whitehall &amp; Industry Group</li> <li>Managed move (critical post)</li> <li>Corporate annual SCS LD event</li> </ul>
Early Promise	Good	Strong
<ul> <li>Action Learning Set</li> <li>Shadowing</li> <li>CSL LD events</li> <li>Corporate annual SCS LD event</li> </ul>	<ul> <li>Action Learning Set</li> <li>Contribute to corporate initiative eg Diversity champion</li> <li>Loan / secondment</li> <li>Shadowing</li> <li>LD events eg CSL; Whitehall &amp; Industry Group</li> <li>Corporate annual SCS LD event</li> </ul>	<ul> <li>Senior coach / mentor</li> <li>Action Learning Set</li> <li>Senior Leaders Scheme</li> <li>Loan / secondment</li> <li>Corporate challenge</li> <li>LD events eg CSL; Whitehall &amp; Industry Group</li> <li>Corporate annual SCS LD event</li> </ul>
Inconsistent	Effective	Expert
<ul> <li>Focused, timebound development plan in place</li> <li>Action Learning Set</li> <li>Consider a mentor from the top row</li> <li>Focused internal opportunities to aid development</li> <li>Corporate annual SCS LD event</li> </ul>	<ul> <li>Coaching by strong performing peers / line manager</li> <li>Action Learning Set</li> <li>Loan / Secondment</li> <li>Shadowing</li> <li>CSL LD events</li> <li>Corporate annual SCS LD event</li> </ul>	<ul> <li>Develop coaching skills by coaching successors / colleagues</li> <li>Action Learning Set</li> <li>Lateral move</li> <li>Team / Directorate challenge</li> <li>Corporate annual SCS LD event</li> </ul>

## Talent Management - roles and responsibilities

Annex D

National Statistician, Directors General and Directors	<ul> <li>Provide visible support for talent management.</li> <li>Ensure that talent management practices are delivered effectively and transparently in their area of the organisation.</li> </ul>
Line Managers	<ul> <li>Ensure appropriate talent and succession practices are owned and embedded at a local level within the organisation.</li> <li>Understand the potential and career aspirations of individuals in their team through focused Career Conversations.</li> <li>Provide individuals with honest feedback on their performance and potential, having courageous conversations where necessary.</li> <li>Play an active role in identifying and developing those with high potential, providing developmental and challenging opportunities.</li> <li>Act as coaches and mentors to high potential employees.</li> <li>Commit to supporting managed moves and releasing high potential individuals to gain breadth of experience.</li> <li>Identify activities for high potential individuals which will develop their longer-term career aims, and agree to release them to gain breadth of experience.</li> </ul>
The individual	<ul> <li>Take charge of their own development by setting stretching personal goals and objectives.</li> <li>Actively seek out feedback and act on it.</li> <li>Identify and apply for other roles as part of an agreed career development path.</li> <li>Understand their own needs, strengths and talents to maximise learning opportunities.</li> <li>Proactively seek opportunities to make a corporate contribution.</li> <li>Move roles and take on projects in order to meet business needs where appropriate.</li> <li>Share experience and knowledge with others and act as a role model.</li> </ul>
Heads of Profession	<ul> <li>Identify career paths and development opportunities which are specifically aimed at people in their profession.</li> </ul>
The SCS Leadership Development and Talent Team (within GSS Professional Support)	<ul> <li>Lead the organisations Talent Management strategy.</li> <li>Provide support and advice on Talent Management processes and help facilitate discussions.</li> <li>Identify the talent offer for staff.</li> <li>Source relevant development opportunities.</li> <li>Help facilitate managed / developmental moves and provide advice.</li> <li>Support succession planning and development planning.</li> </ul>

## Talent Management – outcomes and key success measures

## Our offer will achieve:

- a diverse pipeline that reflects the diversity of the organisation and ultimately results in a more diverse SCS;
- a pipeline of people with the right capabilities required by the organisation;
- a pipeline which produces appointable organisational candidates;
- an increasing percentage of SCS talent deployed into critical roles (by profession) that provides evidence of the use of critical roles to stretch and develop our talent;
- the production of data, evidence and trends on talent and succession by profession to focus corporate talent discussion and action;
- leaders who are more capable of identifying and developing talented people and understand the importance of fair and inclusive succession planning;
- proactively managed talent; we will know our future talent needs and have strategies in place to deliver them;
- centrally held talent data which will enable corporate/cross-government career management and more effective succession planning; and
- managed moves both inside the organisation and via interchanges that are used for business purposes to make the most of individuals' talents and to meet the development needs of high potential staff.

## Proposed success measures:

- 'Bench strength': the number of employees ready for promotion at each grade and the number of successors who fill roles as defined by succession plans.
- Staff applying for and completing talent programmes to be representative of our organisational workforce diversity (in gender, ethnicity and disability). Data will be kept on who applies and completes programmes and 'near misses' at milestone points (selection/completion).
- Maintaining or increasing (if appropriate) the number of applicants on the Civil Service High Potential Development Schemes.
- Maintaining or increasing the number of high potential individuals on loans or secondments.
- Staff feedback demonstrating that individuals:
  - feel adequately supported in the talent processes (both for their own development and when implementing the processes with their staff);
  - $\circ$  understand the personal and business benefits of the talent agenda; and
  - o are aware of the talent offer.

## SA(16)28

## ONS Income Generation Recommendations – Seizing the Opportunity: £40 million to 2020

#### Purpose

1. This paper makes proposals for how the ONS can initiate, develop and secure dedicated capability to both generate new income but also proactively tackle relevant and emerging commercial opportunities relating to data capability.

#### Recommendations

- 2. Members of the Authority Board are invited to provide their input and support to three core recommendations:
  - i. agree the proposed income strategy, scope, goals and next steps;
  - ii. adapt current income generation committee to reflect proposed scope and support, recruiting a permanent capability at Senior Civil Service (SCS) level to take forward the approach; and
  - iii. discuss and agree where organisationally this role should reside and how best to budget for the capability and integration with wider ONS transformation activity.

#### Background

- 3. ONS has periodically reviewed and assessed its income generation strategy and opportunities in the past. External and internal recommendations were made in July and in November 2015 by Commercial Services Branch.
- 4. More recently, ONS has also assessed and compared other National Statistics Institutes' (NSIs) income generation approaches and capabilities.
- 5. ONS has conducted interviews with UK industry users and key stakeholders of ONS outputs. Collectively, this work has qualified an existing market and audience for value added chargeable ONS services.

### Discussion

- 6. Between 2012-2016 ONS consistently generated £18 million per annum of income independent of government funding. Year on year survey related work accounts for almost £11 million of this. In the last two years there has been an increase in income from new sources: examples include Virtual Microdata Laboratory activity (£1.4 million in 2014-16) and the Troubled Families work (£370 thousand in 2015-16). The recommendation is to take independent income to £40 million by 2020 a 30 per cent year on year growth target from 2017-2020 and a gross number that represents 25 per cent of overall capped ONS income. This is considered a modest target as £85 million (identified in Commercial Services review November 2015) of potential target public sector survey business exists between 2017-20 and with wider momentum around data sharing the demand for data services will increase.
- ONS does generate income from other sources including property and major or transformation led programmes (e.g. Census, Fusion related work and Data Campus). Mission aligned income is intended to serve as a guiding principle to focus on growing commercial services aligned to ONS core capability and to a more commercial approach to managing public money<sup>1</sup>.

<sup>&</sup>lt;sup>1</sup> Managing Public Money: Clause 6.1.10 Commercial services: high risk businesses can recover full costs including a real rate of return in line with the rates achieved by comparable businesses facing a similar level of risk.

https://www.gov.uk/government/uploads/system/uploads/attachment\_data/file/454191/Managing\_Public\_Money\_AA\_v2\_-jan15.pdf

- 8. Income generation is not the best name to describe the capability ONS needs to tackle the range of income generation opportunities in its operating model; 'Business Development' is more suited.
- 9. Other NSIs generate significant proportions of their income independently. Perhaps most comparable is Statistics Netherlands: €21 million of their €154 million annual budget is generated from third party contracts (namely Blaise, computer assisted interviewing software). Other interesting examples include Sweden and Denmark where clear data services charging models have been implemented.
- 10. Much of the proposed opportunity fits well with the Data Collection Directorate (e.g. eQ) but significant support from Business Services and Development and other Directorates will be essential to ensure success in delivery and governance. Economics teams are also increasingly looking at commercial data sources and could be supported by this capability. Commercial Services Branch support needs alignment as bringing all income generated into a consolidated view would ideally be led by this team.
- 11. Finalising a four-year budget and resource model working with Commercial Services, Data Collection and with support from Finance is the essential next step.

#### Conclusion

12. The opportunity for ONS to generate an increasing proportion of its own income is real and can support the organisation's on-going efforts to transform capability and work more proactively. There are some clearly defined opportunities; others will need iteration. All require cross directorate support. The time to act is now, with a view to demonstrating year on year progress ahead of the 2020 Spending Review. The timeline for making recommendations was brought forward as it became clear early that without dedicated resources this opportunity would be delayed.

#### Stuart Coleman, Coleman and Pearse, 14 July 2016

SA(16)29

## ONS Data Campus Development and Scaling Funding Strategies

#### Purpose

1. This paper outlines the development of the ONS Data Science Campus (DSC) to date and makes proposals for the identification of a funding strategy to allow the DSC to scale beyond its initial two-year funding period.

#### Recommendations

- 2. The Board is invited to note the progress to date of the development of the DSC and to provide direction on:
  - i. the proposed areas of focus for data science research; and
  - ii. the appropriate strategy for securing additional external funding sources to enable it to scale beyond its current two year time-frame.

#### Background

- 3. The final Bean review report was published in March 2016, and key recommendations included that ONS make the most of existing and new data sources and the technology for dealing with them and become better at understanding and interrogating data.
- 4. The creation of a Data Science Campus in Newport addresses these recommendations through the establishment of an internationally renowned centre for Data Science and Data Engineering, bringing together Analysts, Data Scientists and Technologists from across the UK and the wider international community. Launching in September 2016 as a Directorate within ONS under the Deputy National Statistician for Data Capability, Heather Savory, the DSC will act as a hub and incubator for Data Science, working collaboratively with the broader community and building impactful, co-creative and high value partnerships across the data landscape.
- 5. Delivery of these objectives is enabled through two parallel and interconnected strands of activity, Capability and Research.
  - i. The Capability strand focuses on developing the next generation of analysts, equipped with the skills to meet the future needs of ONS, government and UK society as a whole, through a series of training programmes launching in September 2016. Ranging from Level 4 Apprenticeships in Data Science and Analytics through to MSc programmes in Data Science and Engineering, these courses are targeted at ONS staff and other government employees through the Government Statistical Service (GSS) framework.
  - ii. The Research strand of Campus activity delivers five themed research programmes focusing on the Modern Economy, the UK in a Global Context, Society, the Urban Future and Sustainability. This work is short and sharp, inquiry driven and intended to deliver an answer or technique which can then be applied to answer key questions in future. This strand is delivered though multi-disciplinary teams blending professional expertise with a mix of internally and externally recruited staff, and collaboration with external Academic, Industry and Government partners. The first research outcomes are anticipated in Q1 2017.

- 6. Preparations for launch began in May 2016. To date an initial six-month location for DSC in Newport ONS has been selected, recruitment for a Managing Director is underway and two senior staff are in place with a further four staff recruited. A vendor for the Apprenticeship in Data Analytics has been selected and the programme will launch in September 2016. A tender for the MSc in Data Science and Engineering will be issued in October 2016 for launch in September 2017, in the meantime funding for ONS and GSS staff to undertake external Master's courses has been made available from September 2016. Negotiations on research collaborations are currently in progress with a range of Academia, Industry and Government partners (outlined in Annex C) with the first anticipated to begin in September 2016.
- 7. The 2015 Spending Review Settlement has provided £1.736 million in 2016/17 and £4.222 million in 2017/18, as part of a range of projects designed to meet the recommendations of the Bean Review. This will allow DSC to scale to 57 staff by March 2017, of which 48 are directly involved in research.

#### Discussion

- 8. Over the next five years DSC has the potential to scale to over 100 high value positions, transforming the understanding and interrogation of data within ONS and government as a whole while having a significant and positive economic impact on the South Wales region through the creation of an internationally renowned centre for Data Science and Data Engineering. Resources for growth at this scale and suitable facilities to house a global centre of excellence are not anticipated to be made available through existing funding mechanisms alone.
- Limited exploration of alternative and complimentary sources of funding for the growth of DSC beyond 2017/2018 has been undertaken. The report on ONS Income Generation Recommendations [Paper SA(16)27] explored the offering of "advisory/consultancy services" both nationally and internationally, but focus was on enabling clients with "getting the most from ONS data, and methodology".
- 10. Two existing government models are useful to consider; the Met Office Centre of Excellence charges partners £50,000 a year for collocation space, access to Met Office Informatics Lab, and the ability to undertake joint projects with the Met Office. HSE Health and Safety Lab provides a data science team on a consultancy basis to other government departments for specific project work.
- 11. Partnering at an early stage with a high profile Name Recognition Sponsor is a strategy adopted by many broadly comparable initiatives. In addition to receiving £5 million from each university partner in direct financial support or services, The Turing Institute has also partnered with Intel at a strategic level as part of its launch. Similarly Google invested €1 million in The Science Gallery International to build a network of public engagement spaces in partner universities. Given the nature of the research conducted at DSC, careful consideration must be given to the suitability of potential Name Recognition Sponsors and that any research is conducted in the public good, in line with legislation.
- 12. Given the unique nature of DSC and its impact on the region with scope for up to 100 jobs over the next five years, future plans could offer the potential for philanthropic donations. This would require amendments to ONS Terms of Reference.

13. Commercial opportunities conducted in the public good with open research outputs can exist in parallel with non-commercial experimental research, which the Bean Review highlighted as essential to transform the provision of statistics within ONS. Identifying options for funding beyond the current two-year period, working with Commercial Services and GSS and with support from Finance, is the next step.

### Conclusion

14. The opportunity for DSC to make a significant and transformational impact within ONS and government as a whole through active learning and experimentation is real, but will require additional resources beyond existing funding mechanisms alone to achieve its full potential. A strategic business development plan should be developed but will require the input and direction of the DCS Managing Director, currently being recruited. In the interim where relevant income opportunities exist that complement existing ONS policies they should be pursued as a method of measuring the longer term potential of specific income strategies.

#### David Johnson and Peter Fullerton, Data Science Campus, 14 July 2016

#### **List of Annexes**

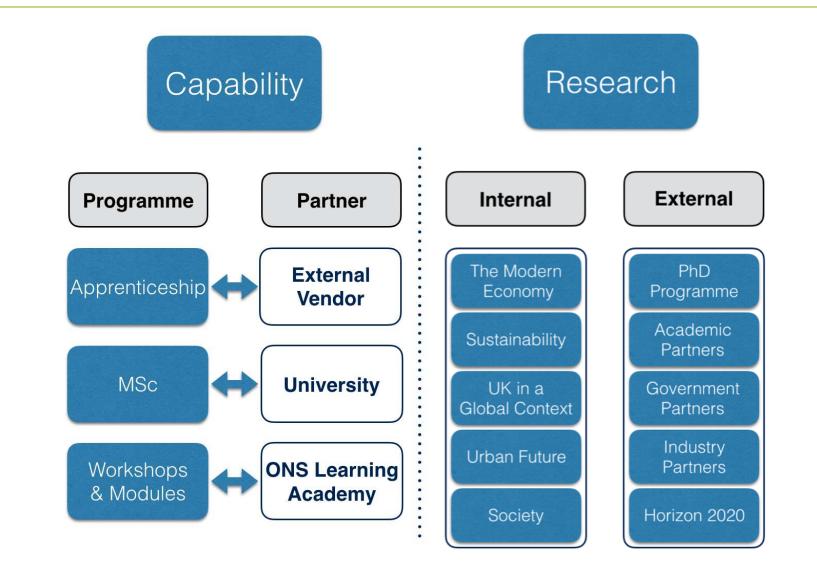
- Annex A Data Campus Structure
- Annex B Income sources
- Annex C Partnerships



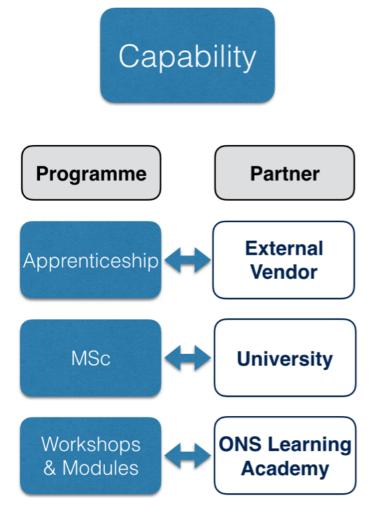
# **Annex A - Data Campus Structure**

David Johnson, Peter Fullerton

## **Data Campus Activities**



# **Increasing capability in Data Science**



## Preparing for the future...

The Campus will develop the next generation of data analysts, equipped with the skills to meet the future needs of ONS, government and UK society as a whole.

## ...through training today

Tailored apprenticeship and post graduate programmes for ONS and GSS developed by **The Campus** in conjunction with external academic and industry partners.

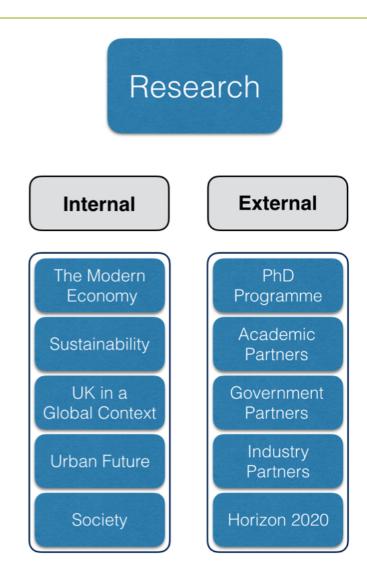
## A Research Hub

## Cutting edge research...

**The Campus** will be a world-class centre for data science and data engineering, bringing together Analysts, Data Scientists and Technologists.

## ...tools for the new Economy

Research and development teams will build next generation tools and technologies that exploit the growth and availability of innovative data sources, providing rich informed measurement and analyses on the modern economy and wider society.



## **Research Themes**

Theme	Description
The Modern Economy	To cope with the pace of change in the economy, ONS will develop data science techniques to provide more 'real-time' economic statistics so that emerging issues and trends are spotted more quickly and understood in greater detail; using Data Science to understand and measure this activity and its influences will be essential to a modern system of national statistics.
Sustainability	The UK has been instrumental in agreeing a wide range of indicators of sustainable development internationally that aim to end poverty, fight inequality and injustice, and tackle climate change by 2030. The UK is committed to monitoring progress. This theme will explore and develop ways of using Data Science to measure performance against these indicators.
Society	How do we use Data Science to understand the characteristics of populations and their behaviour in the economy and in society within the bounds of privacy and confidentiality demanded by the current and future generations?
The Urban Future	What are the measurable economic and social characteristics of the city regions and urban spaces in the years ahead? How do we use Data Science and engineering to measure these and how do we assess the success of city and urban activity in contributing to economic growth and social coherence?
The UK in a Global Context	The UK is highly integrated internationally and accordingly measuring flows, whether of capital, cash, materials, services, energy or people, is essential to an effective set of indicators of success. This stream will assess the role of Data Science in this work.

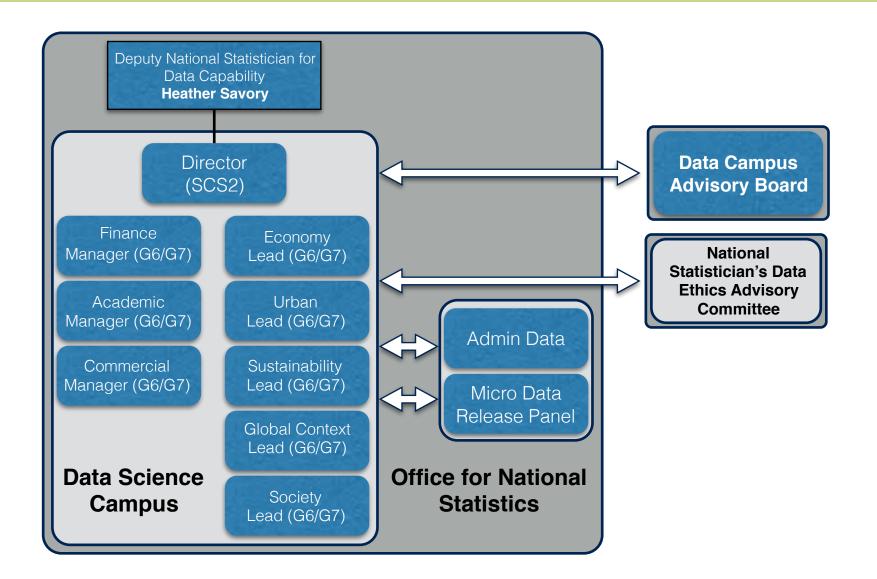
## **Research Output**

	Į.,	2016/17											2017/18											
	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
Economy						Project 1						Project 3				Project 9				Pro	j 17			
Sustainability					8 - S	Project 2					Proje	ect 5			i i		Proje	ct 12			20			
Society									0		R.		Proj	ect 4				12	Proje	ct 10			Pro	j 18
Urban						Project 6					Project 14													
Global	1												Project 7			Project 15								
Society 2							Project 8					Project 16					0							
Global 2	6											Î						16	Proje	ct 11			Pro	j 19
Economy 2																Project 13			ļ	21				

DSC Research Project Timelines, 2016-2018

Partner	Outline	Data Sources
Finance Wales	Track leading indicators of emerging sectors and relative flows and sizes combined with real-time open data from websites and acquired commercial data from Financial Technology partners to predict optimal investment opportunities in Small-to-Medium Enterprises (SMEs) by Regional Governments to maximise regeneration in disadvantaged areas.	ONS: Inter-Departmental Business Register, Business surveys (e.g. Business Register and Employment Survey, Annual Survey of Hours and Earnings, PRODCOM & SERVCOM), Labour Force Survey and Annual Population Survey. Partner: Historic company investment data (size of investment, direct jobs created, return etc), commercial near/real time sector data.
Higher Education Statistics Agency	Develop effective measurements of inequality in longevity, tracking life expectancy by educational attainment and other indicators. This research will connect with ongoing OECD projects and contribute to effective measurement of a range of UK Sustainable Development Goals.	ONS: Births & Deaths, Longitudinal Study, Labour Force Survey and Annual Population Survey, Wealth & Assets Survey, Living Costs & Food Survey. Partner: Higher level education attainment rates, post-graduation salary surveys.

## **Structure and Governance**

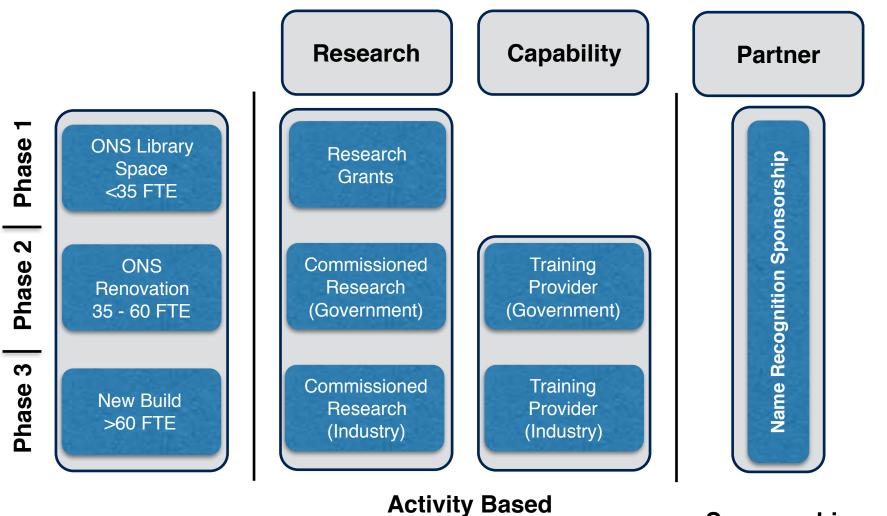




# **Annex B - Business Development**

David Johnson, Peter Fullerton

# **Business Development Opportunities**



Income

**Sponsorship** 

# **Opportunities in Research**

## Research Grants

- In isolation or collaboration the Data Science Campus (DSC) can apply for publicly available research grants
- UK and International funding available
- Commissioned Research
  - DSC has been approached by a number of public sector bodies seeking to utilise ONS expertise and data
  - This service can be charged as a commercial activity
- Commissioned Research for Industry
  - Research must be conducted for the public good in line with legislation
  - Undertaking more substantial work could require a change in the status of DSC to facilitate

# **Opportunities in Capability**

- A Broad Mandate
  - The Bean Review tasked ONS with up-skilling the wider UK Government in Data Science
- Setting the Standard
  - Working through the Government Statistics Service (GSS) framework the opportunity exists to make DCS Capability programmes the standard in Data Science training across government
- Skills and Knowledge Hub
  - Once a standard programme has been established that meets the needs of government, programme can be extended to commercial and industry clients onsite at DSC

# **Opportunities with Partnerships**

- A Name Recognition Sponsor (NRS) can be identified at an early stage within DSC development
- Benefits
  - Identification with DSC at an early stage
  - Access to DSC research teams as collaboration or commissioned research
  - Contribute to the development of Data Science standards in training and education across the UK
- Challenges
  - Suitability of potential NRS limited by sensitivities around nature of research, data managed by ONS and public perception of 'Big Data' collaborations between government and industry



# **Annex C - Partnerships**

David Johnson, Peter Fullerton

# **In-Progress Collaborations**

Sector	Partners					
Government	Cabinet Office, Dept of Culture, Media and Sport (DCMS), Higher Education Statistics Agency, Finance Wales, Government Digital Service (DGS), Government Statistical Service, Met Office, Welsh Government					
Academia	Bristol University, Brunel University, Cardiff University, Lancaster University, University of Southampton					
Industry	IPSOS-Mori, Sainsbury's, SGN, Vodafone					
NGO	Nesta, The Alan Turing Institute, Alacrity					

### Address and Business Registers - progress

#### Purpose

1. This paper provides the Authority Board with an overview of the work currently being carried out within ONS on developing registers or indexes for Addresses and Businesses. A brief demonstration of these systems will be provided at the meeting.

#### Recommendations

2. Members of the Authority Board are invited to note progress and provide any views on priorities for the work.

#### Background

- 3. A register is an authoritative list of information you can trust, which is kept up to date and has a custodian. Many registers are kept by government either because the law instructs it to, or because there is an operational or statistical need to.
- 4. ONS are currently taking the lead across government on developing alpha versions of systems to allow the matching and referencing of addresses and to develop a central index of businesses. Both developments are designed to meet ONS needs for the 2021 Census and statistics, but with one eye on wider government and national requirements.
- 5. The address register work is building a high quality address lookup and matching service for use in ONS and potentially across government. This work has the support of Government Digital Service (GDS) who see ONS as the government lead on addressing.
- 6. The business index work builds upon previous joint discovery work with Business Innovation and Skills (BIS), Her Majesty's Revenue and Customs (HMRC), Companies House and ONS and aims to provide a single 'index' that ties together information about all legal entities in the UK.
- 7. Longer term both developments have potential to play a key role in national digital infrastructure.

#### Discussion

#### Address Index

- 8. A high quality address register lies right at the centre of the approach being taken for the 2021 Census and, increasingly, for the production of statistics across ONS. The growing use of administrative data to supplement ONS statistics makes address lists and address matching all the more important. ONS is building on the existing National Address Gazetteer (a joint venture by Local Government and Ordnance Survey) to build a list suitable for census, to run other ONS surveys in future and to help link together administrative data.
- ONS has established expertise in matching addresses and, following discussions with GDS, has been developing an address look-up and matching service for use in ONS – and potentially across government.

### Address Index Alpha

10. In order to support this work ONS has developed an alpha version of a system to run a series of address search and match functions. The service, based upon the National Address Gazetteer (AddressBase Premium) allows:

- i. Searching and verification of individual addresses returning the UPRN which is the Unique Property Reference Number, a highly persistent unique national identifier for addresses maintained by Ordnance Survey and Local Government.
- ii. Batch matching of addresses returning the UPRN for each supplied record.
- iii. Loading of attributes for example, information known about each property.
- iv. Bulk extract and download of addresses to specified rules; enabling construction of survey frames.
- v. A set of tools to enable maintenance and development of the index and clerical resolution of any mismatches.
- 11. The long term vision for this work is:
  - i. Use of this service across all ONS survey and data collection business areas for internal and citizen facing services replacement of addresses by UPRN across all ONS data.
  - ii. Use by other government departments for their internal and citizen facing services via an Application Programme Interface (API) replacement of addresses by UPRN on all government address data.
  - iii. Use directly by citizens as part of GDS's vision for a set of government registers. This will follow on from work between HMT/BIS/GDS, announced in the budget, to resolve the IP issues hampering an open address register.
  - iv. Wide use of the common service will have the *de facto* effect of pulling together all address reference data. Increased usage and feedback loop will drive the removal of error from the national sources.

A working alpha system is now available within ONS and will be demonstrated.

#### Business Index

- 12. In 2015 a discovery project led by BIS, and including ONS, HMRC and Companies House identified the user need for a definitive list of the UK business population. A range of policy and analytical requirements were identified including the considerable amount of duplication of effort in trying to engage with the business population, or evaluate policy initiatives.
- 13. The existing ONS Inter-departmental Business Register (IDBR) is based on VAT, PAYE and Company registration which does not include very small businesses. Additionally, it can only be used for statistical purposes, so does not fully meet wider requirements. To completely identify the business population Self Assessment and Corporation Tax records will be required.
- 14. Following completion of the discovery phase by BIS, ONS took the lead of the project and an Alpha Business Index was delivered between in June 2016. During this period a cross government Steering Group was established to help determine the Business Index design.

### **Business Index Alpha**

- 15. At the end of Alpha we successfully delivered a working prototype of the Business Index based on data sources currently available to the ONS.
- 16. We have used a blended approach to deliver Alpha working in close collaboration with Kainos who provide the external software development expertise and ONS infrastructure team who are building the cloud platforms (Cloudera).
- 17. Alpha delivered: March 2016 June 2016:

- i. A working system built using new Cloudera technology.
- ii. A de-duplication process that brings in multiple administrative data sources and matches them to create a unique view of each business.
- iii. A query service.
- iv. A matching service, so that users can supply a list of businesses and match them to the index to append local index variables such as industrial classification, employment or turnover.
- v. Created a Unique Business Identifier (UBI).

### Next steps : Registers Programme Beta Stage August 2016 – March 2017 (estimate)

- 18. The Beta phase of the projects will deliver the products into a live environment and build a sustainable operating model to incrementally improve the technologies driven by our user requirements.
- 19. The business goals for the future Address Index Beta are to provide the following.
  - i. A fully functional operating system.
  - ii. An Application Programme Interface (API) which will allow the index to be called by other services and used by other government departments in a safe and secure environment.
  - iii. Testing of service by a range of ONS business areas and at least one other government department.
  - iv. Further development of the matching service.
  - v. A capable team within ONS to deliver, support and maintain the index.
- 20. The challenges for the Address Index are:
  - i. In the short term, close stakeholder engagement will be required with other departments to ensure that the service developed meets their needs (as well as ONS's).
  - ii. Longer term the biggest issue around addressing is clearing a number of blockers around Intellectual Property of the source data. These are not important for beta or our use because ONS and other government users are currently licensed for use of all data required.
- 21. The business goals for the Business Index Beta are to provide the following.
  - i. A fully functional operating system.
  - ii. An Application Programme Interface (API) which will allow the index to interact with other government departments in a safe and secure environment.
  - iii. Import additional data sources into the index from other government departments (subject to legislation/agreement with partners).
  - iv. Further develop the de-duplication service including quality assurance processes to minimise risk of omission or duplication.
  - v. A capable team within ONS to deliver, support and maintain the index.
- 22. The Business Index has a key dependency on the proposed Data Sharing legislation which will allow us access to other data sources. For example Self-Assessment Data which will provide ONS with full coverage of the smallest business. The legal framework will also need to address onward data sharing.

## Alistair Calder, Address Register Methodology, Andrew Allen, Business Index, Barry Jeffreys, Digital Services, 12 July 2016

JA, CB, JH			29-Nov (TCH)	16-Dec	27-Jan	2-Mar	28-Apr
JA, CD, JH	JA, DH	DL				AS	
		Mid Year Report			Quarterly report	Proposed Budget	
IREO blueprint							
Code Stocktake							
Data Campus	Methodology Review	Economic Statistics Centre of Excellence	Population and public policy statistics	Census	Economic statistics		
Registers							
+							
Talent management	Strategic planning workshop			ADRN mid term review			
Income generation	Branding						
		Directorate planning - Economic statistics	Directorate planning - Pop and Public Policy	Directorate planning - Data Capability	Business Plan	Business Plan	
	Data and digital transformation	Economic high level stakeholders	Migration and population change	Earnings, savings and pensions			
London							Self Review
	Code Stocktake Code Stocktake Code Stocktake Code Stocktake Code Stocktake	Code Stocktake       Methodology         Data Campus       Methodology         Data Campus       Methodology         Registers       Methodology         Registers       Image Strategic planning workshop         Income generation       Branding         Income generation       Data and digital transformation         Income generation       Image Strategic planning workshop         Income generation       Image S	Image: second	Image: second state second s	Image: second	Image: second	Image: section of the section of th