UK STATISTICS AUTHORITY

Minutes

Thursday 30 November 2017
Boardroom, Newport

Present
UK Statistics Authority
Sir David Norgrove (Chair)
Mr Jonathan Athow
Ms Sian Baldwin
Mr Iain Bell
Dame Colette Bowe
Professor Jonathan Haskel
Mr Ed Humpherson
Dr David Levy
Ms Nora Nanayakkara
Mr John Pullinger
Ms Heather Savory

Also in attendance
Mr Pete Benton (for item 8)
Mr Robert Bumpstead
Mr Joe Cuddeford
Mr Hugh Stickland (for item 8)
Mr Andy Wall (for item 10)

Apologies
Professor Sir Adrian Smith (Deputy Chair)
Dame Moira Gibb
Professor David Hand

1. Apologies

1.1 Apologies were received from Dame Moira Gibb, Professor David Hand and Professor Sir Adrian Smith.

2. Declarations of interest

2.1 There were no new declarations of interest.

3. Minutes and matters arising from previous meetings

3.1 The minutes of the previous meeting held on 24 October 2017 were agreed.

4. Report from the Authority Chair

4.1 The Chair reported on his recent activities.

4.2 The Economic Experts Advisory Group had met on 1 November. At this meeting, Mr Athow had provided an update on economic statistics and attendees shared their views.

4.3 The Chair, National Statistician and Director General for Regulation had appeared before the Public Administration and Constitutional Affairs Committee to provide evidence on the work of the UK Statistics Authority.

4.4 The meeting heard that a new Director of Communications and Policy had been appointed. It was suggested that, in the context of recent misunderstandings of official statistics, there was an important role for the communications director to think about a programme of educating the public about statistics. There were a number of organisations who could be partners in this space, and consideration should be given to choosing the correct channels, e.g. YouTube. Being on the front foot in this regard could result in less need for correcting misuse.

5. Report from the Chair of the Regulation Committee

5.1 Sir David reported on the recent Regulation Committee meeting. The meeting had considered the scale of the Office for Statistics Regulation's ambition to promote voluntary compliance with the Code among organisations which were not within the current scope of the Code. There might be a connection with new business models and commercial partnerships. Further consideration of this question could take place at the January Board meeting.

6. Report from the Chair of the Audit and Risk Assurance Committee

6.1 Dame Colette reported on her final meeting as Chair of the Audit and Risk Assurance Committee. The meeting had welcomed Nick Bateson as the new Finance Director. The meeting had also heard from Mr Andy Wall, the new Head of Security, and a workshop on the security risks was being arranged for the new year.

7. Report from the Chief Executive [SA(17)47]

7.1 Mr Pullinger provided an overview of activity and issues for November. The GSS Conference had taken place on 22 to 23 November with the theme "Pioneers: on the forefront of statistics and data science".

7.2 Overall, results for the 2017 People Survey had shown a staff engagement score of 62 per cent, up 2 percentage points on last year. The survey highlighted areas of strength but there were also areas where there was still work to do, for example on the visibility of the Senior Civil Service and on bullying and harassment.

7.3 Mr Bell provided an update on the delivery confidence for the Data Collection Transformation Programme which had moved downwards since the previous meeting. It was anticipated that this was temporary and would not result in a sequential delay to the overall programme.

8. Population and Public Policy [SA(17)51]

8.1 Mr Bell provided an overview of plans and developments for Population and Public Policy (PPP). Key aspects of the vision included:

i. population and migration statistics produced on the basis of administrative data;
ii. work to ensure Census, business and social surveys were multimode, timely and made it easy for respondents to provide information;
iii. better statistics delivered across the Government Statistical Service; and
iv. a coherent narrative filling in key gaps, starting with priority areas such as migration, health and social care, housing and inequalities.

8.2 The following comments were made in discussion.

i. A number of contracts would be let for aspects of the work outlined. It would be important to ensure there were strategies in place so that these contracts fitted together well to support the overall vision.
ii. Improvement to communications capability was of central importance. Part of this could be about encouraging staff to be confident to 'write the headline they want to see to reflect the story accurately' to help encourage balanced and informative reporting.
iii. The Board queried how the 'centres for excellence' would work in practice and under what circumstances this approach would be taken to an issue.
iv. The Board queried what topics were not being pursued due to other priorities, and how often users approached ONS for data which was not yet available.

8.3 Mr Stickland presented some examples of recent work across PPP which demonstrated how ONS outputs were shaping policy decisions and broadening impact with the public. The Board welcomed the examples shown and suggested that consideration be given to ways to capture data about the utility of ONS products.

9. Data Capability [SA(17)48]

9.1 Ms Savory introduced a note which provided an update on Data Capability activities over the past year and presented plans for digital, data, security and people transformation activities. The overall aim of Data Capability was to support change across the statistical system to embrace the opportunities of the data revolution, aligning with the objectives set out in the Better Statistics, Better Decisions strategy.

9.2 The meeting considered the breadth of work described in the paper, and how this related to the deliverables which Mr Bell and Mr Athow had set out for their respective areas. It was understood that the next stage of the business planning process would be for the three Directorates General to bring their thinking together into a single plan with quarterly milestones, resources (financial and people) and risks. The following comments were made within that context.

i. The combined plan needed to give the Board a complete line of sight. This meant showing a connection between the overall vision, then plan to get there, the steps along the way and how progress would be reported. It was important that this plan, supported by management information, allowed the Board to see quickly if areas were moving off course.
ii. Non-executive directors could help develop this plan. In particular, non-executive directors could help define what milestones and outcome based metrics would work best from a Board perspective. It was suggested that five to ten key outcome based measures might be ideal, and while the Board might not discuss them every month the indicators and their guide paths would be informative.
iii. A key outcome to track was the extent to which official statistics were informing decisions. It was worth investing time in getting a good measure. The five dimensions of the Better Statistics, Better Decisions strategy were a good framework.

iv. While the pace of progress had been extraordinary, it was important to keep a check on the scope of plans and the scale of ambition. Expanding the product and the market at the same time had risks.

10. Security [SA(17)52]

10.1 Mr Wall provided a progress update on security across the organisation.

10.2 It was agreed that keeping data secure was vital to the work of the statistical system. The proposed security changes should be implemented at pace. It was emphasised that organisational security independence for ONS from central government was important for ONS to succeed in its mission.

10.3 The Board expressed its full support to Mr Wall. A more detailed workshop with Audit Committee members was being arranged.

13. Any other business

13.1 The items from the Director General for Regulation were deferred.

10.4 There was no other business. The Authority Board would meet next on Thursday 25 January 2018 at 9:15 in London.

UK STATISTICS AUTHORITY

Agenda

30 November 2017

Newport

10:30 to 16:00

Chair: **Sir David Norgrove**
Apologies: **Dame Moira Gibb and Professor David Hand**

10:30 – 11:00: Non-Executive's Session

1 11:00-11:05 5 mins	Minutes and matters arising from previous meetings • Declarations of interest	Meeting of 24 October 2017
2 11:05-11:20 15 mins	Report from the Authority Chair	Oral report Sir David Norgrove
3 11:20-11:30 10 mins	Reports from Committee Chairs • Regulation Committee • Audit and Risk Assurance Committee	Oral reports Professor Sir Adrian Smith Dame Colette Bowe
4 11:30-12:00 30 mins	Report from the Chief Executive	SA(17)47 Mr John Pullinger
5 12:00-12:45 45 mins	Population and Public Policy	SA(17)51 Mr Iain Bell

12:45 – 13:45 - Working lunch in the Data Science Campus Innovation Centre: Productivity discussion with Phil Wales and a tour of the Data Science Campus

6 13:45-13:50 5 mins	Report from the Director General for Regulation	SA(17)49 Mr Ed Humpherson
7 13:50-14:15 25 mins	Code of Practice	SA(17)50 Mr Ed Humpherson
8 14:15-15:00 45 mins	Data Capability	SA(17)48 Ms Heather Savory
9 15:00-15:15 15 mins	Security Review	SA(17)52 Mr Andy Wall
10	Any other business	

Next meeting: 25 January 2018, London, 09:15 to 14:00

UK STATISTICS AUTHORITY

SA(17)47

Chief Executive's Report, November 2017

Purpose

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

Summary

2. This month has provided plenty of opportunity for us to reflect on progress made so far and challenges to come over the next period of time. We published Better Statistics, Better Decisions three years on, and set out the milestones we have hit against our strategy.

3. We have also faced scrutiny on the progress against our strategy, at Public Administration and Constitutional Affairs Committee at the House of Commons and a Scottish Parliament enquiry into economic statistics.

Review of recent activities

4. Alongside a number of new or improved statistical outputs, there have been a number of important activities to note:

   i. The GSS Conference took place on 22-23 November with the theme "pioneers: on the forefront of statistics and data science". With 350 people attending and a whole range of speakers including David Spiegelhalter, Tracey Brown and Claire Melamed, the two days brought a strong call to action for statisticians to use data in more innovative ways to help the UK make better decisions.

   ii. The results of the 2017 Civil Service wide People Survey were published. 3,418 colleagues filled out the survey, a response rate of 79 per cent (8ppts up on last year). Our overall staff engagement index was up 2 percentage points to 62 per cent, which is 1 percentage point higher than the civil service average. The survey highlights areas of strength and also areas where there is still much work to do, on SCS visibility and bullying and harassment in particular. We will also get a breakdown for all statisticians across government before the end of the year.

   iii. I, along with Heather, Jonathan and Iain, held a series of 'Staff Talks' in Newport, Titchfield and London where we outlined some of our successes and challenges and took open questions from members of staff. There were concerns about the speed of laptop roll out to staff, and the pace of change differing from team to team. These sessions combined with the results of the people survey are a good reminder of areas to concentrate when thinking about how best to engage everyone who works here.

   iv. Crime statistics were once again in the spotlight, with headlines tending to reflect the overall increase in police recorded crime rather than the underlying patterns of change. Iain Bell published an article following this, helping explain the figures. We aim to develop a clearer narrative on trends in crime for the next release.

   v. NHS Digital published experimental statistics looking at how we can effectively measure improvement and variation in care provision across the week (seven-day services).

   vi. ONS published the Blue Book and Pink Book on 31 October, with various improvements to methods and sources which go along with the annual exercise. Also this month, we published CPIH by earnings decile and by region – adding to the information we publish on inflation. Statisticians in HMRC published an article on detailed trade asymmetries in the trade in goods between the UK and the EU.

vii. The devolved economic statistics co-ordination group met in Belfast on 10 November. This is the strategic forum for economic statistics (below the Inter-Administration Committee) where ONS meets quarterly with the Devolved Administrations (DAs). Key topics discussed were progress with the devolution development programme, access to administrative data, transformation of the surveys that support economic statistics and data to continue to support the fiscal frameworks of the Devolved Administrations. DAs felt well sighted and engaged across the piece and although the odd challenge remains in some areas, they appreciate the collaborative approach to resolving them.

viii. We published our first report on measuring Sustainable Development Goals, covering 41 per cent of the 232 global SDG indicators.

ix. Housing Associations in England have been reclassified as private, non financial corporations for the purpose of National Accounts. This came shortly after OSR's review on public value of statistics on housing and planning.

x. The BBC celebrated the Today Programme's 60th year on air with statistics and interactive charts produced in collaboration with the ONS with statistics portraying the scale of social change since 1957. Pete Benton and Liz Mclaren were interviewed for the programme where they talked about families, house prices and inflation among other issues while neatly underlining the importance of responding to ONS surveys.

xi. The UK's first data science degree apprenticeship (Level 6) standard was submitted 25 October to the Institute for Apprenticeships.ONS strategic capability needs will be enhanced by this apprenticeship. In addition, the scheme will also support the wider analytical community.

xii. Nick Bateson joined as Finance Director.

5. Other important developments in recent weeks include the following:

   i. A range of Census research outputs using administrative data, most notably on estimating commuting flows using mobile phone data and finely disaggregated population data by geography (OA level).

   ii. Chris Skidmore (Minister for the Constitution) visited our Newport office. He looked at the work of the data science campus and work on sub-national data in economic statistics. He also received a briefing on the impact of Brexit on the statistical system; we are expecting further engagement with the Minister on this topic, and on the Census, in the coming months. Many thanks to all colleagues involved in making the visit a success, particularly given the short notice.

   iii. We have received confirmation from the Public and Commercial Services Union that their members have accepted the contractual change to pay, meaning that we can now implement the Pay Offer.

   iv. The efforts of many of our staff has been recognised over the past month at various award ceremonies. The Data Science Campus won Infrastructure Project of the year at the Welsh Government Opportunities Excellence in Public Procurement Awards. Rich Williams won 'Risk Manager of the Year' at the CIR Risk Management Awards.

Future look

6. Our current focus is on planning and on reviewing the latest people survey results within ONS. Statistical Heads of Professions are looking at the future direction of GSS. Alongside this we are preparing strategy ahead of the Analytical Function Board conference at the end of January 2018.

John Pullinger, 23 November 2017

UK STATISTICS AUTHORITY

SA(17)51

Population and Public Policy Statistics

Purpose

1. This paper provides the board with a progress update on developments to our statistics and collections in Population and Public Policy (PPP). It includes progress on the Census and Data Collection Transformation Programme, and the delivery of the Public Policy Analysis strategy, the next steps following the recently announced restructure, risks, and future developments to our statistics.

Recommendations

2. Members of the Authority Board are invited to:

   i. note the progress made in the last year;
   ii. note the progress made to get PPP delivery ready and the risks and challenges with this; and
   iii. comment on our plans to develop our broad range of statistics and how we collect them.

Background

3. The Authority Board has previously received separate updates covering:

   - Public Policy Analysis Strategy;
   - Census Transformation Programme; and
   - Data Collection Transformation Programme.

4. At the July Board, we presented for the first time, a coherent overview of the short-term plans for PPP covering all three areas in one place. This was the start of further work which looked at how we successfully maximise the benefits of the Census Transformation Business Case to deliver a highly successful Census in 2021 as well as transforming how ONS collect and produce statistics.

5. There have been considerable successes over the past year including:

   i. successful delivery of the 2017 Census Test.
   ii. major steps forward in the use of administrative data and exploring its potential use across migration statistics and to replace the Census.
   iii. 103,000 business survey forms are now online.
   iv. merging two of our surveys on income and expenditure to give a better sample size and more in-depth data analysis.
   v. development of new statistical products that expand reach in difficult and sensitive subjects:
      a. The online crime calculator has been seen over 2 million times, equipping many more people with a better understanding of the risk of being a victim of different types of crime where they live.
      b. Development of new statistics in difficult and sensitive areas, in partnership with others:
         - Link between being a victim of abuse as a child and an abuser as an adult.
         - Identifying occupations at higher risk of suicide for Public Health England (PHE), to inform policy on suicide prevention.
         - Deep dive into coroner's records of drug related deaths, to identify key areas for policy interventions and improvements relating to drug treatment services.
   vi. Developed modal and median life expectancy estimates by socio-economic class in collaboration with the Department for Work and Pensions, to help understand changing patterns in pension needs

vii. Significantly improved our impact with national and local policy-makers:
   a. Signed a Memorandum of Understanding with West Midlands Combined Authority on how we can support their decision-making capabilities with robust analysis using existing data and experimental analysis with a view to exploring how this can be further expanded to other regional cities.
   b. Are at the heart of No 10 policy support with presentations today on developing Immigration Statistics to the Ministerial Immigration Taskforce, and recent papers on loneliness, social care, digital exclusion, and childcare, supporting policy-making at the highest levels.
   c. Delivered a wealth of data focusing on the Migration Advisory Committee's call for evidence. This filled an evidence gap in terms of the role of European Economic Area migrants in sub-national labour markets and, and are being used by the Department for Business, Energy and Industrial Strategy (BEIS), the Greater London Authority (GLA), the City of London Corporation, by the Centre for London, Greater Manchester Combined Authority, West Midlands Combined Authority, and shared with the Department for Exiting the EU (DExEU), the Department for Digital, Culture, Media and Sport (DCMS) and the Department for International Trade (DIT) for contextual information.

6. The PPP Leadership Team is working through the following framework to assess our capability to deliver and ensure success against a challenging agenda. The key points we are progressing:

   i. the strategy to deliver in place and understood;
   ii. clarity on the transformed outputs we need to deliver and the transformed ways of achieving this;
   iii. the right behaviours embodied across our organisation for successful delivery;
   iv. the right structure to ensure successful delivery;
   v. the right governance to manage successful delivery and management of risks;
   vi. the Leadership for delivery;
   vii. the skills we need for delivery;
   viii. the right partnerships for delivery; and
   ix. the internal and external communication strategies necessary to ensure successful delivery.

7. In early November, I announced a restructure of PPP, and the related governance. This was because our successes mentioned above masked issues that if not tackled now would cause problems. Overall, we are 4-6 months behind where I think we should be to meet our Better Statistics, Better Decisions (BSBD) ambitions. I am confident we can recover this with focus on the schedule for the Census, streamlining data collection transformation so it does not again move to the right whenever we hit problems and meeting our challenges in communicating our agenda and statistics (e.g. on the Census and crime statistics). While so far these have not caused major issues, tackling now is a necessity to ensure future success.

Future developments

Delivering improved statistics for our users

8. Better Statistics, Better Decisions at three provides a strong strategic framework for the transformation we need to deliver and the next immediate products for delivery. Within PPP, we have by necessity of the Census, to look further out to 2021 and what constitutes a successful year for us (**Annex A**). These now will be developed into our performance indicators, with leading indicators then developed to ensure we can monitor progress.

9. This by necessity also focused us on priorities for delivery over the next few years to achieve these success criteria. These are set out at **Annex A** but key amongst these are:

   i. development of coherent statistical frameworks for all key Public Policy statistical areas that ONS– working with producers from across the Government Statistical Service and beyond. With an immediate short-term priority to resolve this for crime statistics in time for the January 2018 release;
   ii. consulting on a new way of delivering migration and population statistics in autumn 2018 with implementation in 2019 of the new system. This is a significant development of our use of administrative data which is highly ambitious in nature. We are working closely with Data Capability to deliver the agenda and also across the Government Statistical Service. This public commitment has been widely welcomed but now needs to be delivered. Success will also be a major milestone in delivery of the Administrative Data Census as this will build confidence in the use of alternative sources of data to measure the population. If this is in place and confidence in the data builds through 2019 and 2020, this will be a major milestone on the way to ensuring that 2021 Census is the last in its current form;
   iii. developing a Centre of Expertise for Inequalities to provide a credible and coherent source of data and analysis, trusted by the public and policy makers across a range of metrics including income and wealth, but also health, education, generational and geographic data. We will overlay protected characteristics such as gender, age and ethnicity and fill gaps in our data outputs through 2018 and by 2021 develop administrative data solutions to support decision making. Successful piloting of online multi-mode social surveys which deliver unbiased results during 2018 will be critical to modernising our social statistics while we continue to move business surveys online;
   iv. building towards a successful delivery of the Census Dress Rehearsal in Autumn 2019 and the Census on 21st March 2021; and
   v. PPP will also be increasing the level of support available across the Government Statistical Service to tackle high priority areas – our first focus will be to work with the Devolved Administrations and Whitehall Departments to develop and implement a programme of work building on the Office for Statistical Regulation (OSR) review of Housing Statistics.

10. **Annex A** sets these out in more detail.

Structure and Governance for delivery (focus on Census and Data Collection Transformation Programme)

11. One of the immediate tasks though is seeing through our review of the Census and Data Collection Transformation Programme (as backed by the latest Gateway review). The restructure solves many of the immediate issues that were facing these programmes and the challenges they face by:

    - Integrating all requirements for development of the Survey Data Collection platform into a single programme of development which assesses common functionality requirements, when these are needed and to serve all parts of the programme. This work has already started paying dividends in work with Digital Services and Technology (DST) to move forward our development programme and minimise the delays to the move online and ensure readiness for the 2019 Dress Rehearsal.
    - Integrating all our developments of administrative data into a single area, making us a more intelligent customer of Data as a Service (DaaS), Methodology and DST and using the focus on migration statistics to drive forward an integrated work programme.
    - Integrating transformation governance across PPP.

12. These actions will help ensure we get on track for a successful delivery of the Census and Data Collection Transformation programme, but do not solve all the issues. For the Census, the major gap we are urgently filling is at a strategic level. While, the team have developed an Operating Model, this is not yet a Target Operating Model – as there are user journeys which break mid-way through and a lack of optimisation to the maximum response, lowest cost methods and how we achieve this. There are three critical areas:

    - The respondent strategy. This is essential to ensuring we maximise response and needs to fix broken user journeys. For example, it is obvious that we will want to use social media to maximise response – but the current user journey would mean someone on public transport ready to complete the Census would need to have the piece of paper with their access code which had been posted to them handy to complete the Census there and then. This will also have to integrate across social surveys as we need to decide our approach to social surveys over Census period and how to ensure if people are being asked to do additional surveys that it is a seamless experience. It will also cover questionnaire design online to maximise response;
    - Marketing and Communications Strategy. This is about how we use all the channels and behavioural insights necessary to ensure successful completion; and
    - Operational strategy. This is how we minimise costs and maximise benefits.

13. These strategies are due for completion over the coming few months. We have also moved the Dress Rehearsal to autumn 2019 – which happened in 2009. By doing this now, we can ensure that we develop the right strategic framework and operational delivery methods to ensure successful delivery of the Census and maximise the transformational benefits from the Census Business Case.

14. The PPP Leadership team are now working the governance and delivery down to the next level of detail. It is, however, clear that delivery of the transformation envisaged will require further work across PPP to develop our detailed Target Operating Model. This work will also focus on the skills we require to ensure success. It is already clear that we have some areas where we need to urgently supplement our current skills – service management, user insight and analysis being the most immediate. This work is being taken forward as a matter of urgency now in order to ensure we can align with timings for Economic Statistics and any potential Voluntary Exit Scheme.

15. There is one other key area where the restructure increases our ability to deliver – the Government Statistical Service (GSS). I have recently set out an agenda to re-invigorate Heads of Profession (HoPs) as the leaders of the GSS and increasing support for them to deliver BSBD. In order to aid this, I have created bespoke senior resource to work with HoPs to deliver. The first area of focus will be in developing and implementing work on Housing Statistics.

Behaviours and culture

16. While I have agreed with the Leadership Team the behaviours needed and set these out for all staff, we still have significant issues with the ease with which senior leaders form cross-area teams to ensure delivery and the capability of senior and middle managers to successfully manage change in the right way. The People Survey has also highlighted that there are other more problematic behaviours. This will require a significant investment in leadership time and capacity. I will also be commissioning an independent review of the behaviours currently being experienced by staff, so we can fully understand the gap and take forward the necessary actions.

Communications

17. Within the one Office framework we have developed a tailored suite of internal communication channels which we are now deploying to support the contribution our

change programme makes to the BSBD strategy. We have established weekly all staff e-mail updates; live yammer sessions, podcasts, stand-ups in business areas and video-messaging to ensure we have regular cascade and interactive communications. Given we have these tools internally, and are deploying, our developmental focus at present is on working with our new ONS Policy and Communications function on external communications and developing a suite of communication strategies to support our external delivery of statistics and our developmental agenda.

Challenges for delivery

18. As can be seen, the transformation of PPP within the organisation is at an earlier stage than Economic Statistics and there are a number of actions set out above that are required to maximise successful delivery. While inevitably any restructure causes disruption, my assessment is that the restructure has lowered our risk profile rather than raised it because we should be much more likely to deliver the full range of benefits set out in the Census and Data Collection business case in particular and the BSBD strategy in general. We should also be much better equipped to identify and resolve emerging risks and issues, especially where these require teams working across transformation areas to find jointly optimised solutions.

19. Our key challenges are:

- PPP covers a wide range of statistical areas. We are rarely the sole producer of statistics on any topic area and the challenges of coherence, accessibility, gaps and presentation that we have seen in health, crime, equalities and housing will be replicated across most topic areas. We cannot resolve all the issues at once and will need to effectively prioritise our resources. This does mean there are risks that some areas could suddenly move up the decision-making agenda or public agenda before we have fully resolved issues
- With the wide-range of statistics and our communication capability we have challenges in ensuring that we keep our public reputation high. The reputational risks are in two key areas:
    - Poor presentation or communication of our statistics leading to misleading commentary or public understanding. Our communication skills need considerable work still. We are developing communication strategies for each of our key areas, but also need to up-skill on political awareness and writing skills.
    - The decisions on what should be included within the Census always cause a degree of controversy and we need to ensure that we handle our process for making recommendations well and bring stakeholders with us. We cannot meet every demand and so it is inevitable some groups will be disappointed.
- Capability gaps. I have mentioned above several key areas of capability. As well as specific skill-gaps where we will need to recruit expertise (service management, user insight and analysis); we also have some more cross-cutting issues we need to tackle – leadership skills, communications and political awareness. We will be working closely with the Learning Academy over the coming months to tackle these.

Iain Bell, Deputy National Statistician for Population and Public Policy.
Emma Rourke, Director of Public Policy Analysis.
Peter Benton, Director of PPP Operations.

23 November 2017

List of Annexes

Annex A **Population and Public Policy: Towards 2021, what we will deliver and how we will enable success**

Annex A -Population and Public Policy

Towards 2021, what we will deliver and how we will enable success

The 2021 view of success for PPP

- A clearly described statistical system with coherent frameworks underpinning each key area.
- Our products and services support decision-making at all levels from the citizen to the Prime Minister.
- Population estimates, Administrative Data Census, migration, LFS and main census processes are of highest quality possible. Results are comparable so there are no major revisions when Census delivered.
- Administrative data embedded; surveys supplementing where needed.
- There is such confidence in our admin data that:
  - We could be confident in advance of this being the last Census of its kind
  - Migration statistics are trusted and IPS's place in the system is understood and delivered
- The main Census and Surveys are run operationally very well and enhances ONS's reputation for delivery of digital services. Field management is effectively managed. All on common infrastructure.
- Rationalised surveys using all modes available that deliver unbiased results.
- Customer/respondent is at the heart of our design for Census and Social Surveys.
- Methods and outputs designed for new data sources and produced with user needs at their heart.
- An engaged and motivated workforce with the skills needed for greater use of admin data, online collection design and management.
- Reduced costs.

What will our customers see from this over the coming years

Population and Migration Centre of Expertise:

- Deliver well-rounded topic reports as cumulatively link data towards end-state system for migration statistics covering topic areas on migration and work, family, education and access to services throughout 2018 and 2019.
- Consultation on new system for population and migration statistics 2018/19.
- New population and migration statistics system in place - 2019/20.
- Wide-ranging publication of all the GSS know about the Ageing Population – 2018/19.

Crime and Justice:

- Create and agree framework across Government and use this as front door to the statistics across Government – 2018.
- Tackle key gaps – online fraud (January 2018 for two years of data), crimes against HQ businesses, new crime types.
- Re-assessment in 2019/20 not on basis of whether police recorded crime is well-recorded but on whether ONS are helping users understand trends in crime.

What will our customers see from this over the coming years (2)

Health and Life Events

- Development of a health and care statistics landscape map and a monthly health statistics newsletter, collaborating across the GSS to bring greater coherence to health statistics (Autumn 2018).
- Promoting greater coherence, rationalisation and insight in health statistics outputs across the GSS, including expanding our health and care statistics landscape map into an online portal with greater functionality (2018/19).
- An increase in outputs which go straight to the heart of user need - e.g. development of health state life expectancies to inform the state pension age review (2018/19).
- Greater emphasis on providing new insights by linking health and non health data to answer key questions - e.g. linkage of higher education (HESA) and suicide data to better understand mental health of students (2018/19).
- Secure access to key health datasets enabled by new powers in the Digital Economy Act (2018/19 - subject to progress of the next parliamentary phase for our statement of principles and code of practice) - e.g. hospital episodes data; mental health services data, in order to gain insight by linking to non health datasets.
- Increased use of data science and innovative approaches to problem solving, building on the work looking at discrepancies surrounding increases in obesity and decreases in calories counted (2018/19 onwards).

- **Inequalities**
- Establish frameworks and then fill gaps starting in April 2018.
- We are integrating earnings data from the PAYE system with Census 2011 to shed new light on earnings mobility and progression. Importantly, this data will allow us to examine mobility at fine geographic levels, and for different types of households and individuals, shedding new light on an important policy area. This work will be completed by May 2018 and will delivered primarily for decision makers within government policy areas.
- By 2021 have developed our administrative data linking in partnership with Data Capability and the GSS so we have inter-generational administrative data to support policy and decision-making by 2021.
- Wealth and Assets Survey will be moving to a 2-year financial year fieldwork period from April 2018 - leading to results being available 3 months earlier than they would otherwise have been for wave 6 (2016-2018). In addition SSD have been resourced to move to a monthly processing system which will reduce the time lag after the end of fieldwork by another 3 months. (April 2016 - March 18 should be published around June/July 2019). Early indicators will continue to be published throughout the fieldwork period (every six months) around 7 months after the end of the fieldwork period it relates to. Further development work in 2018/19 aims to introduce annual wealth estimates (currently only created on the full 2 year datasets due to the need for statistical imputation).

What will our customers see from this over the coming years (3)

Sustainable Development Goals – next six months

- Renewable energy in the UK: Proportion of energy from renewable sources, plus link to particulate matter/air pollution, mentioning how burning wood (a renewable source) increases local particulate matter slideshare (Over 1,000 views within a few hours of release November 2017).
- Ageing Audit: Audit of SDG indicators showing where disaggregation by age is particularly important (Feb 2018).
- Not in Education, Employment and Training: A look at NEET data disaggregated by disability and ethnicity (Spring 2018).
- Goal 3 (health and wellbeing) in-depth article: To look at how the country is performing against Goal 3 SDG indicators, in partnership with the Department of Health.
- SDGs: Progress and Possibilities 2: Second annual update July 2018.

Environmental Accounts and Natural Capital

- New estimates for 'Material footprint' (to be published in Spring 2018). Also referred to as RMC - Raw Material Consumption), it extends our already reported 'Domestic Material Consumption' (DMC) measure, and is used to inform policy (DEFRA). RMC is currently experimental [and we are working with Leeds University to compare existing and new models] and is recognised as a Tier 3 indicator under SDGs.
- Low Carbon and Renewable Energy Survey Results, 2016 (Provisional release date of 17th January 2018) Results from the third year of this survey allow for the estimation of turnover, employment, imports, exports, acquisitions and disposals in an area of the economy receiving increasing interest following publication of the UK government Clean Growth Strategy in October 2017. The target audience is primarily government stakeholders - BEIS and the Devolved Administrations.
- New Urban Natural Capital Accounts (Pilot account sent to Eurostat on 31st December, initial UK accounts to be published in a bulletin in Summer 2018) - The urban accounts will include estimates of the value of nature implicit in house prices, such a riverside view, using Zoopla data and hedonic regression. Working with the Ordnance Survey spatial maps of extent of urban areas and the green space within them will be available, and through work with the Centre for Ecology and Hydrology spatial maps containing the information about the amount of pollution removed by urban nature and its value.

Across GSS developments

- First key focus area is Housing Statistics where in partnership with CLG and the Devolved Administrations, we will set out our workplan in early 2018.

Enabler: Centres of Expertise

2017/18 – Crime and justice; migration and inequalities.

2018/19 – Ageing; cities and regions.

- Greater collaboration between ONS, the wider GSS and external experts to fill evidence gaps and improve insight .
- Increase our impact with decision makers and meet the growing need for analysis at national, regional and local level.
- Lead and inform public debate.
- Address emerging issues in the modern world e.g. cyber crime.
- Fully exploit potential of the Digital Economy Act .
- Create capacity for fundamental methodological and conceptual innovation.

Example: Crime and Justice Centre of Expertise

- In partnership with Home Office and Ministry of Justice.
- Draft statistical framework and priority areas for collaboration agreed.
- Improve communication of the true picture of crime, derived from different sources

Priority areas include :

- Creating a more detailed understanding of the nature of fraud
  - How are people falling victim to fraud? Who is particularly suffering?
  - What kind of fraud is perpetrated at people's workplace? How?
  - What are the important new kinds of fraud? For example, online personal relationship fraud.
- What is the impact of preventative measures by individuals (commuters, drivers, businesses, housing associations etc.) on their experience of crime?
- What is the link between police resources and levels of crime and justice outcomes?
- More on perpetrators: who they are and what their characteristics are.
  - What is the link between crime (and victims) and nationality? Religion? Immigration?
  - How does demographic change (ageing population, youth bulge) affect crime?

Example: Centre of Expertise in Inequalities early thinking

- Leverage and coordinate resources related to the understanding of inequality within and beyond ONS.
- Inform public debate about how different groups of people are affected by inequality issues (e.g. young people, women, different geographies, ethnicities etc).
- Inform public debate about how different inequality issues affect the population (e.g. employment and income, wellbeing, health and social care etc).
- Inform policy makers about the distributional consequences of decisions for different groups of people .
- Anticipate and respond quickly to emerging issues, policy needs and changing patterns of migration.
- Make better use of data sources within ONS, across government and beyond; and develop new data sources.

How will it be different for our respondents by 2021?

It will be much easier for respondents to provide data through a mixture of channels:

- By 1st March 2019 have over *223,000* business forms online and *957,000* by March 2021.
- Have mixed mode available and working for Opinions Survey in 2019 and the LFS in 2020 delivering unbiased results.
- Implement a survey-wide response rate strategy in 2018 (expanded from LFS response rate work).

By 1st March 2019, operational transformation of the field force will be complete with:

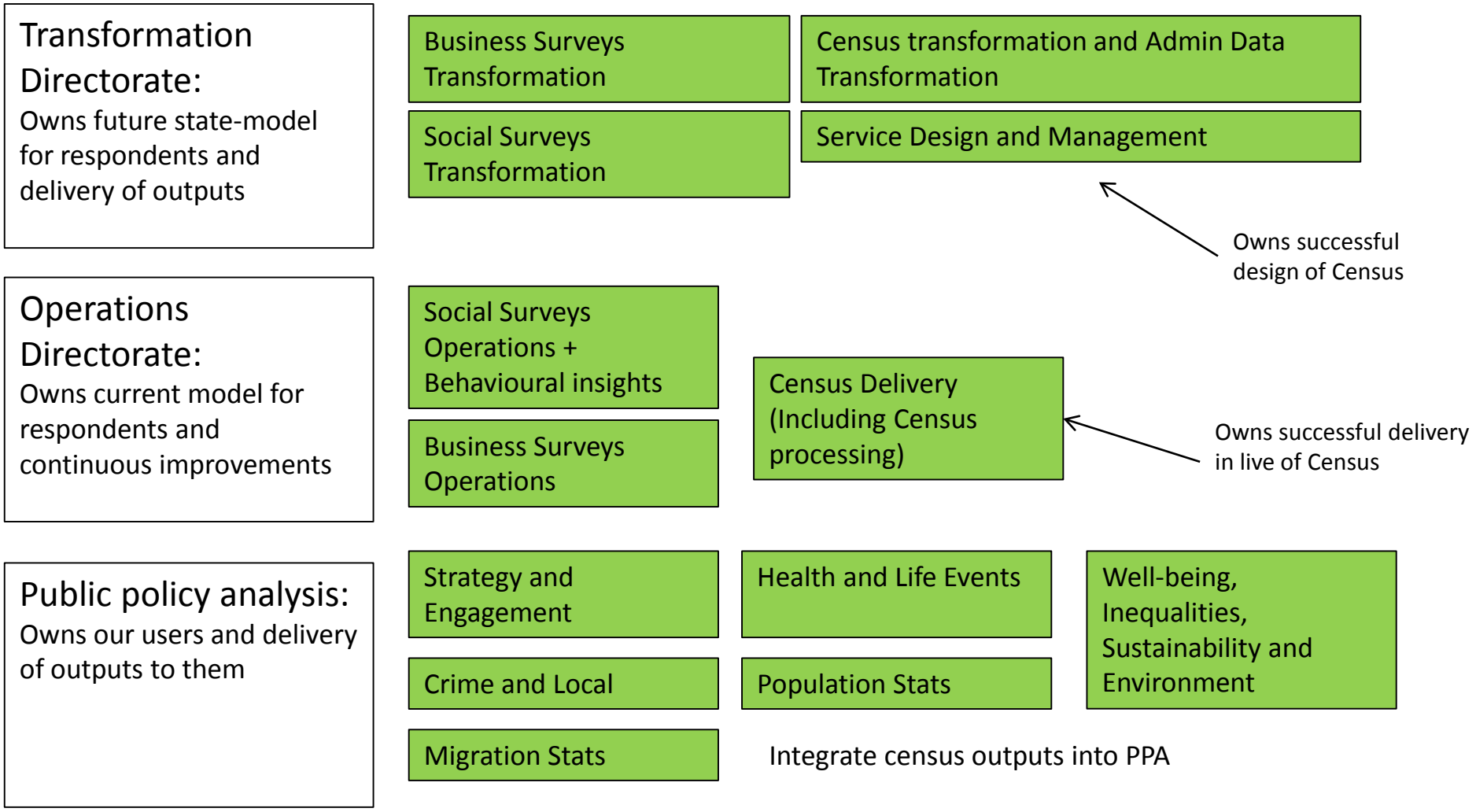
- International Passenger Survey wholly on tablet (March 2018).
- Field staff on all corporate systems.
- Modernised contracts in place for all field staff.

And we will be delivering the final ever Census of its kind

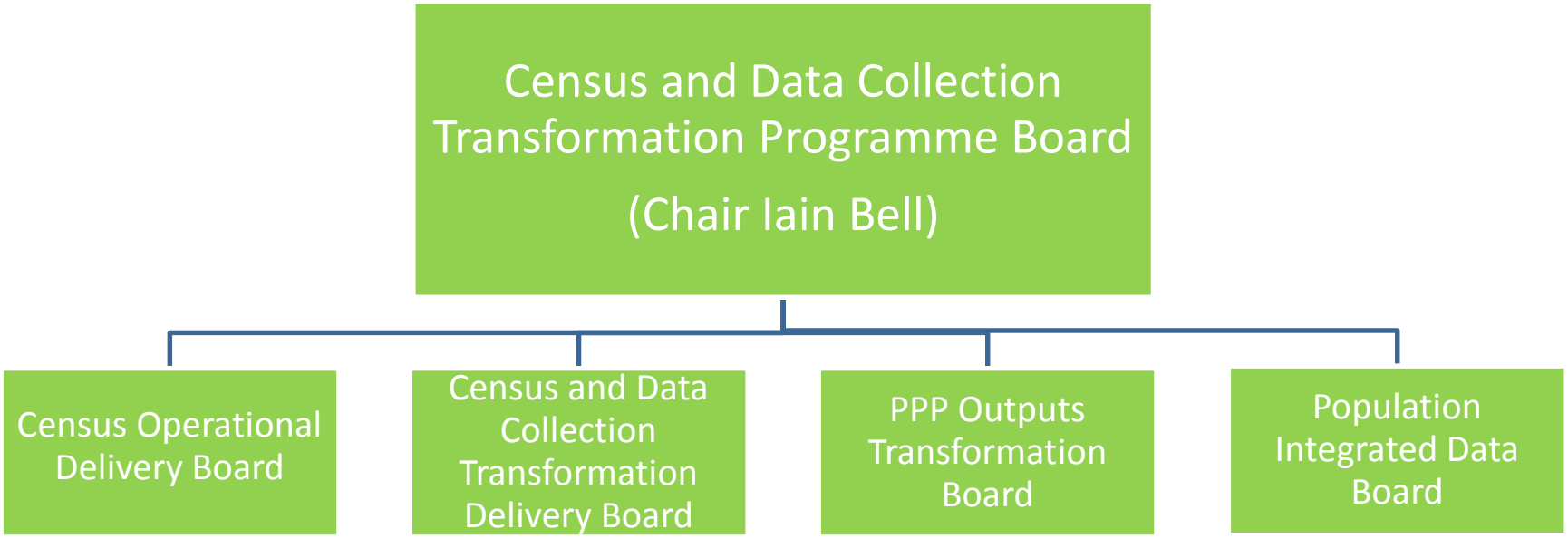
Key milestones

- Development and agreement of our respondent strategy for the Census by early 2018.
- Design and delivery of Census White Paper – 2018.
- Dress Rehearsal.

Enabler 1 - Structure



Enabler 2 - Governance



We will merge the Data Collection Transformation Board and Census Programme Board into single board with four supporting boards.

The Programme Board will focus on strategic issues, unblocking issues and ensuring delivery of the Census and the wider transformation

The four supporting Boards will ensure delivery of these.

The programme board will continue to link to Portfolio Committee

Further work to enable delivery

- Capability gaps identified and addressed working with Learning Academy for broad skill needs across many staff:
  - Communication skills
  - Management and Leadership of Change
  - Political awareness
- Capability gaps identified and fills for key specialist areas: service management, user insight, analysis are current focus.
- Work with leadership team on the behaviours required for successful delivery.
- Embedding of new structure and governance.
- Development of our communications strategies.

UK STATISTICS AUTHORITY

SA(17)49

Report from the Director General for Regulation

Purpose

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

Recommendation

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

Discussion

3. Early November was dominated by giving evidence to two separate Parliamentary committees: the Scottish Parliament's Economy, Jobs and Fair Work Committee on November 7th, and the Public Administration and Constitutional Affairs Committee (PACAC) in Westminster on November 14th:

   i. **Scottish Economic Data:** This session, which I attended alongside Jonathan Athow and Sir Charles Bean, went well. I emphasised our concerns about the Scottish Government's policy on pre release access; advocated wider update of the Code; and encouraged the Committee to focus on practical improvements to economic data, for example to support the Scottish Fiscal Commission's capacity to forecast Scottish income tax receipts.

   ii. **Public Administration and Constitutional Affairs Committee:** the primary focus was on the Chair's letter to the Foreign Secretary. The Committee also showed some interest in the practices for public comment on statistics, which we discussed at the last Board meeting and have since been published. They also asked about the separation of the Office for Statistics Regulation (OSR) from the production part of the Authority, where I emphasised the key areas in which OSR can make its own decisions – strategy, resources, programmes and regulatory judgements.

   iii. **Code of Practice:** We propose to publish a consultation response in early December. This, together with a redraft of the Code itself, is a separate item on our Board agenda this month. In addition David Norgrove, Jonathan Haskel, and I met with Onora O'Neill to discuss trustworthiness.

   iv. **Annual Review:** We are in the final stages of preparing OSR's first annual review. This review summarises the work we have done over the last year and uses it as a basis for an overall assessment of the strengths of and challenges facing the UK statistical system. The review highlights statistical leadership as the crucial differentiator between the successful and less successful sectors. We plan to publish on 4 December.

   v. **Migration:** We held our second Round Table on migration statistics. This focused on the information needed by service providers (eg local authorities) on migration. As with the first Round Table, it led to a structured discussion between users and producers, and identified some areas where ONS and Home Office might be able to consider changes and improvements.

   vi. **Housing Review**: we published our Housing Review on 10 November. We highlight a number of areas of improvement. To address the issue of statistical leadership we convened a meeting on 20 November of all producers of UK housing statistics (England, Wales, Scotland and Northern Ireland). We will also discuss housing statistics at a meeting of the Inter Administration Committee, chaired by John Pullinger, in early December.

   vii. **Health and care statistics:** we held our second conference on health and care statistics on 28 November (after writing this report but before the Board itself). The event's focus is on putting users at the heart of these statistics. We expect the issue of researcher access to health data to come up, and one of our aims is to ensure that

it does not dominate the discussion to the exclusion of other issues (like the quality and coherence of statistics; regional dimensions).

viii. **Department for Education:** I am writing this week to the Permanent Secretary at the Department for Education about repeated breaches of pre-release access arrangements by the Department's communications team. The letter is designed to signal an escalation of our concern about practices on orderly release within DfE.

4. The main challenges are:

   i. Launching the new Code early in 2018. There is still a lot to do to create an interactive version supported by guidance; and to write the wider application document;
   ii. Ensuring that the Annual Review gets appropriate attention from our key audiences, which include the analytical community within and outside Government and key stakeholders like Full Fact and the Royal Statistical Society; and
   iii. Ensuring we respond promptly to issues in the uses of statistics, demonstrating that we are even-handed and proportionate. This may require a more structured approach to surveillance, so that we can identify more potential cases ourselves and have less reliance on complaints.

5. The dashboard summary of regulatory activities is at **Annex A**.

Ed Humpherson, Director General for Regulation, 21 November 2017

List of Annexes

Annex A Regulatory Activities

Regulatory Activities November 2017

Economy	Health and social care	Business, industry, energy and trade	Crime and justice
• Oral evidence hearing at Scottish Parliament's Economy Jobs and Fair Work Committee about Scottish Economic data on 7th November. • Reported to Regulation Committee on 9th November about errors in ONS economic statistics. • Compliance Checks on HMRC Tax and NI Statistics, HMRC Stamp Duty statistics – meetings held after the budget in December. Met Scottish Government to conduct compliance check on Export Statistics Scotland. Reports anticipated before Christmas. • **UK and NI House Price Index:** The report was published on 23rd November.	• **Systemic Review:** Held conference on Health and Care on November 28th. • **Regulatory Services:** Completed compliance check on Northern Ireland Emergency Waiting Times. Agreed to assess ONS avoidable mortality and cancer survival statistics in New Year. • **Casework:** Following our letter to Information Services Division (ISD) Scotland, ISD have agreed to work with Chronic Pain Cross-party Group to improve value of chronic pain waiting time statistics.	• **UK Trade:** ONS focussing on asymmetries with the USA, Ireland, China and Germany. Initial results suggest US issues centre around measurement (BPM 6), FISIM, Financial services and the Channel Islands, although more work needs to be done. Asymmetry with Ireland centred around Travel, Financial and Other Business services. • **Construction Output and Prices statistics:** Assessment process ongoing. ONS currently drafting responses to OSR's queries on new "prices methodology". Meetings with users set for next two weeks.	• **Crime:** After media headlines about an apparent 13% increase in crime, we wrote to ONS to welcome the Deputy National Statistician's prompt initiative to clarify trends, and to agree the next report needed to be clearer. We urged a comprehensive review of crime reporting and will monitor future developments closely. • **Crime and Criminal Justice:** At our second roundtable on 29th November, ONS, MoJ and HO will tell us about the progress their joint Crime and Justice Working Group are making on joining-up criminal justice statistics and data.
Labour market	**Housing, planning and local services**	**Children, education and skills**	**Agriculture and environment**
• **Income/Earnings:** Initiated feedback from key users on any progress made since the Income and Earnings review was published in February 2015. • **Compliance checks:** Initiated compliance checks of **ASHE and AWE statistics** (ONS) and **fraud and error statistics** (DWP) drafted.	• **Housing Review:** Our findings from this review were published on 10th November.	• NS designation suspended for DfE's Characteristics of Children in Need Statistics due to data quality issues. • **Systemic Review:** Innovation review in CES stats, received range of responses from producers and are looking to focus review on three areas of innovative: cross producer working, methods, and alternative outputs. We will undertake interviews with producers and users. • **Casework:** 2 open casework cases, a complex piece on DfE's data privacy arrangements and a smaller piece on limitations on Ofsted's academy ratings for academies reported in DfE's school performance tables. • **Breach Reports:** Since Sept there have been three breach reports from DfE. Ed has written to Jonathan Slater, DfE Permanent Secretary.	• **Compliance checks:** completed two compliance checks on two Defra releases – Total income from Farming and Bovine TB – and are drafting letters to the Head of Profession. • **Milk utilisation statistics:** Following up on voluntary temporary de-designation of these Defra statistics in April 2017 – checking if the quality is good enough to reinstate National Statistics status. • **Systemic review:** Spoken to three users about the public value of these statistics and are arranging further meetings.
Population	**Culture and identity**	**Security, defence and intl relations**	**Travel, transport and tourism**
• **Migration:** 2nd roundtable for migration systemic review – on international migration on service delivery. Brought together stakeholders with producers from five departments. Held initial discussions with each of the census offices about plans for the assessment of 2021 Census.	• No significant activity	• No significant activity	• Engaging with Transport Focus about presentation and use of National Rail Passenger Survey.

UK STATISTICS AUTHORITY

SA(17)50

Update on the refreshed Code of Practice for Statistics

The consultation response has now been published at https://www.statisticsauthority.gov.uk/publication/code-of-practice-for-statistics-consultation-response/.

UK STATISTICS AUTHORITY

SA(17)48

Data Capability: Progress and Priorities

Purpose

1. This paper provides the Authority Board with a progress update on Data Capability activities over the past year and presents ongoing plans for our digital, data, security, and people transformation activities.

Recommendations

2. Members of the Authority Board are invited to:
   i. note progress made in the last year;
   ii. consider the priorities, challenges and risks of the short term (6 month) priorities set out for each Directorate; and
   iii. consider and comment on the medium term priorities and the long term vision for Data Capability set out at the end of the paper.

Background

3. The overall aim of Data Capability is to support change across the statistical system to embrace the opportunities of the data revolution, aligning with the objectives set out in the *Better Statistics, Better Decisions* (BSBD) strategy.

4. Data Capability contributes fully to each of the strategic dimensions of the BSBD strategy. Examples are:

   i. **Helpful** To our *users*: by delivering the new website and work to modernise the presentation and communication of the statistics and information ONS publishes (DST). To *staff*: by working in partnership in multidisciplinary teams to help solve business and technical challenges (All). To *partners*: by being open and transparent about the tools and techniques we are developing for our own transformation, for example sharing workforce planning models and the 'AYDEE' framework across government (BSD).
   ii. **Innovative** For *users*: improved geography behind our web portal (DST/MDR) also improved access to data for academic research purposes (MDR). For *staff*: access to joint working in Data Science for example recent early GDP indicator development using VAT data (DSC). For *partners*: Lead for the Government Data Science Partnership (GSDP) together with GDS.
   iii. **Capable** – For our *users and partners*: openly sharing new methods and techniques across the GSS and internationally through the UN (MDR). For *staff and the GSS*: very significant learning and professional development opportunities now available via the Learning Academy (BSD).
   iv. **Efficient** – For our *users and staff:* developing and delivering the systems and methods to underpin the transformation of all our outputs and the decommissioning of legacy systems (DST/MDR). For *partners*: sharing new systems experience, methods and techniques widely across GSS/Government Analytical Community and internationally through the UN (All).
   v. **Professional** – For our *users*: listening and understanding their challenges better (All): For *staff*: developing modern staffing policies and processes, including the new performance management framework also improving our office environments (BSD). For *partners*: engaging widely and proactively as a professional outward facing organisation for example in building relationships with commercial data suppliers (MDR).

5. Data Capability is responsible for our staff, from their recruitment until the time they leave the organisation and for everything they need to do their work.

6. In December 2016 we provided the Authority Board with an update on Data Capability activities. These included building people and infrastructure capabilities, leading and facilitating ONS's transformation and supporting access to and use of government (administrative) and commercial data sources.
7. Through initiatives, such as building the Learning Academy and establishing the Data Science Campus, we set out plans to build people capability, providing staff and the GSS with the necessary skills to analyse more novel types of data using cutting edge techniques. Our technology plans included facilitating the business in delivering greater numbers of online surveys, building data infrastructure by developing Address and Business Indexes and identifying hardware and software essential to enabling staff and the GSS to deliver against the BSBD strategy. We also set out plans to roll out transformation within the Digital, Technology and Methodology (DTM) Directorate and our approach to facilitating the office in acquiring access to a much broader range of data.
8. Following that in July 2017, together with Economic Statistics and Population and Public Policy, we set out our overall plans and priorities for 2017 and in September 2017 we provided the Board with a specific update on the Data Science Campus.
9. Here we present the Board with an update on progress in delivering our plans and priorities, as part of enabling delivery of our strategy BSBD.
10. A key enabler, for the ONS, the wider GSS and UK research more generally, since we last reported on progress is that the Digital Economy Act 2017 (DEA) received Royal Assent in April 2017. This provides the platform we need to obtain new data from a variety of sources. The Statistics and Research framework is being implemented in phases and the codes of practice underpinning the powers have recently been the subject of a public consultation. A Government response will be published shortly, following which the codes will be considered by Parliament as the Act requires. The conclusion of this phase, and full commencement of the powers, is expected after Easter 2018.
11. In the meantime we are working with in collaboration with business areas to engage with potential data providers across government and in the commercial sector. This includes transitioning existing arrangements, for example set out in Information Sharing Orders, into new data access agreements. Overall, early progress has been good, some examples are provided below (see Methods, Data and Research).

Discussion

12. Following a restructure at the end of 2016 the Data Capability Group now consists of four Directorates: Digital Services and Technology (DST), Methods, Data and Research (MDR), Business Services & Development (BSD) and the Data Science Campus (DSC). In addition the Director General for Data Capability leads operational work on behalf of the National Statistician in the areas of the Digital Economy Act and Legislation, and Security (**Annex A)**.
13. The remit of Data Capability continues to be to provide all the facilities and services ONS requires to deliver its work and the infrastructure for the wider statistical system **(Annex B**). This is everything necessary to recruit and to support staff to deliver statistics and research: from HR policies, estates management, learning and capability, through acquiring data and providing suitable access to it, via technology and tools, to support with methodology, innovation and dissemination via the ONS website.
14. We cannot and should not work in isolation from our external environment if we are to take advantage of new developments across academia and the wider data, technology and services landscape and so we are, necessarily, becoming more outward facing as a Group: working to build stronger relationships with external stakeholders including

across government, with academia, commercial partners, technology companies and internationally.

15. We have recently received a number of recent public accolades across the Group. These include:
    i. Winning the 2017 Digital Leaders "Cyber Resilience Innovation of the Year" award for the 'Five Safes' framework;
    ii. The team leading on the Digital Economy Act were the winners of the annual Demographics User Group (DUG) award for 2017 for opening up access to data for public good statistics and research;
    iii. Receiving five nominations (across four women[1]) in the Computing 2017 Women in IT Excellence Awards 2017;
    iv. CIR Magazine awarding Rich Williams of BSD 'Risk Manager of the Year'; and
    v. The Data Science Campus winning the Government Opportunities Infrastructure Project of the Year in Wales for the procurement in building the Campus and we are now shortlisted for the national award. The Data Science Campus was also shortlisted for the Brilliant Civil Service July award for Skilled People.
16. Here we set out:
    i. Data Capability Directorate progress (past 12 months) and short-term priorities (six months);
    ii. medium term priorities (six to twelve months); and
    iii. longer term vision for transformation of ONS, all statistical operations and the wider statistical system.

Data Capability Directorates Progress (past 12 months) and short-term priorities

Digital Services and Technology (DST) – formerly DTM

Recent Progress

17. Since December 2016 DST (formerly DTM) has completed its workforce transformation and 92 staff exited DTM at the end of December 2016.
18. As part of the planned cross-office Digital Transformation, moving from multiple independent technology stacks to a platform-based approach we are refreshing thinking about technology across the office reframing it based on the approach that in all our work we do four things: acquire data, prepare data, analyse data and publish results. We have centralised the technology budget within DST and use the Design Authority, chaired by the Director of DST, to avoid spending on technologies which are outside our agreed technology roadmap. This will streamline our technical estate and generate long term financial and operating efficiencies.
19. During the last 12 months DST has completed the setup of two Crown hosting environments, moving away from our legacy infrastructure providers and expected to save £600,000 this year and £1 million pounds next year. DST has also completed implementation of a Cloudera/Cloudfoundry infrastructure which will form the basis of our data and analytical service provision for all areas in the future.
20. A cross office desktop and mobile hardware refresh is underway. 250 windows tablets were rolled out to IPS field staff in September 2017. For the next phase of the mobile device refresh a new environment will provide direct access to Apple AppStore, ONS Intranet, Oracle Fusion and Expenses. Over the coming months this will be expanded to allow access to both Microsoft Office and SharePoint (replacing Lotus Notes) also providing delegated access to Outlook. A Desktop refresh is underway too with older

[1] Ceinwen Blake DST nominated in two categories

unsupported laptops being replaced across the office. Microsoft Office 2016 is also being piloted ready for roll-out to all staff in the New Year.

21. In the lead up to the arrival of Sarah Henry and the establishment of the Methods, Data and Research (MDR) Directorate DTM sheltered Data as a Service (DaaS) and Research Support and Data Access divisions in their move from Data Collection to Data Capability before releasing them into MDR and rebranding to become DST.
22. Various Discovery and Alpha Sprints have been completed in different product areas across the office including Data Collection, Economic Statistics and Census.
23. We have gained recognition for our Enterprise Architecture to Digital Product approach in Eurostat as a leading development amongst National Statistics Institutes.
24. We have also closed the WDA and NESS websites leading to savings of more than £1 million per annum.
25. Our new digital platforms are now beginning to be used across ONS. For example over the last 12 months DST has:
    i. Delivered the systems for the Census Test, which received more than 60,000 on-line responses (80 per cent of all responses) using the new Survey Data Collection platforms. A further four online surveys have been delivered including the UK Innovation survey (30,000 responses) and 14 template surveys are now sent out to respondents via secure ftp. A new survey platform has also been successfully integrated into the call centre and field force management applications;
    ii. Worked across the office to incorporate aggregate VAT data into National Accounts using a prototype of the Statistical Production Platform (SPP);
    iii. Delivered alpha versions of the Data Management Platform (DMP), including data exploration facilities using out of the box tools with the new technology stack and a proof of concept of the Statistical Business Register (SBR); and
    iv. Worked alongside the MDR Registers Team and other Government departments to enable the Address and Business Indexes to be made available in private beta to selected partners across government.

Short term (6 month) DST priorities

26. In the coming months DST will be working closely with MDR to bring together experience gained from early work on the DMP and exploration tools, SBR and SPP into the first release of the Data Access Platform (DAP). Services will be provided to enable large scale data import with a focus on the strategic priorities identified by Population and Public Policy and Economic Statistics, including exploratory work relating to Migration and Trade Statistics.
27. DST will also complete migration of the existing Response and Respondent Management Capability on to the new technology including the Respondent Account Service and the Response Management products.
28. It will support the office to roll out more online surveys and maximise online response will also be a priority.
29. At least four legacy systems will move to the new technology. DST will complete the migration of life events to new platforms and the MT204 mainframe will be closed in the Spring, saving the office £1.2 million per year.

Methods, Data and Research (MDR)

Recent Progress

30. Methods Data Research (MDR) Directorate has now been established following the appointment of Sarah Henry as Director in April 2017. MDR has been restructured into five divisions: Data Architecture, Data as a Service (DaaS), Methodology, Best Practice

and Impact and Research Support and Data Access. Key senior appointments have recently been made across MDR:

i. Tomas Sanchez was appointed as the Deputy Director for Data Architecture (Chief Data Architect). Tomas joined in July, he leads the development of the Address and Business Indexes and the Data Access Platform (DAP) working closely with DST and other government departments. Tomas is now recruiting a small team to work with him.
ii. Julie Brown, formerly Head of Profession at the Department for Transport has been appointed as Deputy Director for Best Practice and Impact and will lead the Division from early December.
iii. Rachel Skentelbery from Ofsted was appointed to lead Methodology and will join ONS in the New Year.

31. DaaS Division has been established as part of the wider data transformation to provide a coordinated ONS capability for the acquisition, preparation and linkage of non survey data, supporting data use across ONS and, where appropriate, to the UK research community through the Secure Research Service (SRS) (formally the Virtual Microdata Laboratory) and other approved environments. DaaS is establishing close partnerships with data suppliers, both across Government and commercial organisations.

32. DaaS ensures that requests for access to new data sources for ONS statistics and research are coordinated; that negotiations are conducted within agreed timescales; and that data access agreements for ONS are consistent, clear and enable broad use across ONS. This prevents multiple, uncoordinated requests to suppliers and ensures that business areas secure access to the data they need.

33. Data Acquisition is taking shape with a number of key data sets now in-house including Real Time Information (RTI/PAYE) from HMRC and mobile phone data from Vodafone, in both cases developing strong relationships has been integral to gaining access to these datasets.

34. The Secure Research Service (SRS) in the Research Support and Data Access Division continues to grow with demand more than trebling since the Board approved its technology refresh in 2014. Since the start of 2017 over 350 projects have been approved. Following last year's expansion of the Approved Research Scheme, these include the first 19 from commercial organisations all of which have been reviewed by the National Statistician's Data Ethics Advisory Committee (NSDEC). Example projects include: an evaluation of the Digital Catapult; a 2016/17 Annual Report on UK Small and Medium Sized Enterprises (SMEs) for the EU; research by Experian to inform the Construction Skills Network programme 2015-2017 and an evaluation of the economic and welfare benefits of the superfast broadband programme on behalf of DCMS.

35. The SRS and the "Five Safes" framework used to manage it is recognised as a model of best practice in enabling research while protecting confidentiality. This year it gained further recognition by winning the 2017 Digital Leaders "Cyber Resilience Innovation of the Year" award.

36. Recently, a series of senior level workshops and meetings has resulted in the recognition that ONS is the lead contender to expand its services and deliver a step change in the Government's ability to provide access to public data for Academic Research Purposes. MDR is currently working, jointly with the ESRC, on a Business Case which, if suitable funding is agreed, will enable ONS to take a comprehensive role in the future delivery of the Administrative Data Research Network (ADRN).

Short term (6 month) MDR priorities

37. MDR will continue to lead, via DaaS, the agreed program of data acquisition which has been prioritised with input from across the office.

38. MDR will continue to facilitate the Office's Business as Usual and Transformation activities leading and supporting the development of new and improved methods (e.g. admin data methods).

39. MDR is in the process of scoping a National Statisticians Quality Review (NSQR) on Data Privacy methods. The Data Access Platform will be secure-by-design, providing differentiated access to combinations of data according to the analytical need and the status of the user. However we need to consider carefully how, in the future, with more data being published, we continue to protect privacy without compromising the utility of our publications. This is a general challenge, not restricted to our endeavours so we are engaging with a number of external experts (Privitar, Department for Work and Pensions, Department for Education, Office for Standards in Education, Ministry of Justice, Scottish Government, Professor Mark Elliott, Professor Jim Smith, Dr Martin Serpell), to help conduct this review.

40. MDR will continue with its own transformation programme, with support from BSD.

Business Service Division (BSD)

Recent Progress

Corporate Culture

41. Staff survey - The Cabinet Office has confirmed the combined response rate for the UK Statistics Authority and ONS is 79 per cent; an increase of 8 percentage points in comparison to last year's response rates, with an overall increase in confidence in the way in which the organisation is leading and managing change. Engagement has increased across the organisation by 2 per cent, however, more negatively, individuals continue to report bullying and harassment across the organisation despite ongoing work to deter detrimental and unfair behaviour.

42. A great deal of work has been carried out regarding culture and 'changing' the organisation. A staff culture survey was run in August and the results were analysed by colleagues from People Analytics, Methodology and the Data Science Campus. From this the National Statistician and Director Generals have been working with BSD to develop ideas about how the senior leadership team can lead and move ONS forward evolving the organisational culture to where it needs to be. There is a strong focus on ensuring SCS role model good behaviours.

Corporate Resilience and Business Planning

43. We have established the new Corporate Planning and Resilience division bringing together planning and performance, innovation and improvement and the risk and quality functions.

Estates

44. Approval has been gained from the Government Property Agency (GPA) to reside in Drummond Gate for the next three years beginning on 5 January 2018. The agreement is for a five year lease with a break clause at three years should our or GPA's plans change. The final details are still being negotiated with the landlord.

Career Development / Talent Management / Management Pathways

45. A Management Pathway development strategy has been rolled out, which builds a three tier programme to meet the needs of new emerging managers; those with mid range experience and senior/leader managers at the top end of the continuum.

46. The Women into Leadership programme has been hailed as exemplar of collaborative practice with further progress being made to now develop a Personal Resilience scheme with a range of modular options to support the transforming organisation.

47. The Grade 6 and 7 Change Leadership Programme has been successfully delivered to more than 300 middle/senior managers.

48. The High Potential Programme in partnership with WIG (Whitehall and Industry Group) has received excellent feedback, with plans to rollout a further cohort in 2018, alongside a scheme for SEO/HEO officers. Discussions have also taken place to define our talented workers and develop succession plans, sitting alongside the guidance provided by the team on our annual nine box grid assessments.

49. The ONS Operational Delivery Profession (ODP) Career Analyst Pathway pilot is underway. A pilot group of 20 volunteers have been provided their learning plans and enrolled on Learning Academy analytical courses. Line managers and staff will have meetings with GSS Careers to go through the plans. At the start of the pilot all volunteers undertook a numerical reasoning assessment. The pilot cohort will be supported until December where there will be another assessment.

Learning Academy

50. The learning academy has delivered an extensive and varied programme of learning over the course of the year, focusing on themes such as equality, inclusion and well-being, leadership and management, project delivery and commercial (**Annex C).**

51. Digital learning has led on a series of innovative coding sessions (with content now being integrated into the BBC micro bit scheme) with more to come as well as partnering with DST in the Cloudera project rollout.

52. We have led on the introduction of ONS' own e-learning platform which currently hosts the revised Corporate Induction and Recruitment Assessors training.

53. The Academy has also delivered a broad range of technical and digital learning interventions (Introduction to R and Python, Advanced R and Python and Advanced Machine Learning) through a range of classroom based and e-learning options. There has also been the rollout of the Statistical short course programme and the continuing design of the Data Analytical learning pathway. The end of the RSS Higher has led to the use of distance learning via Southampton University and the Open University. A market engagement day has also helped to shape the future shape of accredited learning for analytical professionals across government.

54. We have started to design the Analytical Functions Strategy to bring professions together from across government departments and build a skilled workforce to meet the anticipated demands of the future. Part of the functions remit is to build analytical capability for all professions by developing career and learning pathways.

55. The UK's first Data Science Degree Apprenticeship (Level 6) standard was submitted to the Institute for Apprenticeships on Wednesday 25 October. We will be submitting a letter of support on behalf of the National Statistician highlighting the importance of this to the UK data and digital economy along with the BBC, Microsoft, Co-op, Lloyds, Barclays and The Bank of England. This puts the GSS Careers led project on timetable for the first apprentices being enrolled at the end of 2018.

56. The Learning Academy's offering is not limited to ONS, and over the past year they have delivered a number of events across the GSS to 350 delegates in London, Leeds, Newport, Northern Ireland and Scotland. These have included GSS induction and foundation events as well as specialised modules in statistics.

Pay and Reward

57. In the last year BSD has successfully negotiated the pay award for 2017/18 and changed the contractual arrangements for field staff to bring them in line with the rest of the office.

58. Working with the Trade Unions BSD has agreed a new collective bargaining framework. This will simplify consultation and implementation of relevant employment policies moving forward.

59. The new in year Reward and Recognition pilot scheme was launched in September. Since its launch 830 nominations have been made and the feedback has been positive.

60. A review of personal allowances from across ONS was undertaken to ensure fairness and probity in the distribution of resources. A framework is now in place to regularly monitor and approve allowances.

Performance Management

61. BSD has introduced a pilot programme to test new approaches to individual performance management, moving away from the traditional twice yearly conversations. A key part of this work has been the successful introduction of the Performance Management toolkit. The project is now entering its final stage of designing the final prototype performance management model.

62. Coupled with this we have launched the new integrated performance report using new tools and techniques. This is an exemplar model building towards real time management information and analytics.

Project and Programme Delivery

63. This year we designed and introduced the first integrated agile and conventional project management framework (AYDEE).

Recruitment

64. In recruitment, as of September this year, the team had successfully attracted and processed 15,700 applications and made 1,253 offers to candidates; an increase of 25 per cent compared with the previous year.

65. Our approach to recruitment has also been modified. Here we have introduced a new strengths-based approach, moving away from the conventional competency model. This has simplified and sophisticated the assessments and better meets our diversity aspirations.

66. In response to user feedback Customer First is reviewing the way it interacts across the office including recently launching a ‘drop-in’ desk as a pilot in Newport.

Workforce Transformation

67. A workforce plan for ONS has been published. This model has subsequently been used as a model by the Cabinet Office to guide other Government Departments.

68. We have implemented the TOM work, the planning cycle, integration of portfolio plans, alignment of plans to risk appetite and building an effective planning community.

Short term (6 month) BSD priorities

69. Providing there are no delays in the final stage of the refreshed Performance Management Model, we will introduce the new model for use in the reporting year 2018/19.

70. Following the introduction of the review framework for allowances we will be mirroring this framework to undertake a review of the pay policy in readiness for next year’s pay remit.

71. Other plans over the course of the next year include:

    i. Expanding our OD provision to accelerate the rate of change across the organisation including wider cultural change;

ii. Building the corporate analytics function providing more insightful and high impact analysis;
iii. Designing and implementing the next phase of the senior manager/leader change programme;
iv. Expanding the current Learning Academy offer to deepen digital, analytical, commercial and change management skills;
v. Introducing a fully fledged in year reward and recognition scheme;
vi. Repurposing the recruitment function to provide a faster, more straightforward and user focused service;
vii. Supporting the office to conduct a review of ONS transformation, thereby implementing recommendations from the Census Gateway Review; and
viii. Supporting the security function re-build to deliver the core recommendations of the Security Review.

Data Science Campus (DSC)

Recent Progress

72. The Data Science Campus (DSC) was successfully launched at the end of March 2017 with DSC staff moving from the Library to new state of the art facilities within in the newly built Data Science Campus.

73. Since December 2016 the number of FTE staff in the DSC has grown to 30, with five secondees placed in the Campus from across ONS. We expect the Campus team to reach 55 FTE by the end of the financial year, with 15 posts currently being recruited for (a mixture of data scientists, trainers and project delivery posts).

74. The Campus has already gained widespread recognition as a centre of growing excellence and capability and has developed partnerships with a number of Government Departments (e.g. Department for Environment, Food and Rural Affairs, Department for Culture, Media and Sport, and Welsh Government), Academic and Research Institutes (e.g. the Alan Turing Institute, Warwick, Cardiff, Lancaster, Swansea, and other Universities) and NSIs (e.g. Stats Netherlands, National Statistics Institute of Rwanda).

75. Outputs from the first set of Data Science Campus projects include:

i. *SDG indicator platform*. The Campus project to develop an open-source re-usable data visualisation tool for the Sustainable Development Goals was launched in November to visualise the full data release by the SDG team, see https://sustainabledevelopment-uk.github.io/. Early feedback on the tool from users and stakeholders is extremely positive.
ii. *Urban Forest* project – developing estimates of tree and greenery cover in urban areas by analysing street view images - we are in discussion with the Natural Capital team about publishing this as an Experimental Statistic output. The project code is being reused by the UN GlobalPulse team to explore similar issues in Indonesia.
iii. *An Employment Resilience Dashboard* produced for a Public Policy Analysis project, working together with the Cabinet Office, has been released to Local Authorities.
iv. *Superfast GDP estimates from VAT* project, working with the VAT team has developed early headline indications of the magnitude and movement of GDP. This has been presented by the VAT team at several conferences including the GSS Conference this month and the quarterly Economic Forum. Economic Statistics are considering including the indicator in a basket of rapid indicators.

76. As part of some of the Campus partnerships and in collaboration with the Learning Academy the DSC is delivering a programme of learning and capacity building through its two year apprenticeships in Data Analytics (14 apprentices in two cohorts); the MSc in Data Analytics delivered by Southampton, UCL and Oxford Brookes (the Campus is sponsoring six places from ONS, and five from across the GSS); the Government Data

Science Partnership (GDSP) and Data Accelerator (eight projects mentored by Campus data scientists) delivered in conjunction with the Government Digital Service (GDS); support for specific government departments building their Data Science Capability including MoJ and Defra; and internal ONS capability activities including the Data Science Academy (five projects mentored). These activities will help build analytical capability for the whole of government.

77. The Campus is also engaging with commercial organisations, to facilitate access to data and skills, and explore potential future sponsorship models. Engagement agreements have been signed with PwC, Barclays and Cognizant. Earlier this month the DSC joined up with Barclays to stage a two day Hackathon event, bringing together 50 analysts and economists from across ONS and Barclays, with senior support from both parties. This was a good milestone in the Campus's engagement with Barclaycard and has helped highlight to Barclays the public good value of their data. Follow-up activities with Barclays are developing access to granular payments data to underpin a proof-of-concept project to develop regional estimates of economic activity.

Short term (6 month) DSC priorities

78. In 2018 the DSC will continue to expand its research and capability work while enhancing its reputation as a world-class data science institute. It set five key strategic objectives for 2017/18:

    i. To be recognised as the Government hub for data science, helping to enhance the UK's reputation as a world leader;
    ii. To support the data science community across ONS and government;
    iii. To contribute to ONS strategic and corporate objectives through data science projects;
    iv. To strengthen cross-government and UK-wide data science capability; and
    v. To be an inspiring, innovative and inclusive place to work.

79. The DSC will develop new objectives and impact measures for 2018/19 to demonstrate the value of its programmes in delivering research outputs, developing data science methods, forming the partnerships that will provide access to new data sources and bring in other resources and growing data science skills in ONS and across the government analytical professions.

80. Over the next 6 months the DSC will continue to work closely with partners across government and more widely to carry out short projects looking into new and innovative methods to apply Data Science to questions of interest.

81. The first two Continuous Professional Development modules taken from the MSc in Data Analytics for Government, each with 15 places for ONS and GSS staff, will be delivered at the DSC in Newport by Oxford Brookes University.

82. A recent meeting with GDS has established the need for an even closer working relationship between GDS and ONS to build Data Science capability across government. This includes joint career pathways to bring together the aims of the data strand of the Digital, Data and Technology (DDaT) profession led by GDS and the aims of the new cross-government Analytical Function led by ONS.

83. We have bid to HMT as part of Bean funding part 2 for funding to build a purpose built Data Science Dome within the grounds of ONS Newport. We are continuing our negotiations with HMT on this. In parallel we continue to build partnerships with commercial organisations in order to look at possible sponsorship for the on-going development of the Dome should HMT turn down our request.

Medium term (6-12 month) priorities across Data Capability

Data Access Platform (DAP)

84. The Digital Economy Act received Royal Ascent in April 2017. Clauses on statistics and research will now allow ONS to unlock data sources and deliver timelier and more granular data and analysis to users.

85. Strategic planning discussions over the summer confirmed that, now the 2017 Census Test has been successfully completed, the Data Access Platform (DAP) is the most important driver of the future transformation of our statistical products and the decommissioning of legacy systems.

86. The DAP is the platform which will bring together services including new data, applications, methods and tools to enable a step change in cross-office research and experimentation into the use of new and diverse data sources.

87. In light of this we have re-prioritised and re-planned the delivery of the DAP using a systems design approach to bring the preceding Agile components together into a coherent development programme with two parallel tactical and strategic development work streams:

    i. DAP-Exploration (DAP-E) will be delivered in the short term and will improve access within ONS to new data sources for exploration, facilitating our statistical and research priorities. This capability is essential to allow new production approaches to be piloted; and
    ii. DAP-Strategic (DAP-S) will be delivered in the longer term and will incorporate new data architecture (such as the Address and Business Registers) and a new cross-office approach to data security and information assurance. As this platform matures, iteratively, over the next 6-12 months, it will become the principle production environment for all our work.

88. Delivery of DAP-E and DAP-S are essential to underpin the transformation and modernisation of ONS statistics and research starting with the immediate priorities set out by the delivery areas (Economic Statistics and PPP). The current timelines for the first phases of this work are provided in **Annex D.**

89. DAP-S will continue to iterate towards a full production platform over the remainder of the Spending Review. The balance of work between DAP-E and DAP-S will depend on the speed with which we work through the challenges of developing a new data architecture including 'security-by-design'; the rate at which the office develops new products on DAP-E using which data sources and which new methods; the systems performance we need to support these data and methods which can be determined only as trial analyses are configured and run; developments in the wider technology space (where new technologies continue to emerge) and the funding and resources which are made available to us. Core funding for DST has been crucial to its recent success. All Data Capability areas need core funding so they can plan strategically and execute efficiently.

Security

90. We are undertaking a full review of all our security policies and practices covering both physical, systems and data security.

91. At the end of 2016 we commissioned XMCS, an external consultancy, to perform an independent review of security. This was followed by a discovery exercise in June and July, which, together with the previous internal audit reports has identified security issues at both strategic and tactical levels from across ONS operations.

92. To address these security recommendations including removing various historical security silos and local approaches in different areas of the office we intend to develop

and embed a holistic secure-by-design approach across ONS. Our first step towards this has been to establish a Security Overhaul Project. Now under the leadership of the recently appointed Chief Security Officer, Andy Wall, the project sets out a thematic and prioritised approach to implement the required security changes needed to support ONS transformation. The current plans were endorsed by the Audit and Risk Assurance Committee at its November meeting and will be implemented over the next year. These plans are not covered in detail in this report.

Data Governance

93. In May, following agreement from the National Statistics Executive Group (NSEG), we established the Data Governance Committee (DGC). DGC, which reports to NSEG, is responsible for the development and application of policies and processes for all aspects of data governance within ONS and has oversight of the formal approval of data flows into and out of ONS. Its activities are split in to three key areas, Data Acquisition, Data Security and Data Access.

94. DGC activities to date include:

    i. Approving the terms of reference for the cross government accreditation panel for the research strand of the DEA;
    ii. Considering the accreditation of processors under the DEA;
    iii. Approving a policy for web scraping for the GSS;
    iv. Approving a renewed process for managing all new applications for a Ministerial Direction;
    v. Advising on a policy for the use of ONS data as a sampling frame for ad-hoc survey requests; and
    vi. Formalising escalation channels to the National Statistician's Data Ethics Advisory Committee (NSDEC).

95. DGC has also commissioned a review of data governance across ONS, to identify and where necessary, consolidate other data governance related activities in order to ensure consistency of strategic decision making.

96. Over the next year, the DGC will become better recognised and trusted across the wider statistics and research community, supervising arrangements for granting researcher access to ONS data, through new powers from the Digital Economy Act 2017.

97. In preparation for the implementation of the General Data Protection Regulation (GDPR) we will establish a Data Protection Team led by the Data Protection Officer. The team will lead a number of strands of work over the coming months to ensure that ONS is prepared for the 25 May 2018 commencement date. Activities will include providing detailed training to staff as required and general awareness training to all other staff. We will also be updating the information asset register in order to ensure currency of information as well as reviewing our exiting privacy notices.

Data Architecture and partnering with others

98. We are undertaking a full review of all our data policies and practices. Our current policies have grown organically over time with approaches to data security, access and usage varying in different areas across the office. Our intention is to simplify and rationalise all policies in line with the new data framework we have set out (**Annex E**).

99. Our medium term aspiration to combine multiple types of data for analytical purposes and to do so at scale brings with it a series of considerable challenges, around data classification and security and how data handling and access requirements change as data is combined in different ways for different analytical purposes. We have developed a Data Sensitivity Model (**Annex F**) which we are discussing with technical partners including Microsoft Research and MIT and which we will pilot in the DAP-S rationalising

our data classification processes as a first step towards automated, risk-based data handling.

100. Our advanced needs to combine and process multiple data types for analysis at scale mean we are fast approaching the forefront of technical capabilities in data systems and analytical techniques. To deliver our aspirations we must combine our own endeavors with those of others so we are, increasingly, working to build strong partnerships with leading technology companies, academics and across government.

101. As an example of reaching out to work with others, in October this year we hosted two data architecture workshops at the DSC in Newport. The first, for other government departments, which has led to our setting up a community of practice on data architecture. The second for the UN Global Working Group (GWG) on the Global Platform was part of the international work described below.

Capability, skills and transformation

102. Building capability and skills will continue to be a strong priority for us over the next twelve months. We very recently have ~200 users working on our new platforms but this is a minority of our staff. Although the Learning Academy is developing well and we can see pockets of capability growing across the office these current examples are sparse in the overall context of our staff numbers.

103. MDR Methodology will need to play a very strong role over the next twelve months, working across the office to build and share the capability to make use of data in new ways, developing methods to combine admin data with survey data and other data sources. The methods developing for the Admin Data Census, for example, need to be widely shared across the office rather than carried out in isolation.

104. Data Capability has now put the jigsaw pieces in place to help the office accelerate its use of new data sources. We are delivering the underlying services to enable real transformation and are here to provide support. The office can now raise its level of ambition and pace.

105. However, Data Capability needs more detailed visibility of how the production areas are planning to change the way they work. For example in each area: how many people do you want to train? What skills do you need them to build? Which of the legacy systems that we have yet to touch do you want rebuilt and by when? What is holding back your local transformation and how can we help?

International - UN Global Working Group on Big Data – Global Platform

106. The United Nations Statistical Commission (UNSC) agreed at its 45th session to create the Global Working Group (GWG) on Big Data for Official Statistics to further investigate the benefits and challenges of Big Data, including the potential for monitoring and reporting on the Sustainable Development Goals (SDGs). In this context, the GWG and the greater official statistical community recognise the need to adequately address issues pertaining to methodology, quality, technology, data access, legislation, privacy, management and finance, and provide adequate cost-benefit analyses on the use of Big Data.

107. In December 2016 the Deputy National Statistician for Data Capability was invited to chair the GWG Committee for the Global Platform. Over the last year the Committee has considered how, by building on the best practices of public and private Big Data initiatives, and offering technology infrastructure and a network for data innovation to the official statistical community, the Global Platform could address the needs for: (a) a global hub for official statisticians, data scientists and domain experts from the public and private sector to exchange ideas and methods for processing, analysing and visualising Big Data; (b) a global hub for storing Big Data, and related processing, analysing and visualising methodology, and services and applications for continuous development and

re-use; (c) a global hub for demonstrating the value of Big Data in better decision making through official statistics through pilots and case studies; and (d) a global resource hub for training materials and workshops on Big Data for capability building.

108. A small team in ONS has helped develop the strategy for the Global Platform working with the Committee and across three GWG GP workstreams: WS1-Business Case and Legal; WS2-Technical; and WS3-Communications and Stakeholder Engagement.

109. It is envisaged that global data collaboratives facilitated by the federated Global Platform will accommodate many different types of trusted data, trusted services and trusted applications and that through those means the global data collaborative, of trusted partners, should work towards:

i. Making it easy for all nations to gain value by participating in the federated global network platform;
ii. Progressively building of a federated global platform driven by use cases;
iii. Delivering a business model and a flexible, cloud based technology infrastructure to allow data , services and applications to be shared as a public good;
iv. Developing transparent partnership agreements with private and public sector organizations so that network partners contribute and derive value in a way which is individually sustainable for all stakeholders.

110. Support for this proposal was recently achieved by presenting the strategy and prototyping many components of the Global Platform and demonstrating these at the Big Data conference in Bogota earlier this month.

111. The next step for this work is to build towards gaining consensus at the UNSC in March 2018 that this programme of work should continue under the auspices of the United Nations.

Long term vision for the transformation of ONS, all statistical operations and the wider statistical system

112. What does success in 2021 look like?

i. Standard statistical outputs are fully automated, some are real-time.
ii. Completing final ever ‘physical’ Census with a 97 per cent on-line response.
iii. Desktop and mobile tools, for all staff, are best-in-class.
iv. Staff have more time to think and develop new ways of doing things (we are now implementing best in class AI and Machine learning) and spend little time on bureaucracy and process.
v. Staff are content with pay and working conditions – and proud to work for ONS.
vi. The Learning Academy delivering training across the whole of ONS and the GSS up skilling all.
vii. ONS led data infrastructure (e.g. Address and Business Registers) used across government to improve the quality of data and facilitating analysts.
viii. Realising the benefits of the Digital Economy Act for UK Statistics and Research, including for the Government Statistical Service and wider analytics function across Government. We will seek access and utilise new data sources held across government and beyond to support the transformation of statistics and research by ONS as the UK's national statistical institute, implement the Research strand of the DEA as the statutory accreditor, including the accreditation of researchers and projects from within the GSS and wider analytic community, and (with the consent of data providers) continue to provide valuable statistical services to government.
ix. We are considering the possibility of developing further Data Science Campus sites.
x. We are sharing data with NSIs across the world and working collaboratively on a global scale to better understand the world we inhabit.

113. What are the key risks to non-delivery of this vision?

i. Embedded cultural issues and attitudes which continue to hold us back.
My questions are where are the real incentives for individuals to change? Do we need more carrot or more stick across the office? To-date Data Capability has not exactly been under excessive pressure to deliver new data or new tools across the office?

ii. Statisticians may start to explore new data and methods with enthusiasm but get stuck in exploratory mode and not move things through to production
Can we remove the current cultural sanctity which seeks the perfect solution? How should we go about doing this?

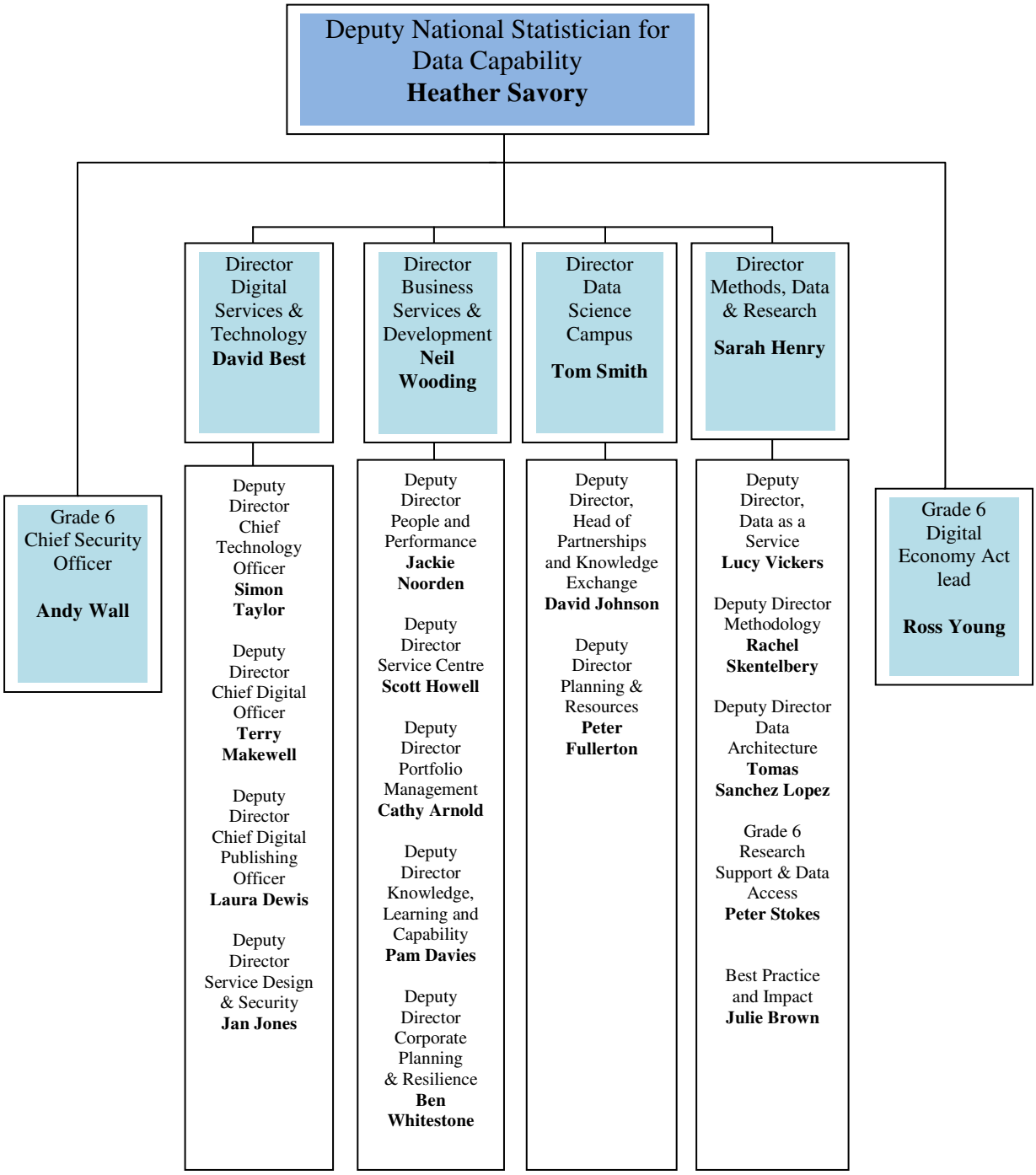
iii. Lack of resources – mainly financial
Even if we can't build enough capability we have interesting enough work and the ability to create a culture which will allow us to buy-in or borrow the skills we need.

Heather Savory, Director General for Data Capability, 23 November 2017

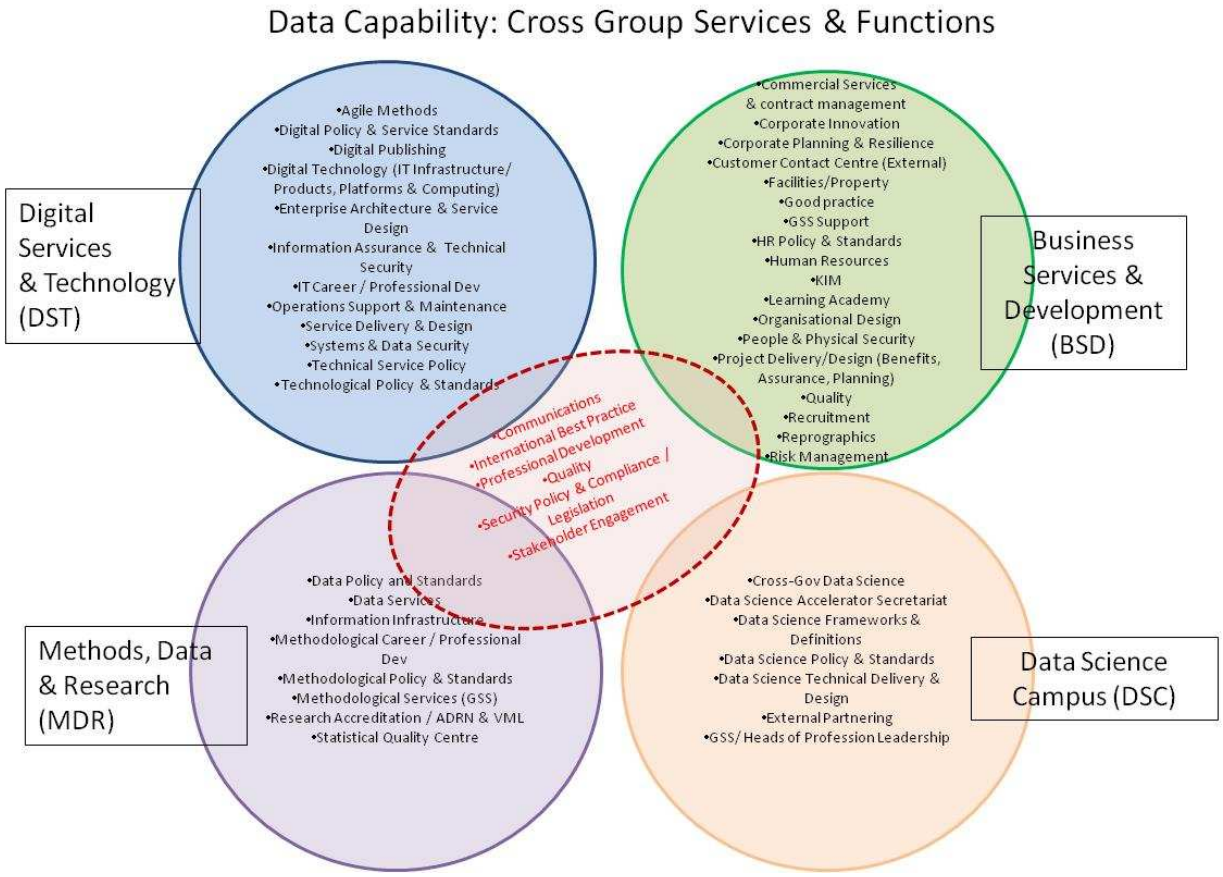
List of Annexes

Annex A Data Capability Group Organogram
Annex B Data Capability Services and Functions
Annex C Learning Academy metrics
Annex D Initial deployment timescales DAP-E and DAP-S
Annex E Data Framework
Annex F Data Sensitivity Framework

Annex A - Data Capability Group Organogram

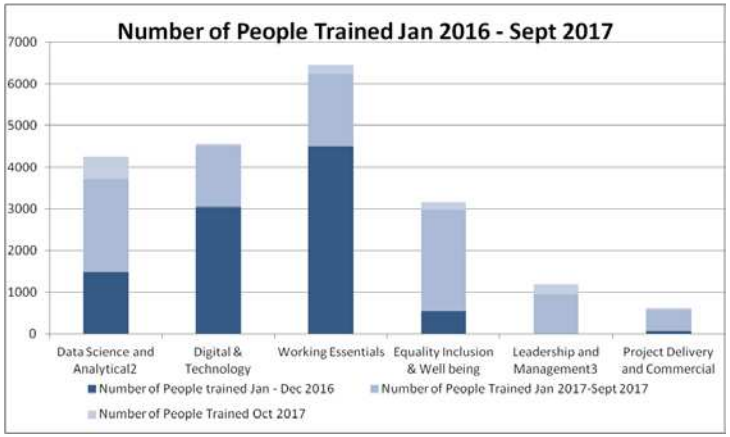


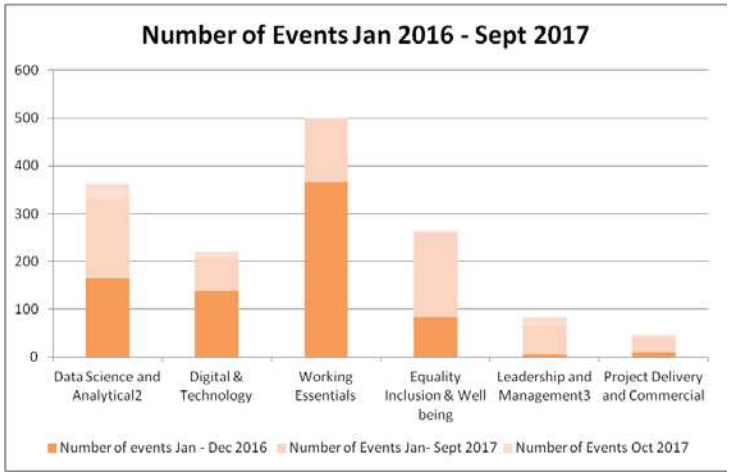
Annex B Data Capability Services



Annex C- Learning Academy Metrics

Strand	Number of People trained Jan - Dec 2016	Number of People Trained Jan 2017- Sept 2017	Number of People Trained Oct 2017	Number of events Jan - Dec 2016	Number of Events Jan- Sept 2017	Number of Events Oct 2017
Data Science and Analytical[2]	1476	2233	541	165	164	32
Digital & Technology	3043	1472	49	139	67	13
Working Essentials	4499	1744	198	366	129	6
Equality Inclusion & Well being	538	2438	183	83	175	6
Leadership and Management[3]	-	944	240	5	59	19
Project Delivery and Commercial	71	505	39	9	30	6
Total[1,4]	9627	9336	1250	767	624	82


Number of People Trained Jan 2016 - Sept 2017
7000
6000
5000
4000
3000
2000
1000
0
Data Science and Analytical2
Digital & Technology
Working Essentials
Equality Inclusion & Well being
Leadership and Management3
Project Delivery and Commercial
Number of People trained Jan - Dec 2016
Number of People Trained Jan 2017-Sept 2017
Number of People Trained Oct 2017


Number of Events Jan 2016 - Sept 2017
600
500
400
300
200
100
0
Data Science and Analytical2
Digital & Technology
Working Essentials
Equality Inclusion & Well being
Leadership and Management3
Project Delivery and Commercial
Number of events Jan - Dec 2016
Number of Events Jan- Sept 2017
Number of Events Oct 2017

Annex D – Initial deployment timescales DAP-E and DAP-S

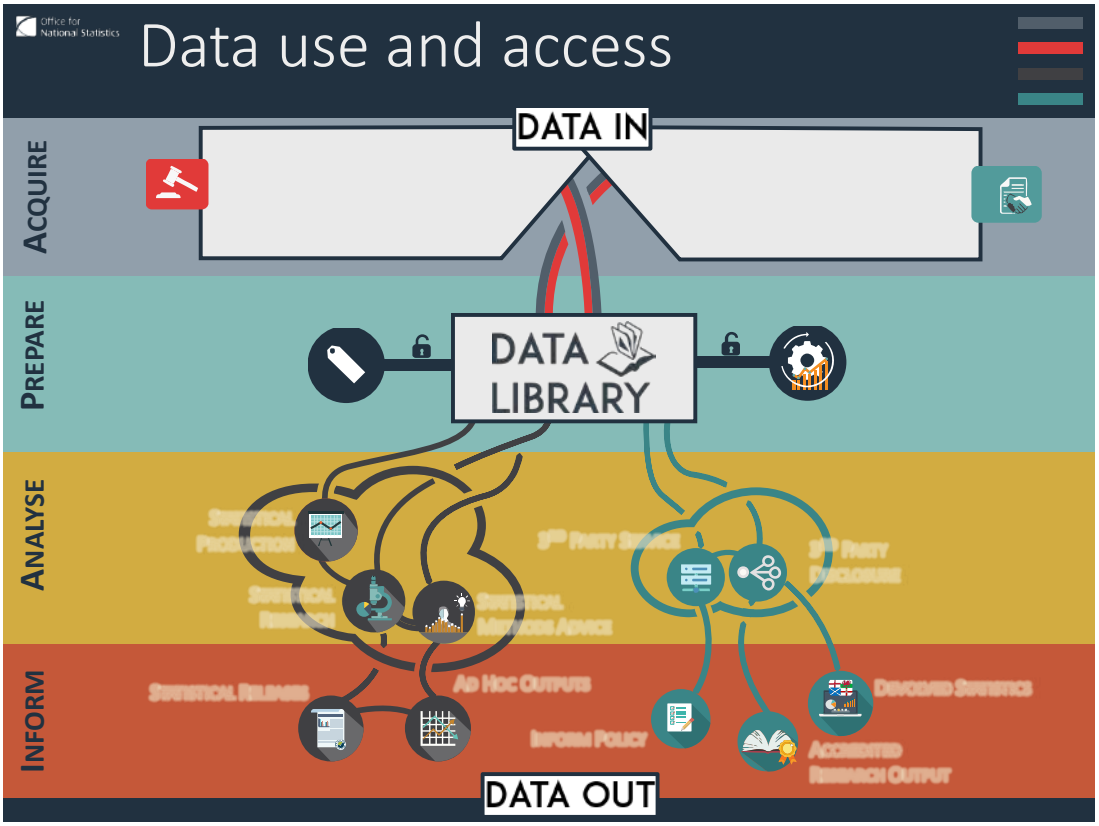
DAP – Exploration timeline

#	Milestone	Deadline
1	Resource agreed and in place	Eof Oct
2	Assurance requirements & onboarding process agreed	Eof Nov
3	Scope and ingestion process agreed	Eof Nov
4	Onboarding / ingestion process and schedule in place	Eof Dec
5	Training programme agreed	Mid Jan
6	Exploration environment ready for onboarding	Eof Jan

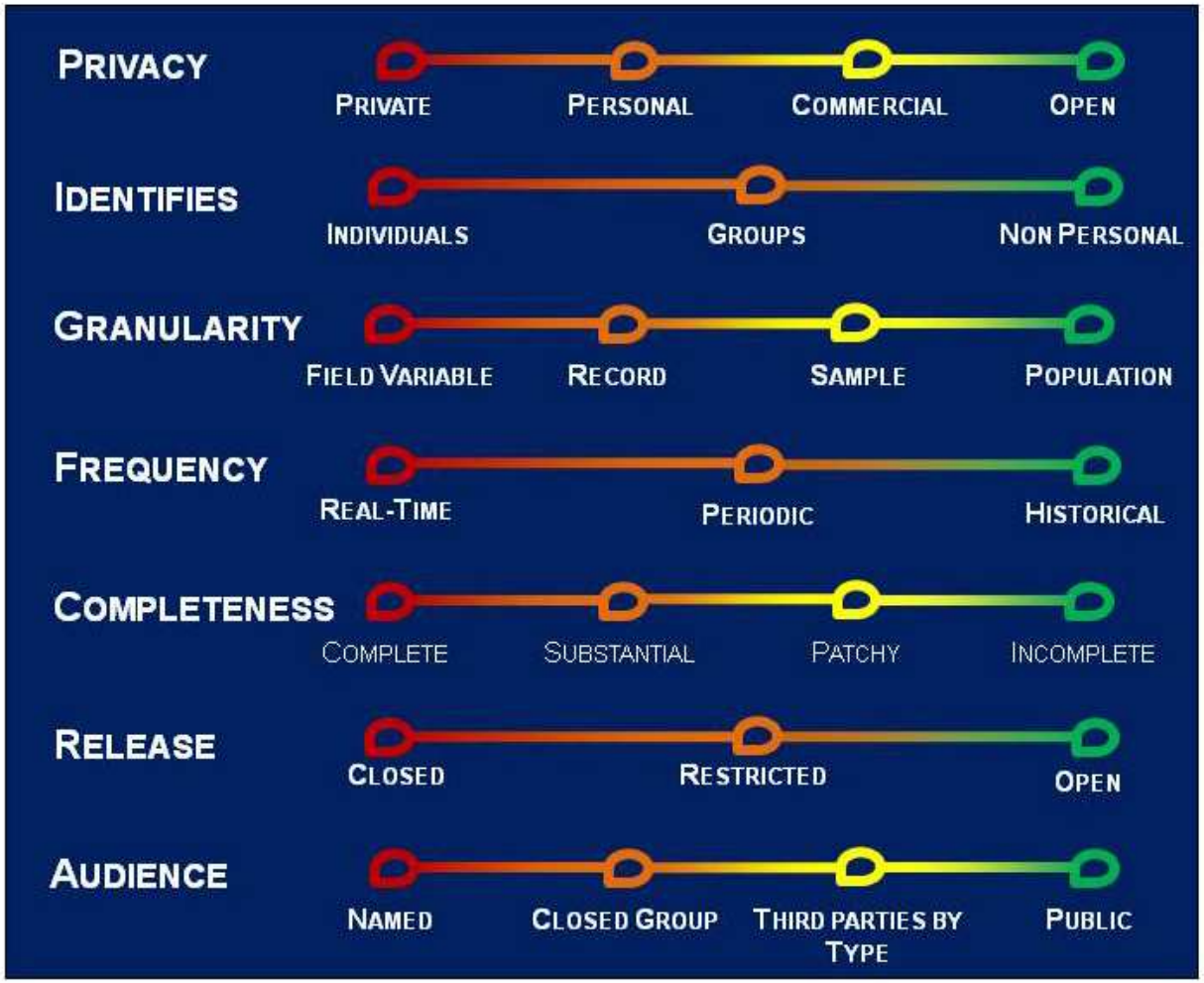
DAP - Strategic timeline

#	Milestone	Deadline
1	Resource agreed and in place	Eof Oct
2	Scope, datasets & methods use case determined	Mid Nov
3	Information assurance model determined	Eof Dec
4	Solution architecture, service design & tool selection finalized	Eof Dec
5	Data Model & Metadata determined	Mid Jan
6	Service framework designed	Eof Jan
7	Catalogues implemented	Mid Mar
8	Selected data implemented in data model & catalogues	Eof Mar
9	Services implemented	Eof Mar
10	Output generation implemented	Mid Apr
11	Final testing & validation, Plan for next release	Eof April

Annex E-ONS Data Framework



Annex F- ONS Data Sensitivity Framework



UK STATISTICS AUTHORITY

SA(17)52

Review of Security

Purpose

1. This paper provides the Authority Board with a progress update on the review of security across the organisation.

Recommendation

2. Members of the Authority Board are invited to:

   i. note the progress made on security as reported to the Audit and Risk Assurance Committee; and
   ii. consider and comment on the revised approach for the Security Overhaul Project, which will collectively address security through a single programme.

Background

3. ONS's structures and systems are transforming to meet the challenges of new data sources, technologies, statistical production and the Digital Economy Act 2017.

4. ONS security is well-established, reflecting the importance the organisation has always placed on data confidentiality. The Office's commitment to protecting personal and commercial information is as strong as ever.

5. XMCS, an external consultancy, was commissioned to perform an independent Review of Security. The recommendations of this review were discussed by the Audit and Risk Assurance Committee in April 2017. An important recommendation was a discovery exercise to inform ONS of specific security issues within the context of the Security Review. This identified strategic and tactical actions across ONS operations. The report on this exercise, together with the view of the Chief Security Officer was discussed by the Audit and Risk Assurance Committee in November 2017.

6. Progress has been made on the security issues identified by the Security Review, though this has not been as quickly as ONS hoped, due to a range of factors that were highlighted to the Audit and Risk Assurance Committee.

7. The Chief Security Officer presented a plan to implement the Security Overhaul Project. This aims to consolidate all the security work identified through the Review and Discovery work, together with his own findings. The key recommendation is a short exercise to create a formal security strategy to focus this work into a single programme, aligned to ONS business objectives.

8. The Audit and Risk Assurance Committee discussed the approach and have endorsed both the strategy and work consolidation. They have restated that security is a most important concern. In addition, they have also requested a workshop to explore more of the detailed security issues presented in the Security Review and Discovery Report.

The Security Overhaul Project

9. The Chief Security Officer proposes a thematic and prioritised approach to implement the required security changes needed to address the review recommendations and support ONS transformation.

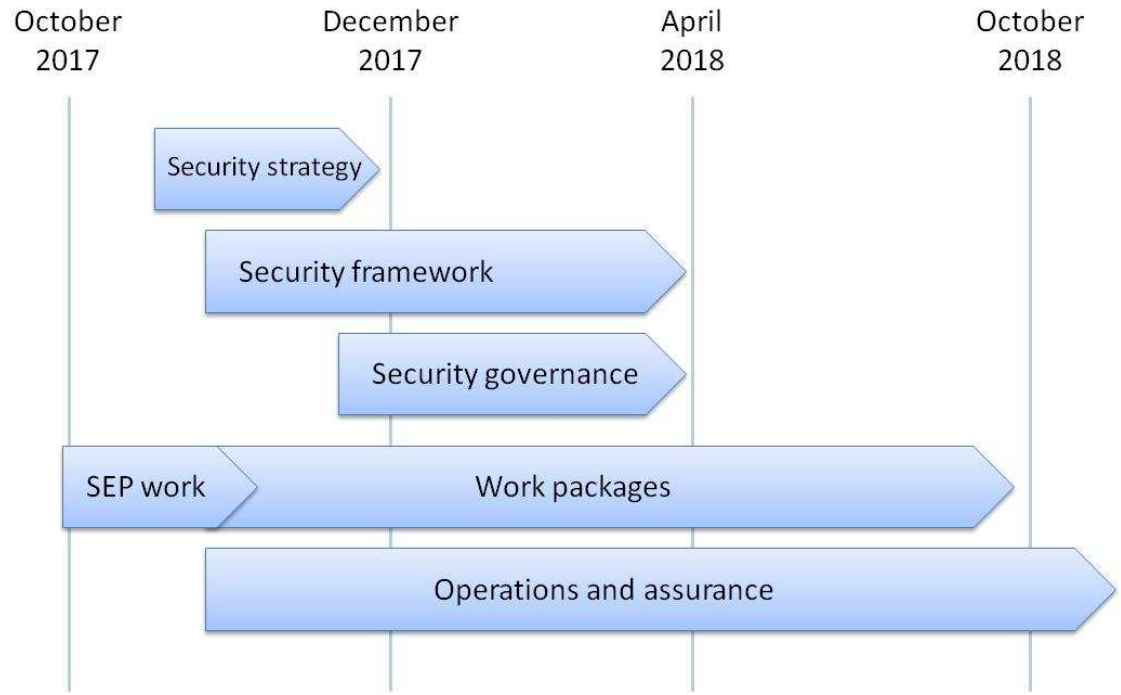
10. The approach will see the creation and delivery of a security strategy in December 2017 that sets out the vision for security which is designed to meet transformed business operations. This will include an organisational model for security and its operation within ONS.

11. The security strategy will highlight specific security requirements that need development and delivery. Those activities from the Security Review and Discovery work will be integrated into the work packages. It is expected that four themes of work will be required, with prioritised activity within and across the themes.

12. The proposed security themes to deliver the strategy include:

    i. Security framework (Govern and report) – work to create and deliver security principles, policies and processes; the threat model; risk management and risk appetite; baseline countermeasures;
    ii. Data management (Enable and control) – work to create and deliver data asset management including impact categorisation, sharing standards, handling standards, access models etc;
    iii. Organisational capability (Protect and assure) – work to create and deliver core operations capability including improved security service management, enhanced protective monitoring, vulnerability management, patching etc; and
    iv. Staff capability (Organise and educate) – work to create and deliver a new security target operating model with supported recruitment, training and development, increased staff security awareness, realignment of security activity across the directorates.

13. Timescales for the development of the strategy and follow on security work are outlined below.



Andy Wall, Chief Security Officer, 21 November 2017