

# UK STATISTICS AUTHORITY

## Minutes

Thursday 26 April 2018  
Boardroom, London

### **Present**

#### **UK Statistics Authority**

Sir David Norgrove (Chair)

Professor Sir Adrian Smith (Deputy Chair)

Mr Iain Bell

Professor David Hand

Professor Jonathan Haskel

Mr Ed Humpherson

Ms Sian Jones

Dr David Levy

Ms Nora Nanayakkara

Mr John Pullinger

### **Also in attendance**

Mr Jonathan Athow

Mr Nick Bateson (for item 10)

Mr Darren Bone (for item 10)

Mr Owen Brace

Mr Robert Bumpstead

Mr Joe Cuddeford

Ms Heather Savory

### **Apologies**

None

## **1. Apologies**

1.1 There were no apologies received.

## **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 22 March 2018 were agreed.

## **4. Report from the Authority Chair**

4.1 The Chair reported on his recent activities since the last meeting. The meeting noted the upcoming Economic Statistics Centre of Excellence conference which would be held at the Bank of England on 16-17 July.

## **5. Report from the Director General for Regulation [SA(18)20]**

5.1 Mr Humpherson provided an update on regulation activity since the last Board meeting, noting that:

- i. the Ministry of Housing, Communities and Local Government (MHCLG) had published analysis on the impact of immigration on house prices, following an intervention from the Office for Statistics Regulation (OSR);
- ii. the team was reviewing the quality of accident and emergency statistics in Scotland;
- iii. OSR had published recommendations about how the Department for Education should improve its approach to confidentiality and communication of the National Pupil Database;
- iv. fraud and computer misuse statistics produced by ONS had been confirmed as National Statistics; and
- v. following the national debate around plastic and the environment there had been increased interest specific statistics about these issues, including statistics about the number of plastic straws used.

## **6. Report from the Chief Executive: review of the Year [SA(18)21]**

6.1 Mr Pullinger introduced a report which provided an overview of 2017-18 to help guide finalisation of the Annual Report and set the scene for the work programme for the year ahead. The paper set out key achievements in economic statistics, population and public policy, and data capability. It also set out seven key areas of challenge and risk.

6.2 The Board welcomed the paper and stressed that it was important to celebrate the positive achievements. While the Board inevitably tended to focus its time on discussing challenges and risks, this was not to say it did not recognise that there was a lot to celebrate.

6.3 Turning to the risks, the following points were made in discussion.

- i. Workforce transformation was a big challenge. New metrics on the workforce would be provided to future meetings, including tracking contractors.
- ii. The pace of change was fast, and sometimes transformation could get ahead of management discipline to deliver the basics. But the alternative risk was that we were too tight and didn't let innovation happen.
- iii. It was difficult to get a sense of how productive the workforce was. Metrics could shed some light on this and it was also helpful for NEDs to have opportunities to visit ONS sites and see staff working.
- iv. Culture change was difficult and required real time and effort to be set aside.
- v. The internal audit programme should be aligned with the key risks.

## **7. Initial 'beyond 2020' discussion**

- 7.1 The Chair led a discussion on future strategy beyond the end of the Better Statistics, Better Decisions strategy.
- 7.2 It was suggested that ONS currently focussed on 'descriptive' statistics, which describe what has happened. There was an opportunity to move towards more actionable analysis, such as predictive analysis and modelling. The technology landscape was constantly changing; artificial intelligence and machine learning brought new opportunities. ONS was transforming from a factory producing descriptive statistics to become a professional services organisation delivering insight.
- 7.3 One way to think of the business was in terms of the products it produced. It was important to use every facet of new technology to develop the existing products, consider opportunities to create new products, and to drive product development based on what the consumer wants. In future as analysis became more integrated and inter-dependent across government, delivering insight would be an increasingly collaborative and cross-cutting activity.

## **8. Leading the GSS and the Analysis Function [SA(18)22]**

- 8.1 Mr Bell provided an update on the development of the Analysis Function across government and work to support the GSS.
- 8.2 The Analysis Function was a collaborative community, with experts in different professional fields. The term 'analysis' covered a very broad range of rigorous numerical work. There were different teams supporting the various professions and in respect of the GSS a range of teams in ONS and the Authority provided support and leadership.
- 8.3 The Board welcomed the update.

## **9. Census and data collection transformation update**

- 9.1 Mr Bell provided an update on the Census and Data Collection Transformation Programme.
- 9.2 The update covered the operational transformation of social surveys including the International Passenger Survey and business surveys; progress with the necessary research to make recommendations on the final topics for the Census which will provide the basis for a White Paper; progress with procurement and integration design of key services; and the status of plans to recruit a field-force of sufficient size to conduct the Census.
- 9.3 The Board further discussed the process for the development and sign-off of a White Paper setting out recommendations for the Census. It was agreed that an additional meeting of the Board would be scheduled in early June to provide additional time to consider these matters.

## **10. Managing contracts**

- 10.1 Mr Bateson and Mr Bone provided information on procurement via third-party contracts from requirement gathering through to placing the contracts and then managing performance.
- 10.2 The Board sought assurance on how confident the organisation was that sufficient checks and balances were in place to mitigate risks such as the failure of a large supplier. A number of mitigations were in place such as the use of fall back clauses and having a range of different suppliers.

**11. The experience of using VAT Data in National Accounts [SA(18)23]**

11.1 Mr Athow introduced a paper which provided an update on the use of VAT data in National Accounts to celebrate the success of this project and share lessons learnt from this work.

11.2 The Board welcomed the update and was encouraged by the positive learning this case study had demonstrated. It was noted that obtaining and using administrative data was still difficult and there were cultural challenges to overcome, but it was becoming easier.

**12. Authority Board self review of effectiveness**

12.1 Discussion of this item was deferred to the meeting of 28 June.

**13. Any other business**

13.1 There was no other business. The next meeting of the Authority Board would be arranged for the start of June, and then the Authority Board would meet again on Thursday 28 June 2018 at 9:15 in London.

## UK STATISTICS AUTHORITY

### *Agenda*

26 April 2018, 09:15 to 14:00

Boardroom, London

**Chair:** Sir David Norgrove

**Apologies:** None

#### **09:15 – 09:45: Non-Executive Session**

1 09:45-09:50 5 mins	Minutes and matters arising from previous meetings <ul style="list-style-type: none"><li>• Declarations of interest</li></ul>	Meeting of 22 March 2018
2 09:50-10:00 10 mins	Report from the Authority Chair	Oral report Sir David Norgrove
3 10:00-10:20 20 mins	Report from the Director General for Regulation	SA(18)20 Mr Ed Humpherson
4 10:20-10:50 30 mins	Report from the Chief Executive: review of the year	SA(18)21 Mr John Pullinger
5 10:50-11:30 40 mins	Initial 'beyond 2020' discussion	Discussion Sir David Norgrove
6 11:30-12:05 35 mins	Leading the GSS and the Analysis Function	SA(18)22 Mr Iain Bell
7 12:05-12:30 25 mins	Census and data collection transformation update	Discussion Mr Iain Bell
8 12:30-12:50 20 mins	Managing contracts	Discussion Mr Nick Bateson and Mr Darren Bone

#### **12:50 – 13:20: Lunch**

9 13:20-13:35 15 mins	Authority Board self review of effectiveness	Discussion Sir David Norgrove
10 13:35-13:55 20 mins	The experience of using VAT data in National Accounts	SA(18)23 Mr Jonathan Athow
11 13:55-14:00 5 mins	Any other business	

**Next meeting: 28 June 2018, London, 09:15 to 14:00**



*Report from the Director General for Regulation*

**Purpose**

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

**Recommendations**

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

**Discussion**

3. Key activities since the last Board meeting include:

- i. **Dominic Raab's statements on housing and migration:** In an interview with the Sunday Times, published on 8 April, the Housing Minister Dominic Raab said that "Based on the ONS data, the advice to me from the department is that in the last 25 years we have seen immigration put house prices up by something like 20%". This statement drew on unpublished internal analysis.

We contacted the Ministry of Housing, Communities and Local Government (MHCLG), and, through a series of discussions in the week of 9 April, encouraged them to make the analysis publicly available.

On Friday 13 April, MHCLG published the analysis, and I wrote to the Permanent Secretary to welcome this. I am also arranging a follow up meeting with her to discuss lessons learned.

This was an effective intervention that: secured publication of the analysis; highlighted the importance of equality of access; generated positive media coverage; and enhanced our reputation with senior decision makers in MHCLG.

- ii. **Accident and Emergency Statistics in Scotland:** We have been reviewing the quality of Accident and Emergency Statistics in Scotland following the emergence of data recording problems in NHS Lothian. We completed our review at the end of March and concluded that the Scottish statistics can retain their National Statistics status, but that we expect, within 3 months, a series of improvements to the quality assurance processes.
- iii. **Health and Care Statistics in England:** We published a short report confirming our decision to shift away from convening producers. We are content to leave this facilitation and leadership role with the producers themselves. We will continue to monitor and comment on the production and use of health and care statistics. In that capacity, I have been discussing improvements to the Accident and Emergency Statistics for England with the CEO of NHS Improvement and the President of the Royal College of Emergency Medicine.
- iv. **National Pupil Database:** We published our recommendations to DFE on how they need to improve their approach to confidentiality and communication of the National Pupil Database, and DFE are starting to implement our recommendations. We also met the Nuffield Foundation to discuss data ethics and governance more broadly, as the Foundation launches the Ada Lovelace Institute.
- v. **Fraud statistics:** We confirmed the designation of the Fraud and Computer Misuse Statistics, produced by ONS, as a National Statistic in March. This confirmation, which included positive feedback on the approach taken by the ONS team, provided an opportunity to signal to ONS the positive aspects of the regulatory role.

- vi. **Code of Practice:** We have conducted a series of workshops across a range of Departments, including for analysts in Defra and DFT, and 8 workshops and a stakeholder event in Belfast.
  - vii. **Business Plan:** We aim to publish the Business Plan at the end of April. An updated version has been provided to the Board for comment, including a 'plan on a page' summary.
4. John Pullinger has provided a review of the year for this month's Board. Rather than provide a parallel review for the OSR perspective for this month's Board, I propose to submit a short review to the June Regulation Committee for discussion. This review will update the Annual Review of 2017 which we published in December 2017.
  5. The main challenges continue to be:
    - i. Supporting the Code roll-out: While the roll-out is as much the responsibility of the GSS as it is for my team, we are happy to support the roll-out by presenting at other people's events.
    - ii. Developing a clear regulatory stance on data governance and data ethics.
  6. The dashboard summary of regulatory activities is at **Annex A**.

**Ed Humpherson, Director General for Regulation, 19 April 2018**

#### **List of Annexes**

**Annex A      Regulatory Activities**

## Regulatory Activities April 2018

Economy	Business, industry, energy and trade	Health and social care	Crime and justice
<ul style="list-style-type: none"> <li>The findings of ONS's Regional Gross Value Added (Balanced Estimates) assessment are drafted in a report for presentation to Regulation Committee in May</li> <li>HM Treasury agrees to identify NHS spending separately from total health spending in PESA from July 2018</li> <li>Project closure on 2015 work on the productivity puzzle and 2016 work on statistics about city regions</li> </ul>	<ul style="list-style-type: none"> <li><b>UK Trade:</b> Regulatory Committee requested further quantification of Trade Asymmetries, particularly on the US/UK imbalance to address the issue of comparative advantage (dual surplus positions reported on US and UK Trade in Services accounts). ONS asked ESCoE to assist.</li> <li><b>Construction Output and Prices statistics:</b> Case discussed at March Regulatory Committee. ONS are aiming to publish analytical work covering the issues of revision bias and modelling of construction new orders data by the end of May 2018. Regulatory Committee were concerned that this work will not be completed in time for June Committee, given the time it had taken to make the initial case. ESCoE have been asked to assist.</li> </ul>	<ul style="list-style-type: none"> <li><b>Assessments:</b> Undertaking assessments of ONS's cancer survival &amp; avoidable mortality statistics.</li> <li><b>Systemic review:</b> Published report summarising activities to date. Progress towards improving public value of health statistics in England.</li> <li><b>Casework:</b> Published regulation Blog on our experience of recent casework on mental health statistics.</li> <li><b>Forward focus:</b> Domain plans for 2018/19 will focus on social care, urgent and emergency care statistics and mental health statistics.</li> </ul>	<ul style="list-style-type: none"> <li><b>Crime:</b> Ongoing engagement with ONS about their presentation of crime statistics; latest inspection reports show signs of improvement in previously poor performing forces' crime recording.</li> <li><b>Compliance:</b> Beginning staged compliance checks of Northern Ireland Crime Survey</li> <li><b>Justice:</b> Preparing public statement on systemic review of justice statistics</li> <li><b>Casework:</b> Published response from the Chair on statements about police funding in England &amp; Wales. Home Office has accepted offer of support from GPT for new bulletin.</li> </ul>
Labour market	Housing, planning and local services	Children, education and skills	Culture and identity
<ul style="list-style-type: none"> <li><b>Income/Earnings:</b> Published letter to ONS on progress and plans for next phase of Income and Earnings review. Scheduled meeting with stakeholders from ONS, HMRC and DWP in early June.</li> <li><b>Casework:</b> Published letter in response to DWP statements on Universal Credit.</li> <li><b>Other activities:</b> Published letters on de-designation of Northern Ireland Claimant Count statistics, and improvements to DWP benefit sanctions statistics.</li> </ul>	<ul style="list-style-type: none"> <li><b>Assessments:</b> Evidence review meeting for Welsh Housing Conditions Survey assessment on 11th April. User interviews, to take place in May/June. Follow-up with producers of NI Housing Conditions Survey. Currently drafting letter confirming National Statistics designation.</li> <li><b>Casework:</b> Published letter welcoming MHCLG analysis that underpinned a statement by the Minister of State for Housing and Planning on the impact of immigration on house prices, this attracted wide media attention. Responding to a complaint about a Local Authority's presentation of increases in council tax.</li> <li><b>Compliance Checks:</b> Meeting with statisticians in MHCLG on 18 April discussing findings from our compliance checks of new build dwellings, net additional dwellings, affordable housing supply &amp; dwelling stock statistics</li> <li><b>Systemic reviews:</b> Continued dialogue with ONS about collaborative work across GSS to improve housing statistics. Expecting action plan in late April 2018.</li> </ul>	<ul style="list-style-type: none"> <li><b>Innovation Systemic Review:</b> Review to report as a series of web postings, beginning end of April.</li> <li><b>Skills Systemic Review:</b> Initial research and user engagement ongoing to shape scope of longer term project.</li> </ul>	<ul style="list-style-type: none"> <li><b>Assessments:</b> Assessment of the DCMS Community Life Survey is progressing. Currently working on draft assessment report with a view to presenting it to the June Regulation Committee. Assessment of DCMS Economic Estimates is currently at the stage of collecting user feedback.</li> </ul>
Population	Travel, transport and tourism	Security, defence and intl relations	Agriculture and environment
<ul style="list-style-type: none"> <li><b>Systemic review:</b> Monitoring migration roundtable actions by producers</li> <li><b>Compliance checks:</b> Home Office immigration statistics check paused until May.</li> </ul>	<ul style="list-style-type: none"> <li><b>Compliance check:</b> Reviewed Dft's Port Freight statistics.</li> </ul>	<ul style="list-style-type: none"> <li><b>Casework:</b> Letter went out to Permanent Secretary, DfID regarding complaint over misleading statement for department's pledge for aid funding.</li> </ul>	<ul style="list-style-type: none"> <li>No significant activity</li> </ul>



***Chief Executive's Report: Review of 2017-18***

**Purpose**

1. This report provides the Board with an overview of 2017-18 to help guide finalisation of the Annual Report and set the scene for the work programme for the year ahead.

**Summary**

2. This year was the third year for implementation of the Better Statistics: Better Decisions strategy. From the outset, we had envisaged five stages of implementation, each building on the other. The first year was primarily about leadership - building the leadership team and developing the relationships needed with partner organisations. The second year the focus turned to finance - getting clarity about the resources available, notably through the 2015 Spending Review and subsequent funding from Charlie Bean's review of economic statistics, and improving our financial competence.
3. This third year was about technology - building on early progress made with the website and our IT sourcing, we have delivered on the promise of the Data Science Campus and seen enactment of important provisions in the Digital Economy Act. We have also made significant progress with improving the technology available to staff (especially field staff) and moved off long running, expensive and high risk legacy systems (such as Model 204).
4. There is still work to do on leadership, finance and technology but we are now on a much firmer footing as we move into the fourth phase of the strategy. Now the focus is on our staff, their skills and how we work together to maximise our collective contribution. We are on track to complete the final stage of this period of radical change in our three priority areas: economic statistics, contribution to public policy (including through the census and other data collections) and data capability (technology and skills) in year five, ready for the next Spending Review period.
5. Critical to our success will be how we manage challenges and risks notably on rising demand, communications, financial management, security, data protection, workforce transformation and benefits realisation.

**Review of the year**

6. The top priority in our strategy is to deliver a statistical service to help with decisions about the economy. When the strategy was initiated this was a major task which has been heightened following the Bean review and preparations for Brexit. Key achievements in the last year have been:
  - i. Incorporation of VAT data into the national accounts (important in itself and signalling a future drawing more heavily on administrative sources of data).
  - ii. Improvements in prices statistics (including reaccreditation of the CPIH measure as a National Statistic and publication of a new Household Costs Index).
  - iii. Improvements in productivity statistics with a greatly expanded range and depth of analysis.
  - iv. Improvements in trade statistics, including understanding of asymmetries (although we have not yet achieved reaccreditation as a National Statistic).
  - v. Better measurement of construction (although we have not yet achieved reaccreditation as a National Statistic).
  - vi. Full operation of the Economic Statistics Centre of Excellence.

7. The second priority in our strategy has been to improve the contribution we make to public policy, including through the census. Key achievements in the last year have been:
  - i. Stronger working across the GSS on topics including migration, health and crime and justice.
  - ii. Significant innovations in use of data in important policy areas including race disparities (Cabinet Office in support of Prime Minister's initiative), housing (DCLG, especially following the Grenfell fire), education (DfE utilising longitudinal outcomes data and developing school performance tables), justice (use of data science to deliver new insights) and tax collection (HMRC predictive analytics and use of the real time information data from the PAYE system).
  - iii. Enhancement of impact of statistics in devolved administrations, notably in Scotland in support of the Fiscal Commission and Northern Ireland to help assess trade flows.
  - iv. Richer analysis of migration, including on student migration.
  - v. Better crime statistics, especially on violent crime, abuse and cyber crime.
  - vi. A new dashboard of sustainable development indicators.
  - vii. Meeting our target for online business surveys.
  - viii. A successful test for the 2021 census.
8. The third priority in our strategy is to enhance data capability. Key achievements this year have been:
  - i. In its first year the Data Science Campus is already making a major contribution to the strategy.
  - ii. Royal Assent to the Digital Economy Act, giving the opportunity to access a much wider range of data to serve the public good.
  - iii. Significant improvements to the technology available to staff, including field staff
  - iv. Moving off legacy systems such as Model 204.
  - v. Over 100 people signed up to apprenticeship schemes including through our data analytics apprentice scheme.
  - vi. The highest level of staff engagement since the establishment of the Authority.
9. There is a lot here to celebrate in the areas we identified as priorities at the outset of the strategy. The last year has also seen the end of pre-release access to ONS statistics and the establishment of the Government Analysis Function. However, it has not all been plain sailing. Key areas of challenge and risk during the year have been:
  - i. Increase in demand arising from Brexit and other policy imperatives - this has seen even the radical requirements in the strategy for faster, more fine grained and more relevant statistics exceeded, resulting in a need to up the pace of transformation and make good choices on priorities.
  - ii. Communication of statistics - the bar here has been raised by the complexity of the external environment.
  - iii. Financial capability - we have made significant improvements over the last few years but are now setting higher aspirations in order to meet business goals.
  - iv. Security - the levels of threat have been rising and we have had to respond.
  - v. Data protection - the Digital Economy Act powers coupled with enactment of a new regime (GDPR) have called for wholesale review of our policies and practices.
  - vi. Workforce transformation - our strategy requires a substantial shift in job roles across our workforce. This requires us to improve management, behaviours and learning opportunities at all levels.
  - vii. Benefits realisation - our biggest programme is the Census and Data Collection Transformation Programme. We are working through changes designed to maximise our prospects for successful benefits realisation. This has created some tension in the short run.

**Conclusion**

10. The last year has been a pivotal year in the delivery of the strategy. We have kept on track despite many challenges. If we can keep our focus and manage risks well, I believe we can be confident of a successful year ahead.

**John Pullinger, 19 April 2018**



***Supporting Decision-makers in Government: Mobilising the Analysis Function and the Government Statistical Service***

**Purpose**

1. The successful delivery of Better Statistics, Better Decisions requires us to work across professions and departments. This year, we have taken some major steps to mobilise this, so we can:
  - i. deliver joined-up, user-led statistics across departments, in line with the new Code of Practice;
  - ii. support Heads of Profession who are at the front-line of trust in statistics. As NatCen research showed, the biggest gap is not in trust in the GSS products, but trust in how ministers and journalists are using them; and
  - iii. provide better joined-up evidence to decision makers across analytical functions and departments so that we have the right capability in place to support the high levels of demand of senior decision-makers.
2. The paper sets out the work done to support the National Statistician in creating an Analysis Function and the work we are undertaking across the GSS to support Better Statistics, Better Decisions.

**Recommendation**

3. Members of the Authority Board are invited to:
  - i. note the work undertaken so far and next steps; and
  - ii. advise on what else we could be doing to provide support across Government.

**Background**

*What are the problems we are trying to solve?*

4. There are a range of issues which make it more difficult for decision-makers to access the evidence they need.
5. Firstly, we have brigaded ourselves by professions which makes sense to us but for those delivering policy and front-line operations makes little sense as from their perspective they need analysis. Decision-makers don't need to know which flavour of analyst they need or why. To them the nuances of the skills of an Operational Researcher vs a Statistician are not important, simply that they need evidence.
6. Across the range of analytical professions, we often lack the capacity and/or capability to have the desired impact. We need to ensure we are recruiting, developing and promoting the skills we need to support decision-makers. The appetite at senior levels is huge and we need to be ready to meet it.
7. Our strategy for Better Statistics, Better Decisions and the revised Code of Practice both mean we need to join-up across Government to deliver statistical products that meet user needs. This is felt most keenly in social policy where we have to work in partnership to deliver, but is true across many areas.
8. Finally, we need to recognise that Statistics Heads of Profession are often at the front-line of Trust in Statistics. As NatCen showed, 78% of respondents thought official statistics were accurate. But, only 26% thought Government presents official statistics honestly when talking about policies. This is where many issues of trust are won and lost. It needs to be cherished valued and brought up to the standard of the best.

### Where are we at?

9. As you would expect, it is a mixed picture across Government with some Departments excelling and others lagging well behind. Some Departments are good at joining up across analytical professions but poor at fact-checking or working across Government. Very few are strong across the piece.
10. Until recently ONS have provided support in some areas, but there has been no coherent offer for supporting delivery. The initiatives described here have landed initially well, but need ongoing focus to ensure successful delivery.

### **The Analysis Function**

11. The Civil Service Reform plan, led by Chief Executive John Manzoni, is strengthening Professions and Functions. Functions work horizontally across government so encourage collaboration across departmental boundaries to successfully deliver, rather than in vertical departmental silos. Actively contributing to this agenda raises the profile of the GSS and analytical standards at Civil Service Board and Civil Service People Board level.
12. The National Statistician and other Heads of Professions, supported by the GSS Careers Team in ONS and the GESR team in HMT, established the Analysis Function at the end of 2017 by bringing together the leaders of seven professions and the Civil Service Chief People Officer, Rupert McNeil, to agree on a strategy and priorities. The Function's vision states "Analysis, research and evidence helps make better decisions to improve outcomes for the UK". This recognizes the commonality across all the professions' strategies, including Better Statistics, Better Decisions. The strategy sets out an objective to produce a common government analytical standard which is easy to access and follow for analysts and non-analysts. This is then supported by four skills objectives, shown below. Progress on these objectives is provided in **Annex A**.
  - i. Learning and Development building capability across the Function for allied Functions and professions.
  - ii. To engage partner Functions to increase the integration of analysis and radically improve Civil Service capability in Analysis and Data Science.
  - iii. To strengthen the Function's management models and career framework to support multi-disciplinary teams while building analytical specialist as well as leadership roles.
  - iv. To develop a supply of talent which delivers the Civil Service Leadership and Diversity objectives.

### **Mobilising the GSS**

13. The Deputy National Statisticians for Population and Public Policy and Data Capability are supporting John Pullinger by working to mobilise the GSS to deliver. To achieve this, we have for the first time articulated the "offer" across ONS to support the GSS to deliver the five dimensions of Better Statistics, Better Decisions.
14. The key actions we have taken are:
  - i. To focus Statistics Heads of Profession meetings on the full responsibilities of Heads of Profession and begin to discuss how we work together to support Better Statistics, Better Decisions;
  - ii. Opened the debate up to recognise their challenges around fact-checking; and
  - iii. Articulated our offer and begun discussing how it can be a deal between ONS and Departments to deliver Better Statistics, Better Decisions. Effectively this is asking Departments to step-up and collaborate fully on key areas. Too many viewed collaboration as being ONS supporting them to deliver their agenda.

15. HoPs have, on the whole welcomed this change but we now need to bed it in across the GSS. The proof will be on some of the more challenging collaborations over the next year.

*Can you take the horse to water?*

16. At the very highest levels of the Civil Service, the demand for analysis is way beyond what can be delivered. However, this often does not translate into day-to-day commissions. Often this relates to the capability of the policy profession of knowing they need help. We are working with the policy profession to improve their understanding and application of statistics through our 'ten things you need to know about statistics' and 'opening up data visualization to policy' training courses as well as helping them assess their own statistical capabilities through our 'ten self assessment statistics questions' module which can help them identify knowledge gaps.

*What's next?*

17. These initiatives are all in their early stages but are designed to bring people together to deliver more evidence-based decision-making. Over the next year our focus is on bedding these in and working with others to ensure we deliver.

**Iain Bell, Deputy National Statistician; Julie Stanborough, Best Practice and Impact; and Gareth Clancy, GSS Careers Team, 19 April 2018**

**List of Annexes**

**Annex A      Progress on Analysis Function skills objectives**



## Annex A Progress on Analysis Function skills objectives

### Analysis Function

1. This note provides an overview of the Analysis Function Strategy, responsibilities for the delivery of the standard and the skills objectives which support the strategy.

### Timing

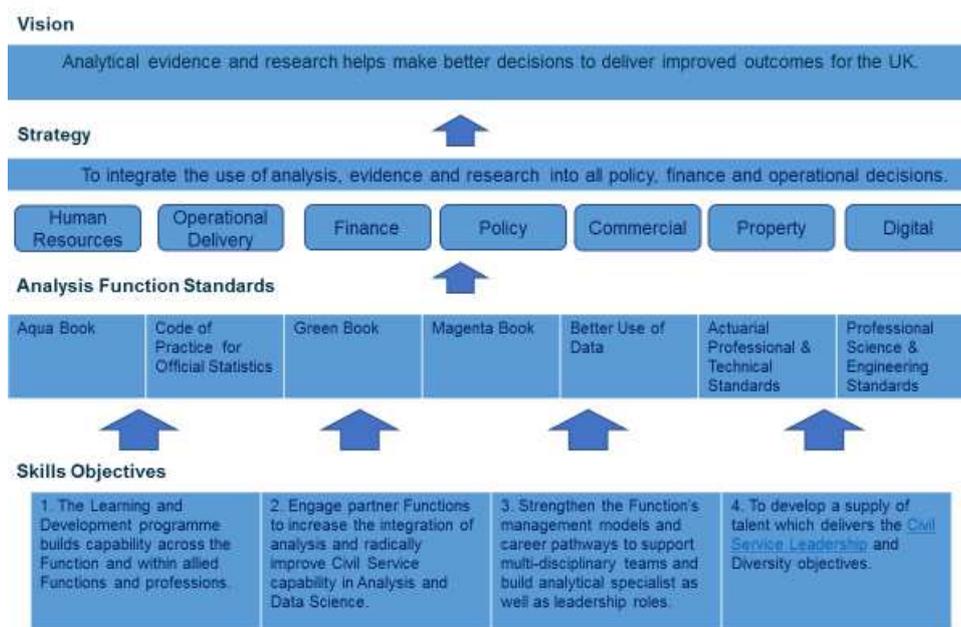
2. The next Analysis Function Board is on 14 May. Related Functions, Digital and Finance, will produce their first published draft of their standards for user testing and feedback by October 2018.

### Recommendation

3. Feedback on the Analysis Function objectives and how they support the Authority Board's own objectives is welcome.

### Analysis Function Strategy Overview

4. The Analysis Function Strategy is summarised in the diagram below. The Strategy will launch following the Analysis Function Board on 14<sup>th</sup> May.



### Developing a Cross Government Analysis Function Standard

5. A Function standard sets out the expectations of a Function and of other Functions in the delivery of a service. It demonstrates accountability, responsibility, governance and best practice. It is not a legal document but will contain mandatory requirements to meet desired outcomes/standards. The interaction between Function standards is therefore important.
6. The Government Economics and Social Research team are leading on behalf of the Analysis Function on the production of the standard. A first draft of the standard is scheduled for soft launch between October 2018 and January 2019. Finance and Digital have initial plans to soft launch between July and October 2018. It will be important to work with them to ensure consistency between the standards and clear accountability and responsibility.

### Next Steps for Analysis Function Objectives

7. The Analysis Function strategy articulates four skills objectives, to improve standards across government.
  - i. Learning and Development building capability across the Function and for allied Functions/professions. The GSS is recruiting so it can lead the coordination of sharing best practice across professions, working with the other profession's teams;
  - ii. To engage partner Functions to increase the integration of analysis and radically improve Civil Service capability in **Analysis and Data Science**. GSS Careers have set up a SCS Leadership Academy course across government to encourage the integration of analysis, supported by a multi-disciplinary SCS analytical team. The Data Science Campus and DDAT are also providing learning across government;
  - iii. To strengthen the Function's management models and **career framework** to support multi-disciplinary teams, while building analytical specialist as well as leadership roles. GSS Careers have led the creation of the first career framework linking the analytical professions', and is also leading the Analysis Function input into the new Civil Service Careers attraction strategy; and
  - iv. To develop a supply of **talent** which delivers the Civil Service **Leadership and Diversity** objectives. The Government Economics and Social Research team has taken a lead on building a picture of analytical talent through the Talent Board. Government Science and Engineering are working with the GSS to build an action plan following the Analysis Function Diversity survey conducted by GSS Careers.

*The experience of using VAT data in National Accounts***Purpose**

1. This paper updates the Board on the use of VAT data in National Accounts to celebrate the success of this project and share lessons learnt from this work.

**Recommendations**

2. Members of the Authority Board are invited to:
  - i. note the content of this report; and
  - ii. discuss what we can learn from this experience

**Background**

3. ONS used Value Added Tax (VAT) data from 630,000 businesses directly within National Accounts estimates published 22 December 2017 replacing the information we currently receive from 8,200 questionnaires for small and medium size businesses. This represented a significant advance in the transformation of National Accounts and short-term economic indicators.
4. One of the key features of this development project was the use of multidisciplinary teams successfully bringing together software engineers, data scientists, technical leads, methodologists, project management and business area subject matter experts together to create and validate methods and processes. The scope of the project was defined as a minimum viable product. This assisted in providing a definitive set of final deliverables which would allow ONS to prove the concept that VAT data could be successfully used alongside survey data within National Accounts and provide approaches and solutions for other projects. It was comprised of three distinct workstreams:
  - i. **Workstream 1: Statistical Processing Platform (SPP) – VAT [alpha]**. This workstream was comprised of a team of IT professionals from the Digital Services and Technology (DST) directorate. Its focus was to build a prototype version of the office's planned SPP platform which would form the central part of the new Enterprise Architecture (EA). This platform would then be used to process unit level VAT data from HMRC into aggregate level datasets which could then be fed into Economic Statistics National Accounts CORD<sup>1</sup> system.
  - ii. **Workstream 2: CORD Building Block Development**. This workstream sat within Economic Statistics Group (ESG) and focused on building the functionality required to accept VAT data into the CORD system as well as the methodological changes needed to combine that data with survey returns and process through the various output systems also hosted on CORD.
  - iii. **Workstream 3: Economic Statistics Business Transformation**. This workstream again sat within ESG and its aim was to establish a business function that would be responsible for both the initial industry analysis as well as the regular business-as-usual monthly round of processing VAT data for delivery to output areas
5. VAT data was incorporated successfully into the compilation of the output measure of gross domestic product GDP(O) developing new methods for cleaning, matching and estimation and calendarisation of administrative data. Although the revisions were small at an

---

<sup>1</sup> Centralised ONS Repository of Data (CORD) is a long-standing ONS production platform.

aggregate level at no more than 0.1 percentage point to GDP growth, there have been significant improvements at lower industrial levels where the use of VAT data has removed volatility due to sample rotation and improved seasonal patterns. The use of VAT data also offers huge opportunities to provide more detailed data by region or industry

## **Discussion**

6. Lessons learnt workshops were held at the end of the project and earlier when the statistical production platform which included all the methods that adopted had been delivered. One of the findings was the importance of sharing the successes and areas where improvements could have been made more widely. Members of the Board are invited to discuss the key successes and lessons learnt set out below.
7. Key successes included:
  - i. The use of multidisciplinary teams which was well co-ordinated across divisions, directorates and workstreams proved an effective and efficient way of working.
  - ii. Good stakeholder engagement helped the launch to be positively received by key government users, the media and other stakeholders. Workshops were held with key economic departments at critical stages of the project and articles on the development were published regularly, generally at quarterly intervals
  - iii. The project provided reusable workflow solutions and technology and data structures that could be adopted by other developments.
  - iv. A lot of time was devoted to the training of the staff who now operate the system as it is a very different way of working. We recruited a number of new analytical staff and upskilled other members of the team, which is aligned with our strategy of increasing analytical capability in the office. It also helped to inform the new Data Analyst Pathway and act as a path finder for the implementation of our Target Operating Model.
  - v. We operated the development as a production of a minimum viable project. This meant that we adopted solutions that were fit for purpose but could be improved when the short-term indicators are fully transformed.
  - vi. The inclusion of VAT turnover was assessed against a variety of criteria to assess its suitability. The IT systems were developed to be able to select VAT turnover to measure each stratum to reflect the strengths of each data source. It gave the business team flexibility where further research was necessary to add further cells in alter publications and so take pressure of this first publication
8. Areas where lessons could be learnt for future work included:
  - i. Getting the full team in at the start. There were delays in recruiting the business change manager and subject matter expert which caused some delays in the first few months. This being our first attempt at working in this way, ESG had to learn which key skills were most required, and brought together a number of specialist staff to meet the task, as this became clearer.
  - ii. Ensuring that there is a clear way of signing off and recording decisions. The use of decision logs, which was introduced during the project was helpful in providing clarity to senior stakeholders. Some early methodological decisions were made that were insufficiently visible and unacceptable to the business and had to be revisited.
  - iii. The pace of the development work and aspirational timeframe highlighted that some of our established business processes were overly burdensome, for example the Economic Statistics Methods Advisory Committee. This approval process has subsequently been streamlined and improved.

**Jonathan Athow, 14 March 2018**