

## Written evidence from the Royal Statistical Society (GOS 13)

### Public Administration and Constitutional Affairs Committee Governance of Statistics inquiry

#### 1. How well are the structures established by the Statistics and Registration Service Act 2007 working?

- a. What has UKSA achieved over the last 10 years?
- b. Has the 2007 Act succeeded in assuring the independence of official statistics?
- c. Does anything in the legislation need to be changed?

a. The UK Statistics Authority (UKSA) is a relatively young organisation. A decade in, our view is that it has established itself and made an important difference in the production and, to a lesser extent, the use of UK official statistics. Regulators are rarely noticed for the things that go right, and tend to be taken to task for the things that go wrong. Our contribution is in the spirit of helping develop UKSA, and hence the whole of the GSS, for the next decade. As a result, we will necessarily focus in this evidence on the areas which can be improved, but all of this should be seen in the context of our support for this body, and recognition that UK official statistics would almost certainly be a lot weaker if UKSA had not existed over the last 10 years.

UKSA is coming to the end of its 2015-2020 strategy and the PACAC inquiry could really help to shape the new 2020-2025 strategy. Looking ahead, some of the big themes which it needs to grapple with are systemic: developing capable leadership; strengthening innovation for data science; engaging with users; improved communication and take up of statistics amongst public and policymakers; maintaining confidence in the system including through good data governance, ethics and public engagement. With the rise of new data sources there is greater demand for more granular data, and for statistics to be produced more quickly: these demands will only continue to grow over time. The major deliverable in the coming period is obviously the census, and this will be a challenge for the whole statistical system, in particular in moving to using new data sources.

One of the fundamental tests for the official statistics system is whether the public has the information that it needs. It's not clear that the system currently meets that test. How can information be developed in a way that is usable, and makes sense to non-expert users? In a world that is concerned with misinformation and so called 'fake news' the official statistics system needs to cut through and give people and local communities the information they need, in a format they find helpful.

UKSA has a specific objective under the Act: to promote and safeguard the production and publication of official statistics that serve the public good. It is to do this by informing the public about social and economic matters, and assisting in the development and evaluation of public policy. The Authority fulfils this objective primarily through the leadership of the National Statistician (NS) as Chief Executive of the Office for National Statistics (ONS) and head of the Government Statistical Service (GSS).

The Authority is also required to promote and safeguard the quality of official statistics, good practice in relation to official statistics, and the comprehensiveness of official statistics. The Authority is required to monitor these aspects and report its findings. It does this through the

Office for Statistics Regulation (OSR), which assesses official statistics against its Code of Practice.

The view of the RSS is that these functions have been discharged quite well, though better in some areas than others. For example, the discharge of the National Statistician's functions through the ONS has been more effective than in the rest of the GSS (see later) where the National Statistician has little direct management control.

There is a concern that the Authority has, through the Code and its assessment function, concentrated more on good practice than on quality or comprehensiveness. We have welcomed in recent years the move towards more systemic reviews of areas of statistics as a whole (e.g. in housing, justice, data linkage). The OSR, and its predecessor, has done a good job assessing statistics against its Code of Practice, and withdrawing National Statistics status as needed, but the Code (now in its second version) still has some drawbacks. When consulted on the second version, we welcomed some of the strengthening of the new Code in respect of quality although, as we have noted before, many of the de-designations of National Statistics status occurred after a successful OSR assessment. Also, we have commented that the Code should be more specific about quality assurance procedures, for example, adherence to the Quality Assurance Framework of the European Statistical System.

There have been a number of areas where UKSA does not appear to have anticipated early enough issues which it should have been alert to. It is notable that it was the Treasury that asked for the external Bean review of economic statistics<sup>1</sup>, rather than UKSA itself having driven this review. UKSA has also seemed slow to respond to other challenges - e.g. classification of student loans, improvement of migration statistics (which were clearly in the public spotlight). As we note later on, UKSA said surprisingly little publicly about what Brexit means for official statistics, and how it is preparing for that until the statement it issued on 29<sup>th</sup> January 2019 which relates specifically to preparations for 'no deal'. In all of these areas there appears to have been a lack of foresight. We would argue that to develop this foresight UKSA needs to have better mechanisms to understand the needs of the various users of statistics. We say more about this later in our submission.

Although UKSA proactively commissioned the Johnson Review of consumer prices, that review did not look sufficiently at user needs, focusing instead on technical aspects. The recent Lords Committee on Economic Affairs report on 'Measuring Inflation' is highly critical of the way that the UKSA has dealt with the Retail Prices Index (RPI).<sup>2</sup>

The UKSA needs to look at ways to drive forward its own aims and direction. Maybe the OSR's focus on sets of statistics does not give the Board enough of the big picture, and does not enable it to fulfil its remit on the comprehensiveness of official statistics?

PACAC will recognise the complexity of official statistics. Statistics is itself a complex subject, and in the context of government, with the need for quality assured processes for delivering statistical outputs, with demanding users, it is even more so. We recognise that the UKSA Board may not have the background, knowledge and experience of official statistics, but in their absence must have good supportive structures and sources of advice to enable it to form a view on the wider picture.

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<sup>1</sup> Bean, Sir Charles. Independent Review of UK Economic Statistics.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/507081/2904936\\_Bean\\_Review\\_Web\\_Accessible.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/507081/2904936_Bean_Review_Web_Accessible.pdf)

<sup>2</sup> The Use of the Retail Price Index report. <https://www.parliament.uk/the-use-of-rpi>

The current UKSA strategy 'Better Statistics, Better Decisions' (from 2015, and now due for an update) does not explicitly anchor itself in the objectives set out in the legislation. The next update of this strategy would be an opportunity to revisit this.

More generally, across government, it is not clear that policymakers are using data as much as they should to inform the policy process. UKSA and the GSS should be indispensable across government for statistical evidence although they can't expect to be the only source of analysis, so need to work closely with the other professions. The development of the 'analysis function' in government is a useful start, but it is not yet having enough impact with policymakers. The ONS has an opportunity to position itself as the 'data hub' across government, but this would require it to become more responsive to wider policy needs, and to continue to develop its analysis function.

b. The legislative framework, requiring the Authority to report to Parliament rather than to ministers, is recognised internationally as having secured the independence of UK official statistics. The abolition of pre-release access by ministers (and others) to ONS official statistics, which took effect in mid-2017, after a successful RSS campaign, was a welcome assertion of such independence. We believe, however, that this reform needs to be taken further. There remains an enormous amount of pre-release access to non-ONS official statistics. We suggest that UKSA collates and publishes data on the average number of people with pre-release access, for each Department, and updates this annually to establish what if any progress is being made to reduce the extent of pre-release access across government. Our concerns over the continuing prevalence of pre-release access are shared by, for example, members of the Scottish Parliament's Economy, Jobs and Fair Work Committee, who recommended tightening Scotland's pre-release rules in their February 2018 report entitled *How to Make Data Count: Improving the Quality and Coverage of our Economic Statistics*.<sup>3</sup> Dissatisfied by the Scottish Government's response to their report's recommendations, several Committee members recently reiterated their continuing concerns on this subject during a debate in the Scottish Parliament<sup>4</sup>. Accordingly, we believe that pre-release access remains a 'live' issue, both in Westminster and beyond - despite 2017's important (but incomplete) reforms that we welcomed, and for which both the National Statistician and UKSA's Chair should be commended.

The Authority regularly writes public letters to politicians where they have made a public statement which the Authority believes undermines public confidence in official statistics. It does seem as if this is now a functioning part of the democratic process, and UKSA is broadly seen as even-handed between, for example, political parties. However, the interventions have limited power – they partly depend upon moral authority as there is no formal sanction for statistical misuse. Our view is that their interventions do tend to carry force and politicians generally listen. (The obvious exception – the £350m figure in the referendum campaign – is not a typical case as a referendum campaign has different rules and involves time-limited organisations.)

Further consideration should be given to possible means to sanction those individuals in public life or organisations who take actions likely to reduce trust in official statistics, such as repeated incorrect use of figures. This could include measures such as requiring apologies to Parliament, or publishing lists of those sent letters by the Authority, or strengthening the

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<sup>3</sup> [http://www.parliament.scot/S5\\_EconomyJobsFairWork/Reports/EJFWS052018R03.pdf](http://www.parliament.scot/S5_EconomyJobsFairWork/Reports/EJFWS052018R03.pdf)

<sup>4</sup> <http://www.parliament.scot/parliamentarybusiness/report.aspx?r=11795&mode=pdf>

Ministerial Code<sup>5</sup> so that Ministers are not only required to be mindful of the Code of Practice, but required to observe it, including in how they present and use data. The same requirement could also be included in the Special Advisors' Code of Conduct.<sup>6</sup>

It may be worth specifically considering the role of the Authority during elections, to ensure it does not feel constrained by “purdah” rules in both its regulatory work and the ONS/GSS in helping to inform citizens.

c. Governance is about how decisions are made, and legislation is only part of this. What is also important is how the UKSA Board makes decisions, and how decisions are made and implemented across the GSS. Effective decision-making is dependent on good leadership at all levels, and a culture that is aligned with the strategic direction. A key question is to ensure that the statistical system continues to have the leadership and culture it will need to meet the challenges it faces. This is true at Board level, but perhaps even more importantly about leaders working in the statistical system including the National Statistician, Deputy National Statisticians, Heads of Profession and the Director General for Regulation. Do they have the skills not just to produce the numbers, but to build relationships with policymakers and other users, talk to the media, help their colleagues innovate, etc. We think this is a systemic capability challenge which ought to be a key part of the next UKSA strategy.

## **2. Does the UKSA Board intervene effectively in the statistical system, addressing problems with appropriate urgency?**

- a. How well does the UKSA Board understand current and emerging issues?
- b. The ‘Bean Review’ highlighted shortcomings in economic statistics. Is UKSA doing enough to tackle problems with other areas of official statistics, such as health, education, migration and crime?

As stated above, it is not clear whether the UKSA Board adequately surveys the statistical landscape to identify emerging issues. It is also unclear whether the UKSA Board has the structures it needs to pick up user issues early enough. The Board needs to be asking ‘What are the statistics that the public and policymakers will need?’ We think it needs to consider what are the structured ways in which it could be getting this information?

One problem in assessing how effective the UKSA board is that it is not as transparent as it could be. Board minutes are not always published quickly. The last set of published Board minutes are from July 2018.

As already indicated, UKSA has said very little publicly about Brexit preparations, despite this being such a major policy change. Our reading of this is that this is not due to a lack of preparedness, but a lack of openness about strategy.

## **3. How effectively does UKSA perform its regulatory function through the Office of Statistics Regulation (OSR)?**

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<sup>5</sup> Cabinet Office ‘Ministerial Code’. January 2018.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/672633/2018-01-08\\_MINISTERIAL\\_CODE\\_JANUARY\\_2018\\_FINAL\\_\\_3\\_.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/672633/2018-01-08_MINISTERIAL_CODE_JANUARY_2018_FINAL__3_.pdf)

<sup>6</sup> Cabinet Office ‘Code of Conduct for Special Advisors’. December 2016.

[https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/579768/code-of-conduct-special-advisers-dec-2016.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/579768/code-of-conduct-special-advisers-dec-2016.pdf)

- a. Is there sufficient compliance of statistics with the Code of Practice?
- b. Is the new Code of Practice effective and should it include administrative and other forms of data?
- c. How can UKSA best counterbalance the incentives for public bodies to present data and statistics in ways that show them in a good light?

a. The Authority has strengthened its regulatory function through setting up the Office for Statistics Regulation (OSR), and we welcome this. The OSR undertakes compliance checks/assessments against the Code of Practice, and systemic reviews. It would be worth looking particularly at the latter to see if they have identified issues of key concern and, if not, why not? And if they have, what has the Authority done about it? In 2012 the Authority published a monitoring report of the first few years of assessment, which highlighted a number of common issues: including engagement with users, transparency of methodology, and accessibility of statistics.<sup>7</sup> It would be good if they were to repeat this analysis to see what has improved. From our reading of many assessment reports, there is still some way to go on engagement with users beyond specific policymakers, for example.

There is a question about whether UKSA has got the split right between the National Statistician and OSR. For example, the OSR led on the consultation around the new Code of Practice, which it might be thought should be 'owned' by the National Statistician. It may be that the OSR is getting sucked into filling gaps that it thinks need fixing, but which in practice ought to be held by the National Statistician and their team. At the very least UKSA ought to be clearer and more transparent about the rationale for the split of work between them.

Maybe the work of the OSR needs to be refocused more around supporting UKSA on the key aspects of the legislation which require the Authority to stand back and take a view of the official statistics system. This could include a series of questions to be asked about the capability of the whole statistical system in terms of skills, innovation, leadership, communications, ethics, etc.

b. The legislation defines 'official statistics' as statistics produced by government departments. The Authority interprets this to mean statistics described by departments as being official statistics, which essentially means that departments define this themselves. Many administrative data sources are included in official statistics and subject to the Code, although the extent of this could be made clearer. The Authority maintains a list of National Statistics, but there is no list of official statistics. Such a list should also embrace what are in effect 'official statistics' - those produced in compliance with the Code of Practice but by organisations beyond those named in the legislation. From a user perspective, such statistics are already envisaged as official statistics and we welcome efforts by the OSR to encourage more organisations to sign up to the Code.

'Statistics' are generally taken to mean the summaries derived from data sets, which provide analysis, information and knowledge. Government departments do provide many unit record data sets, under confidentiality protection, for research purposes, but it is not clear whether these are in scope of the OSR assessment reports. Many government statistics are based on or make extensive use of administrative data sets.

c. The Code of Practice requires that 'those producing and releasing statistics should be free from conflicts of interest, including political and commercial pressures, that may influence the production, release and sharing of the statistics and data.' Compliance with the Code

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<sup>7</sup> The Assessment of UK Official Statistics 2009-2012, August 2012.  
<https://www.statisticsauthority.gov.uk/publication/the-assessment-of-uk-official-statistics-2009-2012/>

should therefore prevent statistical publications from being presented in a biased way. Commentators, senior administrators and politicians may be tempted to present statistics in a particularly favourable light. The Code requires the commitment of ministers and senior advisers on these issues, and UKSA has taken seriously its role of holding departments to account on these matters.

Despite this, the need for UKSA to write to ministers on these issues continues; it would be good if the Authority could publish the trend in the number of these letters and by Department.

The RSS has recently been working with ONS to develop the statistical understanding of the Government Communication Service. There may be an opportunity for UKSA to have a similar and more proactive role in the induction and training process for Ministers and Special Advisors.

#### **4. How effective is the Government Statistical Service (GSS) model in ensuring that official statistics are independent and accurately reflect performance while being responsive to the needs of public bodies?**

- a. What skills do GSS statisticians need to influence good use of statistics by public bodies?
- b. Does UKSA have sufficient influence over the recruitment, training and career paths of GSS statisticians?
- c. How could the roles of Heads of Practice and GSS statisticians be strengthened?

While it is not easy to tell from the reports that UKSA publishes, our impression is that most of the breaches of the Code occur outside the ONS- in the wider GSS. It would be helpful if the Authority could provide some analysis of this.

According to research by NatCen, of those who expressed an opinion in 2016, 90% tended to trust ONS, which is around the same level as in 2014 (88%). There has been a modest increase in agreement that official figures are generally accurate (Of those able to give an opinion, 78% in 2016 agreed that official figures are accurate, compared with 73% in 2014).<sup>8</sup>

By contrast, the numbers of people who agreed that Government (26%) and newspapers (18%) present official figures honestly remains low. This points to people clearly distinguishing the statisticians as separate from the government; although also obviously raises issues about how to improve trust in the use of official statistics when two of the key users are so distrusted. The GSS was at its inception mostly decentralised, with statistics produced mainly by government departments. Over the years most economic statistics, and most surveys have been transferred to the ONS, leaving the rest of GSS producing mainly official statistics from administrative sources. Many of these sources are also management information systems used by ministers to manage aspects of their departments, so there tends to be a strong interface, and sometimes some tension, between policy managers and their statisticians.

The role of the National Statistician as Head of the GSS has weakened over the decades. When it was originally set up, 50 years ago, the Head of the GSS would effectively appoint the senior statisticians in departments (the Heads of Profession - HoPs), manage a strong interdepartmental committee system setting statistical policy, and also centrally manage careers (including transfers of statisticians between departments) and training. Elements of this remain, and the HoPs are professionally accountable to the Head of the GSS.

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<sup>8</sup> <http://natcen.ac.uk/our-research/research/public-confidence-in-official-statistics/>

HoPs themselves will usually not have line management control over all the statistics produced in their department but will rely on exercising influence with colleagues. Over the decades structural change has led to HoPs having typically lower grading within departments than in the past, so that it is not clear whether they have sufficient weight in departments to ensure the Code of Practice is followed.

PACAC may wish to look at alternative models in other countries. There is some international literature on this. The US system has remained strongly decentralised, coordinated by the Office of Manpower and the Budget, as has that in France (and Northern Ireland). Canada, Australia and many European countries have more centralised systems, though in some countries it may be that they fail to acknowledge some statistics produced by departments as being part of the official statistics system.

France has a hybrid system, whereby although it is decentralised, the statisticians are bedded out from the central statistics agency (INSEE) and can be moved between departments to match priority needs.

The decentralised part of the GSS has some clear strengths, in terms of the development of policy analysis skills and the ability to work closely with policy professionals, although this might be at the cost of methodological development and serving the needs of a wider group of users.

## **5. How well do UKSA and statisticians at all levels of the system engage in dialogue with current and potential users of official statistics?**

- a. Does UKSA understand the needs and concerns of all user types?
- b. What mechanisms are effective in engaging users and how can they be used more widely?

We support the views set out more fully by the Statistics Users Forum (SUF) in its submission that user engagement needs to be significantly strengthened. OSR has published 340 reports giving its assessment of how sets of statistics comply with the Code of Practice and these are among the sources for our assessment that more needs to be done by UKSA on user engagement. It is reassuring to read in the latest of these reports that the producer in this case has “continuously developed and published new indicators to meet user needs” and that “users of the statistics spoke highly of their engagement” with the department in question. However, our concerns are also illustrated, for example, with the OSR’s observation that “The primary use of the statistics is for the department to understand and analyse the economic impact of its policy areas” and that there is an opportunity for the department “to help users to get greater value and insight from the available statistics [by explaining] the alternative sources of information available, and when different ones might add useful additional insight”.<sup>9</sup>

The vision expressed by the National Statistician on the need for users to be at the heart of all the GSS does is excellent. We also note that the UK chaired a 2017 international task force on the value of official statistics to take forward the commendable position that “the value of official statistics should be promoted as a global asset”.<sup>10</sup> However, experience shows that user engagement practices across ONS and the rest of the GSS are patchy. We therefore suggest that UKSA should produce a strategy for improving user engagement across the

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<sup>9</sup> [https://www.statisticsauthority.gov.uk/wp-content/uploads/2018/12/Assessment\\_Report\\_340\\_DCMS\\_Sectors\\_Economic\\_Estimates-2.pdf](https://www.statisticsauthority.gov.uk/wp-content/uploads/2018/12/Assessment_Report_340_DCMS_Sectors_Economic_Estimates-2.pdf)

<sup>10</sup> [https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2017/CES\\_4\\_Value\\_of\\_Official\\_Statistics\\_for\\_endorsement\\_for\\_upload.pdf](https://www.unece.org/fileadmin/DAM/stats/documents/ece/ces/2017/CES_4_Value_of_Official_Statistics_for_endorsement_for_upload.pdf)

GSS, to meet the needs of all users, including unmet demands and potential new users and to put into effect the promise that users will be at the centre of the production of UK official statistics, including by implementing the UNECE task force recommendations on promoting, measuring and communicating the value of official statistics. It will need to take steps to change culture throughout the GSS, to routinely engage in dialogue with current and potential users, building on the beacons of good practice. We would suggest that UKSA develop and publish a practical implementation plan with milestones and deliverables across all ONS and GSS data collection activity, to deliver the requirements of the Code of Practice<sup>11</sup> (“Users of statistics and data should be at the centre of statistical production; their needs should be understood, their views sought and acted on, and their use of statistics supported. Statistics producers should maintain and refresh their understanding of the use and potential use of the statistics and data. They should consider the ways in which the statistics might be used and the nature of the decisions that are or could be informed by them.”)

Statisticians need to develop more understanding of the use of their statistical products, through user engagement and by outreach to prospective users.

To take forward a user engagement strategy, we would suggest that UKSA undertake a quick mapping exercise across all GSS producers, to gain a better understanding of current users and user engagement practices, as a basis for the development of a more strategic approach to user engagement. We would suggest that a central user engagement and insight team in ONS is enabled to encourage, support and share good practice in the user engagement of every team producing official statistics. Finally, one approach might be to set up a small, virtual centre within ONS with responsibility for effective, two-way communication between SUF and the GSS - to make progress with, and report back on issues raised by SUF, as well as to engage with SUF on high level business planning and statistical developments from across the GSS. SUF are obviously not representative of all users of statistics, but are one helpful body that UKSA should be engaging, alongside other users.

## **6. Are official statistics easy for users to access, understand and use in making decisions?**

a. How well does UKSA curate statistics from ONS and other sources?

A key test of the statistical system is whether users find the statistics they need easily and in the format that they want. On this test we would say that the system is not yet meeting the challenge. Accessing data too often remains difficult even for expert users. In part this may reflect resource limitations whereby ONS and the rest of the GSS attempt to create ‘one size fits all’ outputs to meet the needs of very different sets of users. The sheer volume of different tables in different spreadsheets has led to spreadsheets listing other spreadsheets. Whilst the ONS website has improved, it is still clunky in parts and can be hard for non-experts to easily find articles on specific topics, within the more general themes. Where information is collected by more than one part of the GSS it is not easy for the non-expert to easily understand and find this range of information. It would be helpful to have an assessment report on the ONS website and on ONS’ engagement activities, and comparisons with equivalent websites from other leading economies, given how vital this area is to delivering value.

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<sup>11</sup> UK Statistics Authority, Code of Practice for Statisticians. <https://www.statisticsauthority.gov.uk/code-of-practice/>



Non-expert users find information even more difficult to access and understand. One option might be to re-establish some form of the discontinued '*Social Trends*' publication. There is an enormous amount of data out there, and part of the value of this kind of publication is that it is curated and digestible, making sense of the key issues. It would also be able to highlight longer run trends, as otherwise the media focus is overly on short run changes in newly released data.

UKSA should also challenge itself to see if local communities feel they have the data they want about themselves. The top down model of statistical production does not necessarily map onto the lives of people – administrative boundaries do not always map onto natural boundaries. Given the growth of new data sources, is it possible to provide more hyper-local data to communities, in the form that they want it? A sign that the statistical system is working is when ordinary members of the public are able to find out about the things they want to without becoming an expert statistical user.

The public is more concerned today about misinformation. The statistical system has a critical role to play in communicating statistics to its audiences, in a fast-changing media landscape. The UKSA could usefully work with UK Research and Innovation (UKRI) to research 'what works' in helping communications about evidence reach different parts of the public. The ONS might also consider setting up a rapid response team which disseminates its information into real-time debates. It could develop partnerships with, and learn from, civil society organisations that work to help improve evidence and facts in public debate.

UKSA has sometimes shrunk from the role it could vitally play in casting light on the key issues of public debate. At the time of the Scottish Independence Referendum the RSS highlighted to UKSA that it should consider playing a proactive role to help clarify the facts in the debate. UKSA was not keen to take up that mantle. There are many other areas where, if it wanted to, UKSA could be more active in helping ensure public debates are rooted in facts.

## **7. The world is transforming fast as a result of technological and social change. How well does UKSA anticipate the future data needs of decision-makers and plan to close gaps?**

a. How visible are the forward programmes of UKSA, ONS, OSR and GSS?

Users would like more engagement on all these future plans. There are some good examples of this, but it is not universal.

The Authority has produced a three-year high-level business plan for 2018 to 2021, which sets out a range of objectives for each of the key areas of ONS and grouped under the five perspectives from the business strategy. This gives a good sense of direction for the ONS, but there is no published annual work plan for the development of specific sets of statistics that could be discussed with users.

Innovation with data use is going to be key for the future as more and more new sources of data become available. This means the statistical system will need to change how it works. There may be a move from gathering data to cleaning, linking and analysing data. It will require more methodological innovation. We have seen more thinking on economic statistics following the Bean review. This needs to be matched across other areas of statistics. There is a danger that the statistical system could get left behind by developments in data science. The ONS's Data Science Campus is a useful innovation but we would suggest that it should be tasked with building the capacity of the wider statistical system to become innovative and

capable of managing new data sources, rather than just running its own projects and becoming almost an internal consultancy unit across government.

The key test in the upcoming period will be the delivery of the new census. It is positive that the planning for this is being used to redevelop ONS systems and technology. The data linkage that is required for the census will also be required for future statistics, especially with the intention to make the 2021 census the last traditional version, and to move more towards real time data from there.

Until recently, the UKSA has said very little publicly about the impact of Brexit on official statistics. This is an area about which it has been relatively non-transparent about and a statement it issued, on 25<sup>th</sup> January 2019 gives very little detailed information about how Brexit might affect official statistics.<sup>12</sup> On the one hand there may be opportunities to develop statistics which are more specific to the UK's needs. On the other hand, we may risk losing important relationships and sharing of good practice through participation in Eurostat working groups. We recognise that there is considerable uncertainty in relation to the form that Brexit will take, but we do think it is a major oversight for a public body to not have a published strategy on how it plans to deal with what may be one of the biggest changes of public policy in the UK in several decades.

## **8. Does UKSA create an effective environment for innovation and improvement in the statistical system?**

a. How well does UKSA translate vision into the practice expected of statisticians in their day-to-day roles?

Innovation has been more of a feature of ONS plans in recent years, with innovative approaches planned for the census, and the opening of the new Data Science Campus. The new Director General posts in ONS may have helped here, together with the current National Statistician's leadership. The statistical community does not necessarily produce many outward facing innovators, and culture and capacity at all levels will be key in building on this. The 2016 Bean review highlighted the need for a change in culture across ONS' economic statistical systems. Whilst a range of outputs in new areas such as well-being and loneliness have been welcome, the systems used to produce outputs have not necessarily changed significantly. Similarly, the Bean review cited a belief amongst users that ONS' performance had fallen in recent years, recommending improvements in its analytical capacity and ability to deal with technological change. It does seem as if there has been more serious investment in technology in recent years which is welcome.

More could be done to strengthen leadership amongst statisticians across official statistics. We would suggest a leadership academy be developed to help statisticians develop the wider skills they need. The RSS would be willing to help with this if that was appropriate.

We are aware that 'Better Statistics, Better Decisions' has been explicitly used to challenge internal business cases and ethical justifications for statistical innovation work. This is

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<sup>12</sup> Preparing the UK statistical system for a no-deal EU exit. 25<sup>th</sup> January, 2019.

<https://www.statisticsauthority.gov.uk/news/preparing-the-uk-statistical-system-for-a-no-deal-eu-exit/>

forcing statisticians to think beyond improvements to the statistics and justify the usefulness of their innovations. Such a focus on use was not previously present.

### **9. Has the Digital Economy Act 2017 removed the obstacles to effective exploitation of administrative data?**

- a. What sharing of data and data linkage are happening in government?
- b. Is the right capability in place to make best use of big data, artificial intelligence and other developing technologies?
- c. How well integrated are the roles of statisticians with other data professionals across government?

Last year UKSA developed a Statistics Statement of Principles and a Code of Practice on changes to data systems, as was required under the 2017 Act. This includes a commitment to publishing information on how these new powers are being used. So far no reports have been published, although we have raised the matter informally on a number of occasions. It would be helpful to know more about the Authority's future plans in this area. This is again an example of where UKSA is not as transparent as it could be.

We do not expect that legislation alone will have removed all the obstacles. There will be a range of technical issues around exploitation of new data sources (for example, for sources where ONS has little or no previous expertise, and on developing best methods to link different data). Whilst there have been some useful developments the use of administrative data to supplement or inform survey estimates can lead to the need to reconsider existing definitions and methods.<sup>13</sup> The establishment of the Data Science Campus has been a good step forward: however, we now need to see a more rounded plan and clear engagement with users on the next steps, both to help inform what questions could be asked using which data, and to provide a more focussed timeline and milestones towards effective use. Greater use of administrative data is welcome, but needs greater involvement from users at an earlier stage.

We also note that Digital Economy Act provides ONS with a gateway to access administrative data from Government Departments for data sharing but does not help improve data sharing between such Departments, which means that non-ONS outputs cannot benefit from the same opportunities. Academic researchers are also interested in whether the ONS might now help improve access to administrative data for research purposes. The ONS involvement in the Administrative Data Research Partnership provides opportunities here.

A significant question will be the public view. In a post 'Cambridge Analytica' world, there is more likelihood of a public backlash about how data about them will be gathered and used. The case that statisticians are working for the public good needs to be made. There has been a backlash in Canada over their statistical agency's use of similar legislation to the Digital Economy Act. We would suggest that the UKSA works with a range of other agencies (such as the RSS, Ada Lovelace Institute, Centre for Data Ethics and Innovation, UKRI, Wellcome Trust and Open Data Institute) who share the view that data should be used securely for public interest work to consider how best we can collectively make this case.

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<sup>13</sup> The Office for National Statistics. Report on International Migration Data: Sources July 2018. <https://www.ons.gov.uk/peoplepopulationandcommunity/populationandmigration/internationalmigration/articles/reportonthecomplexityandqualityofinternationalmigrationstatistics/july2018> and ONS forum signals new era for migration statistics September 2017. <https://blog.ons.gov.uk/2017/09/22/ons-forum-new-era-for-migration-statistics/>

## **10. What role should UKSA play in areas such as data policy and data ethics and how well does it engage with the parts of government responsible for these areas?**

There are many events and debates going on within the UK relating to data governance and data ethics. UKSA has thus far been conspicuously absent from these. If it wishes to step up to being a data leader, it needs to become much more engaged with these.

The UK Centre for Data Ethics and the Ada Lovelace Institute have both become established over the last year, recognising the increased emphasis needed on issues around data ethics. The RSS has established its own Special Interest Group on Data Ethics and we are engaging very positively with individual GSS members but would be pleased to collaborate more substantially. As a learned society and professional body we can take on emerging and professional issues, and count GSS members among our fellowship but we have no formal engagement on ethics. The independence of ethical bodies is important, but ONS needs to volunteer specialist expertise even when it has a vested interest - e.g. data collection and statistical production - so that advisory bodies are well-informed and can anticipate emerging issues. UKSA should lead confidently on data ethics and data governance as they are specialists and know what data is for.

The National Statistician's Data Ethics Advisory Committee (NS-DEC) has established a set of ethical principles that it is using to review projects. Given the risks of data linkage, UKSA could raise the profile of this work to take more of a lead in working with outside organisations to promote data ethics principles more generally. NS-DEC should move to take on an increasingly proactive role to consider ethics across the statistical system. This will help safeguard public trust, in particular in relation to the census. As the ONS becomes increasingly a data hub across government, it may be called upon to take on more ethically tricky areas – e.g. predictive analytics work. NS-DEC will need to be thinking about these with the UKSA board - it is not currently clear how NS-DEC engages with it.

The GSS has responsibility for more data than its overseas counterparts, so it has the potential for greater impact. This is a challenge to which it must rise. NS-DEC is tightly constrained to advising on statistics uses of data but it has attracted referrals when doubts have arisen on approved research. This model has been impressive for its ability to develop its working beyond approving access (which now has a separate committee) to ethical issues. The move to an independent chair is logical but has reduced its engagement through a director level representative in ONS. It is not clear who in ONS now leads on data ethics. This lack of explicit internal leadership prevents the impact of the innovation being seen elsewhere in government. More generally, caution in stepping beyond statistics has seen the NS-DEC overlooked in draft government policy documents on data ethics (subsequent versions have adopted this as an exemplar without necessarily being clear on its role). We believe there is a role for the chair of NS-DEC to visibly champion data ethics in analytical professions and to use this to build the trust in oversight of data use.

## **11. How well does UKSA promote and enhance statistical literacy across government, Parliament and the general public?**

The UKSA could and should take much more of a role on promoting and enhancing statistical literacy among the public. RSS work with Ipsos MORI has shown there are many areas where the public understanding is very different to what official statistics show (e.g. levels of teenage pregnancies). The UKSA might consider striving to increase what Hans Rosling called 'factfulness': public understanding of facts through effective communication

of statistics. This needs intelligent communication, and a greater focus upon longer term trends, rather than short term data.

UKSA is starting to do some small pieces of work across government. The RSS and ONS held a joint roundtable for the GCS, which is leading to best practice development. The creation of the analysis function within government is also giving rise to more opportunities to promote statistical literacy amongst the civil service. Secondments of statisticians to the BBC, for example, should be of mutual benefit in this regard.

The RSS Champion award for excellence in official statistics in partnership with the UKSA, recognises good practice in official statistics. This award focuses on meeting the needs of the wider user community.<sup>14</sup> The UKSA could, however, do more to ensure that the information that is needed by its audiences is better reflected and clearly communicated. This will help to avoid misinterpretation, misunderstanding and mistrust of statistics. For example, looking at the unemployment rates published by the ONS in the UK Labour Market Bulletin of January 2019, it is not easy to ascertain whether the figures are from surveys or exact counts.<sup>15</sup> Clarification of this can be found towards the end of the document (page thirty-four of thirty-five pages) and as a result, there is a confidence interval which is frequently larger than any change reported in the headlines. Communicating uncertainty is crucial to inform political discussions and avoid distorted media reporting.

Statistics are of value only if they are effectively used. Investment in the communication of statistics and developing new methods, tools and forms of communication for statistics is welcome and should be encouraged more. The UKSA should have a fundamental role in ensuring that good practice and minimum standards of statistical understanding are promoted and maintained across government and Parliament, working in partnership with the relevant organisations. This is because access to official statistics is often mediated by press officers, speech writers and other professionals in the civil service and Parliament. This wider context should be considered as part of the question.

Finally, there is an assumption that the UKSA produces statistics which are those that are relevant to the public, media, government and Parliament. It is necessary to build public trust and interest in statistics by their involvement. User engagement is vital, and users' needs must be incorporated and broadened beyond professional users. Statistics affect everyone as our lives are influenced by the decisions made with the data.

*February 2019*

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<sup>14</sup>[https://www.rss.org.uk/RSS/About/Recognising\\_Statistical\\_Excellence/Official\\_statistics\\_awards/RSS/About\\_the\\_RSS/Recognising\\_statistical\\_excellence\\_sub/Statistical\\_excellence\\_in\\_official\\_statistics\\_awards.aspx?hkey=08ac8c27-3191-44da-9b68-c52b569645d7](https://www.rss.org.uk/RSS/About/Recognising_Statistical_Excellence/Official_statistics_awards/RSS/About_the_RSS/Recognising_statistical_excellence_sub/Statistical_excellence_in_official_statistics_awards.aspx?hkey=08ac8c27-3191-44da-9b68-c52b569645d7)

<sup>15</sup><https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/employmentandemployeetypes/bulletins/uklabourmarket/january2019>