

# **UK STATISTICS AUTHORITY**

## **Minutes**

**Thursday 25 February 2016  
Boardroom, Newport**

### **Present**

#### **UK Statistics Authority**

Sir Andrew Dilnot (Chair)

Professor Sir Adrian Smith (Deputy Chair)

Professor David Hand

Professor Jonathan Haskel

Mr Ed Humpherson

Dr David Levy

Mr John Pullinger (from item 1 to item 10 and then from item 13)

Mr Glen Watson

### **Also in attendance**

Mr Jonathan Athow

Mr Robert Bumpstead

Mr Richard Campbell (for item 9)

Mr Joe Cuddeford

Mr Paul Layland (for item 8)

Ms Heather Savory (from item 1 to item 8 and then from item 13)

Mr Peter Stokes (for item 10)

Mr Ben Whitestone (for item 8)

Mr Ross Young (for item 10)

### **Apologies**

Dame Colette Bowe

Dame Moira Gibb

## **1. Apologies**

- 1.1 Apologies were received from Dame Colette and Dame Moira. The Chair welcomed Professor Haskell to his first meeting of the Authority Board.

## **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 29 January 2016 were agreed.
- 3.2 The Chair reported on the topics discussed at the meeting of the non-executive directors that had taken place prior to the start of the Board meeting. The non-executives had discussed appointments to the Board and the Bean Review of Economic Statistics.
- 3.3 The meeting reviewed progress with actions. With regards to the development of an enhanced London presence, as had been discussed at the previous two Board meetings, the Chair again reiterated that this was a critical part of the transformation process. This should not just be about economic statistics but should cover all areas of work. It was noted that at the present time there was a great deal of planning taking place, but it was unclear where executive responsibility for the London presence lay, or what the timelines and plans were. Mr Athow reported that current plans and resources allowed for an incremental build up of the London presence, but if additional resources were made available then this could happen more quickly. A paper on plans for the London presence would be provided to the next meeting, including timetables.
- 3.4 The meeting discussed the forthcoming EU referendum and arrangements for conducting business during the campaign period. The Cabinet Office would issue guidance on the 'Purdah' rules in due course and the secretariat were in discussions with the Cabinet Office to ensure the guidance allowed the continuation of statistical activity and publication, as had been the case during the referendum on independence for Scotland. The Chair asked that, if any Board members were considering becoming engaged in the debate, they notify the Chair in advance.

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

- 4.1 The Chair reported on his recent activities which included various meetings with the Royal Statistical Society, Professor Jonathan Haskel, the National Statistician, the Director General for Regulation, and Professor Sir Charles Bean.

## **5. Reports from Committee Chairs**

### ADRN Board

- 5.1 Professor Hand reported on the meeting of the ADRN Board held on 1 February. Ms Sharon Witherspoon had joined the ADRN Board as its Deputy Chair. The meeting had considered the slow pace at which data owners were providing data, the performance of the England Administrative Data Centre, and policy issues around the retention of data.
- 5.2 It was agreed that the administrative data infrastructure should be scheduled as a substantive discussion at a future Authority Board meeting.

### Regulation Committee

- 5.3 Professor Sir Adrian reported on the meeting of the Regulation Committee held on 11 February. The meeting had considered the business plan for the regulatory function, how to communicate the role of the regulator more effectively, the assessment of consumer

price statistics and plans for a health statistics round table. The assessment of consumer price statistics was relevant to the discussion of the National Statistician's draft proposals on price statistics, which would be considered in detail later in the Authority Board meeting.

## **6. Report from the Chief Executive [SA(16)07]**

- 6.1 Mr Pullinger provided an overview of activity and issues for February.
- 6.2 Ms Savory reported that the National Statistician had given final approval for the new ONS website to go live. The switchover would happen that evening.
- 6.3 In the past year many positive pieces of work had begun, and some of these were now delivering first results. The recent productivity release was one example, as was the website. It was agreed that as more of these projects delivered positive benefits, consideration should be given to communicating the benefits widely.
- 6.4 Ms Savory reported that the ballots of members of the Trades Unions regarding the revised pay offer would close shortly. A number of staff talks had been provided on pay. The first Voluntary Exit Scheme had closed for applications.

## **7. Update on Electronic Data Collection [SA(16)08]**

- 7.1 Mr Watson provided an update on progress with the move to Electronic Data Collection (EDC). The Monthly Wages and Salaries Survey (MWSS) and the Monthly Commodities Inquiry (MCI) would begin to go online in April would ramp up gradually until fully online by September 2016. By the end of 2016/17 more surveys would be online and it was expected that all surveys would be electronic by the end of 2018/19, though this was a cautious estimate which could speed up. The effect of the new data collection method on survey results was being monitored closely and a pilot of the MWSS had provided reassurance on this.
- 7.2 The Board considered the extent to which EDC would reduce the data collection burden on businesses. While data capture was easier for businesses, they still had to spend time finding the correct data and filling out the online form. Direct data capture would reduce burdens further but there were technical and conceptual difficulties in developing statistical systems which would interface correctly with business systems. The ONS strategy for data collection more broadly would be considered at the next Board meeting.

## **8. Authority Business Plan and Budget [SA(16)09]**

- 8.1 Mr Pullinger introduced a draft medium term business plan, including budget information. The meeting heard that the business plan starting in 2015 was a transitional plan, but the new business plan would be transformational. Now that the outcome of the Spending Review was known, it was possible to put milestones in place.
- 8.2 Mr Whitestone summarised the plan. Some Key Performance Indicators (KPIs) remained unconfirmed, and the plan would be updated in light of the recommendations from the Review of Economic Statistics being conducted by Professor Sir Charles Bean. Mr Layland reported that he had been compiling detailed budgets since receiving notification of the outcome of the Spending Review. The internal governance of investment decisions had been amended and the Portfolio Committee had been given a new focus on major transformational programmes.
- 8.3 The Board discussed the draft plan and budget and the following comments were made.

- i. It was suggested that performance metrics should be ambitious and aspirational. For instance, the target for the proportion of statistics free from major errors could be 100 per cent.
  - ii. As more administrative data was made available, surveys would complement this. The aspiration should be for a reduction in reliance on surveys, but not necessarily to reduce survey sample sizes.
  - iii. It was important to incentivise high performance and retain skilled staff. But the public sector was limited in the extent that it could use financial incentives. Alternative incentives needed to be found and examples from academia could inform this.
  - iv. The draft mentioned work to develop measurement of so-called 'missing capitals' including human, natural and environmental. This work might also consider intangible capitals.
- 8.4 The Board heard that the ONS consultation on changes to outputs had closed and a response would be published in due course.
- 8.5 A revised business plan would also be provided to the Board by correspondence.

## **9. National Statistician's Recommendation on Price Statistics [SA(16)10]**

9.1 Mr Pullinger introduced a paper which set out his draft proposals for the future of consumer price statistics, following a review by Mr Paul Johnson and a subsequent public consultation in 2015. The draft proposals covered:

- i. the development of Consumer Price Index including housing costs (CPIH) as the ONS preferred measure and focal point of commentary on consumer inflation;
- ii. the development of measures of inflation for different types of households and research into the concept of a 'Household Inflation Index';
- iii. clarification that the Retail Prices Index (RPI) would continue to be maintained through routine changes, but that the Authority does not view the RPI as a good measure of inflation; and
- iv. commitment to the continued development of consumer price statistics.

9.2 The Board considered the draft proposals in the context of the findings of the draft Assessment Report of CPIH which had concluded that there were issues about the quality of CPIH that needed to be resolved before it could be designated as National Statistics. While the Board recognised the strong support for a main measure which included housing costs, and there was a need to make progress with price statistics, the Board agreed that it was not desirable to make a recommendation that CPIH should become the preferred measure at a time when ONS had yet to resolve the issues raised in the Assessment Report.

9.3 The Board considered the protracted history of deliberations about price statistics, which went back as far as early 2013. It was unlikely that all stakeholders would agree with whatever the final outcome was. It was agreed that, despite being unable to make a final recommendation until such time as the National Statistics status of CPIH is awarded, it would be helpful in moving the debate forward if the National Statistician were to put into the public domain his view on the direction of travel.

## **10. Data policy issues**

- 10.1 Mr Young provided an update on the development of new data access legislation. A consultation would be launched on 29 February 2016.
- 10.2 Mr Stokes provided a summary of a consultation about changes to the approved researcher scheme. The Board sought assurance that safeguards would be in place to

ensure appropriate use of data and it was confirmed that these would remain or be strengthened. The Board was comfortable with the proposals in principle but agreed to discuss again at its next meeting.

## **11. Report from the Director General for Regulation [SA(16)11]**

- 11.1 Mr Humpherson provided an update on regulation activity since the last meeting.
- 11.2 Dr Levy reported on the Code of Practice Stock Take. Dr Levy was chairing a steering group for this work, which had brought in voices from outside the Government Statistical Service (GSS), as well as voices from within. 600 responses to a questionnaire had been received and a report would be provided to the September meeting of the Authority Board. The Board heard that there was also a range of supporting policies and guidance documents that related to the Code, some of which were in need of review. Mr Watson reported that he was leading a group of Heads of Profession to review guidance on the use of Management Information that feeds into official statistics.
- 11.3 A roundtable meeting about health statistics had taken place on 22 February. Mr Humpherson reported that this had been a success and that Mr Watson had played a leading role to bring together a wide cast list from across the sector. There had been consensus about the incoherence of health statistics and the need for action, and the Authority's role in this space had been welcomed.
- 11.4 Mr Humpherson discussed two issues that had been raised with the Authority where a number had been put into a Ministerial speech without a supporting published statistical output. In both cases, post-hoc releases had been published. In one of these cases, regarding government estimates of benefits received by recent migrants, the department had still to publish detail around the figure. Mr Humpherson and the Authority Chair would be considering further action on these issues.
- 11.5 The Board heard that a business plan for the regulatory function had been endorsed by the Regulation Committee. The Board approved the business plan on the advice of the Regulation Committee. A summary would be published as a separate chapter to the Authority's wider business plan.

## **12. Stakeholder engagement**

- 12.1 The Chair led a discussion on stakeholder engagement. It was noted that many government functions looked inwards to what was going on within government. But for statistics it was essential to look outwards. There was a great deal of work going on to be proud of. While stakeholder engagement could sometimes seem optional, it should be regarded as a core activity. The Chair would look to the new Head of Communications, the National Statistician and his deputies in this regard. It was reiterated that the Board wished to invite stakeholders in during extended lunch sessions.
- 12.2 It was also important to strengthen the public presence of the regulatory function and articulate its activities with greater confidence. Sufficient resources should be made available to support stakeholder engagement for the regulatory function.

## **13. Authority Board self review of effectiveness**

- 13.1 The Chair led a discussion on the Authority Board's effectiveness. The following comments were made in the discussion.
  - i. Last year the Board felt it had not sufficiently defined its risk appetite, but following focussed activity this year, the Board's risk appetite had now been defined more precisely.

- ii. The business planning process and monthly performance report were better but should be developed further.
  - iii. Some members would value more opportunities to interface outside meetings.
- 13.2 The secretariat would consider actions arising from the self review. It was noted that Professor Sir Charles Bean's review had also been considering the Board's role and any recommendations arising from this would also be considered.

**14. Any other business**

- 14.1 The Chair noted for the record that the Statistics Act allowed for three executive members of the Authority Board, one of whom shall be the National Statistician and the other two being appointed by the Non-Executive members. As recorded in the Standing Orders of the Authority Board, the Board had determined that the other two executive members of the Board would be the Authority's Director General for Regulation and one of the three Deputy National Statisticians, rotating on an annual basis. Mr Watson currently held the formal membership position on the Board but, from April 2016, Mr Athow would hold the formal membership position. It was noted that the three Deputy National Statisticians were equal in status and, irrespective of one of them being at any one time a member of the Authority Board, all three usually attended meetings of the Board.
- 14.2 Mr Humpherson reported that he was content to provide financial advice to the Board in his capacity as a Chartered Accountant. It was agreed that this was not inconsistent with the separation of the production and regulation roles. In practice this might mean Mr Humpherson could flag to the Board when an issue had financial implications which might warrant the attendance of the Finance Director at the meeting.
- 14.3 There was no other business. The Authority Board would meet next on Friday 29 April 2016 at 10:00 in London.

**UK STATISTICS AUTHORITY****Agenda**

**Thursday 25 February 2016**  
**Boardroom, Newport, 10:30 – 15:10**

**Chair:** Sir Andrew Dilnot

**Apologies:** Dame Colette Bowe and Dame Moira Gibb

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

1	11:00	Minutes and matters arising from previous meetings • Declarations of interest	Meeting of 18-12-15
2	11:05	Report from the Authority Chair • Economic statistics • Recruitment of non-executive directors	Sir Andrew Dilnot
3	11:10	Reports from Committee Chairs • ADRN Board • Regulation Committee	Professor David Hand Professor Sir Adrian Smith
4	11:20	<a href="#">Report from the Chief Executive</a>	SA(16)07 Mr John Pullinger
5	11:40	<a href="#">Update on Electronic Data Collection</a>	SA(16)08 Mr Glen Watson
6	12:00	<a href="#">Authority Business Plan and Budget</a>	SA(16)09 Mr John Pullinger, Mr Paul Layland, and Mr Ben Whitestone
12:30 Lunch Meet the Minister for the Cabinet Office			
7	12:50	<a href="#">Shaping the Future of Consumer Price Statistics</a>	SA(16)10 Mr John Pullinger, Mr Jonathan Athow, and Mr Richard Campbell
8	13:20	Data policy issues • Data Access Legislation • Approved researchers • International context	Discussion Ms Heather Savory, Mr Ross Young, and Mr Peter Stokes
9	13:50	<a href="#">Report from the Director General for Regulation</a> • Regulation Business Plan	SA(16)11 Mr Ed Humpherson
10	14:15	Stakeholder engagement	Discussion Sir Andrew Dilnot
11	14:35	Authority Board self review of effectiveness	Discussion Sir Andrew Dilnot
12		Any other business	

**Next meeting: 29 April 2016, 10:00 to 15:30, London**





## UK STATISTICS AUTHORITY

SA(16)07

### *Chief Executive's Report, February 2016*

#### **Purpose**

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

#### **Summary**

2. As we head towards an intense period for elections, as well as an important Budget, our figures will be very much in the spotlight. An especially strong focus on quality will be required during this period, including particular care on the commentary accompanying our releases to ensure the messages come through clearly, minimising risk of misinterpretation.
3. At the same time we are coming towards the conclusion of the Bean Review of economic statistics, the outcome of our work to review consumer price statistics and a series of important announcements relevant to the broader data landscape, including on proposals for legislation.

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

4. The Board will be considering the business plan for the period to 2020 which sets out the steps we are taking to realise the vision articulated in the *Better Statistics, Better Decisions* strategy. The focus of the business plan is on ONS and the cross cutting elements of the wider Government Statistical Service (GSS). In parallel we are pulling together information about the work of statisticians in other government departments in order to get a comprehensive picture.
5. Other important developments in recent weeks include the following.
  - i. The Inter-Administration Committee has been considering a range of proposals for the new landscape on devolution. An agreement between the administrations on statistical matters is currently being ratified.
  - ii. The GSS played a prominent role in the Heads of Analysis conference, which brings together leaders of the analytical professions across government. There is a strong sense of analysts working together to support policy and operational delivery, especially on the most challenging questions. The importance of making best use of new data sources came through strongly. I spoke at the Government Operational Research conference – this is a group where there are plenty of opportunities for common endeavour.
  - iii. The role of statistics/data science was also much to the fore in an event (Sprint 16) hosted by the Minister for the Cabinet Office on the Government's technology, digital and data strategy. I chaired a panel session. In addition, I chaired a meeting and a workshop for the government's Data Steering Group. An important theme of this work is the way in which technology is transforming the relationship between citizen and state and need for clarity on the question "what is the deal on data?".
  - iv. The House of Commons Science and Technology Committee published a report on the *Big Data Dilemma*. This report recommends new powers for ONS and also a stronger approach to data ethics. We will be working closely with others on a government response to this report.
  - v. After a period of testing through an Open Policy approach, a wider consultation on data sharing legislation is beginning. This includes data access provisions for ONS and for wider research purposes, which is of particular relevance to the Administrative Data Research Network (ADRN).

- vi. We have met with the Chief Executive of the Economic and Social Research Council to discuss a range of issues including how to support the ADRN. In parallel to this I hosted a workshop on Data Labs which heard from colleagues from Health and Social Care Information Centre (HSCIC), Department for Work and Pensions (DWP), Department for Education (DfE) and the ONS Virtual Microdata Laboratory about their plans. The user focused approach of the Ministry of Justice Data Lab is one that others are keen to follow but there is an imperative now to maximise efficiency and effectiveness as well as reduce risks from proliferation of data by taking a government-wide view.
- vii. Following the Board discussion last month, I have started to consider the issue of Pre-Release Access to ONS statistics.
- viii. Department for Business, Innovation and Skills (BIS) has announced the closure of its office in Sheffield which is a significant employer of statisticians.
- ix. There has been a range of useful opportunities for us to reach wider audiences this month: Glen Watson was on Radio 2's Steve Wright Show, Heather Savory was interviewed by Womanthology, Jonathan Athrow was interviewed on the weekly business programme on BBC Radio Wales and The Mail on Sunday carried quite a detailed interview with me.

#### **Future look**

- 6. In the next few weeks we will be gearing up for the start of the new financial year. This will include work on the annual accounts for 2015-16 as well as annual reporting for all staff. Detailed work on planning and monitoring of activities for the coming year will also be put in place to support future reporting to the Board and elsewhere.

**John Pullinger, 17 February 2016**

## UK STATISTICS AUTHORITY

SA(16)08

***Electronic Data Collection progress update*****Purpose**

1. This paper provides the Board with an update on progress with our move to Electronic Data Collection (EDC).

**Recommendations**

2. Members of the Board are invited to note:
  - i. the continued progress being made toward our goal of a first business survey online by end April 2016; and
  - ii. the interim findings of the Monthly Wages and Salaries Survey (MWSS) pilot.

**Background**

3. The last update on progress with EDC was provided to the Board in November 2015. A video was shown of the end to end user experience in setting up and responding to a short online survey. We also discussed early findings from the MWSS pilot which is designed to provide insight into the modal bias of collecting business data online. The Board asked for a progress update in February.

**Discussion**

4. At the November 2015 Board meeting I provided an overview of the work we were doing to align EDC with the ONS Enterprise Architecture; moving away from monolithic system development toward a more modular approach. This focuses on developing smaller technical products, as part of a wider service.
5. We discussed how the electronic Questionnaire (eQ) product was to be assessed by the Government Digital Service (GDS) in early December against the 18 Digital by Default Service Standards. The review endorsed our approach, and we are now in the eQ Beta stage, running in parallel with ongoing development of the response and respondent management products. In mid February a further 'integration' team was established to enable data to flow between the different products and to ONS's processing systems.
6. In respect of business survey roll-out I explained in November how we plan to shift the Monthly Commodities Inquiry (MCI) online from April 2016. This is part of the Retail Sales Inquiry (RSI) which is completed by 32 of the largest retailers. The MCI remains our key focus and is on track, albeit with some challenges that we are managing closely – in particular, being ready to test the Beta MCI questionnaire in late February, and enabling secure integration between the EDC components.
7. In November, I also explained how the eQ tool is now also being designed for use in the 2021 Census, subject to testing over the coming months and during the 2017 Census test. This is of increasing importance as we move through the Beta phase and Census colleagues are actively engaged in the prioritisation of development activities.

**Interim findings from the MWSS pilot**

8. As discussed in November, the EDC system has been used to conduct an online MWSS pilot with a sample of 6,500 businesses across all industries. Whilst the pilot is not yet complete, **Annex A** provides interim findings which are summarised below.
9. Survey data mode effects.
  - i. At the output level, the *pseudo Average Weekly Earnings* estimates for *regular pay* show no evidence of a mode effect. It should be noted that the data analysed to-date do not cover all industries and any inferences made so far are tentative.

- ii. At the cell level, the figures for *gross regular pay* and *employment* appear to be mostly consistent with no mode effect. *Bonuses* are of more concern, but the skewed nature of this variable for the periods available is impacting the analysis. This will become clearer when data from March 2016 are available, that is when more businesses pay their bonuses.

#### 10. Validation and imputation.

- i. As expected, coding user-defined checks within the eQ, so that respondents self-validate their data at the point of collection, has eradicated many failures, reducing the need for re-contact.
- ii. The analysis of selective editing (targeted error checking routines) has been limited so far by the pilot mainly consisting of newly selected businesses, i.e. those for whom we don't hold previous data. As the pilot matures, the selective editing rates are improving to levels typical of the paper survey, and better for some industry domains. Trends suggest they will further improve as the pilot progresses.
- iii. Overall, interim findings suggest we will deliver validation efficiencies, with further scope to introduce external data sources to the eQ validation process.
- iv. Early findings also suggest that the pilot has both lower unit and item non-response.
- v. However, call centre information suggests that these benefits will be offset initially by an increased number of incoming calls from respondents, mainly due to issues around the registration and login process (forgotten usernames and passwords etc). These issues are being prioritised for ongoing user research.

#### 11. Response Rates.

- i. EDC achieves a higher response rate initially, but the paper survey overtakes it around the respond by date. Again this appears to be an effect of the online pilot sample consisting mainly of newly selected businesses.
- ii. There appear to be learning effects for both the general survey process and mode of collection. Reassuringly, the response profile is very healthy for those businesses with experience of both. This bodes well for rollout, as most respondents will fall within this group after an initial registration period, although we may see a small decrease in response rates when business survey respondents first transition online.

#### Risks

- 12. The immediate risks to our EDC roll out plans are around the successful user-testing of the MCI questionnaire and the flow of data between the discrete products, and to ONS downstream processing systems. These risks are being managed and, whilst ongoing attention is required, we do not consider these to be major threats to delivery. In respect of the risk of modal bias, this is continuing to be assessed and analysed via the MWSS pilot but is not currently causing concern.

#### **Conclusion**

- 13. In summary, since our decision to realign EDC product development and refocus priorities, progress has been good, including passing the GDS assessment of the eQ in December. There are still challenges ahead of planned roll-out for the MCI in April, but these are being closely managed.
- 14. Separately, the MWSS pilot is providing reassurance around potential mode effects, validation efficiencies and response rates.

**Jason Bradbury, Programme Director, Electronic Data Collection, 11 February 2016**

#### **List of Annexes**

#### **Annex A Interim findings from the MWSS pilot**

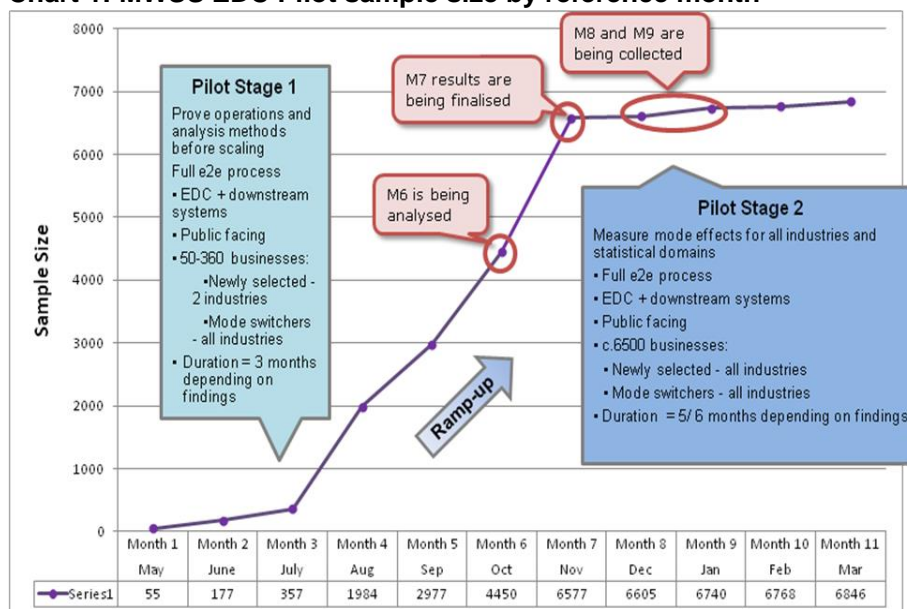
## **Annex A: Interim findings from the Monthly Wages and Salaries Survey (MWSS) pilot**

### **Pilot aims**

1. The pilot is aimed at iteratively testing and developing our online data collection service for business surveys. A cautious approach is being taken, with the pilot running in parallel to the existing paper based survey. Following qualitative questionnaire design and usability testing, this quantitative pilot is gauging intended benefits such as more timely response, editing efficiencies and measuring mode effects on statistical outputs in response to concerns from output managers and users. This paper focuses on those aspects, although the pilot's value extends to bedding-in new systems and support operations and providing valuable feedback from internal users and business respondents, without risk to statistical outputs. Findings are informing implementation of the service for this and other business surveys.

### **Sample design**

2. The existing MWSS sample is a stratified simple random sample of around 9,500 businesses each month, with a register employment of at least 20. Strata (cells) are defined by industry, business size and legal status. Sample selection is performed using permanent random numbers (PRNs) with a rotation period of 60 months, although most businesses leave the sample after less.
3. The pilot is running in parallel with the existing survey. Most businesses are newly selected to the pilot, with the bulk of the sample replicating the existing sample. To avoid the samples overlapping the largest businesses, which are always included in the existing survey, are excluded from the pilot, along with strata with sampling fractions of over 33 per cent. Additionally, any business rotated out of the live sample is recruited into the pilot the following month, provided that the total time spent in both surveys will not exceed 60 months. We refer to these businesses as mode-switchers. Around 30 to 70 new mode-switchers are added each month. Where the population permits, the pilot also samples businesses with less than 20 employment, allowing us to observe their behaviour to inform roll-out to surveys that sample them.
4. The pilot has been implemented in stages to allow the EDC systems, operations and methods to stabilise (chart 1). Stage 1 covered only a few strata, with limited scope for analysis. The ramp-up was also stretched over a number of months to allow newly selected businesses that typically require more support initially, to be included in manageable batches. Whole industry domains were added when ramping-up, to enable editing and sampling processes to occur at that level, and also allow analysis for those domains. The pilot survey data analysis currently runs to October (month 6).

**Chart 1: MWSS EDC Pilot sample size by reference month**

## Pilot analysis findings

### Survey data and output mode effects (for returned and validated data)

5. The main starting assumptions are that significant / noticeable mode effects on survey data will not be detected for business surveys such as the MWSS, given:
  - i. The paper survey is already a self-completion mode, so less change than moving face-to-face surveys online where the interviewer is removed from the process.
  - ii. The questions are factual in their nature and so the collection mode is less likely to affect cognition of the question itself (how / what businesses respond).
  - iii. The survey is mandatory, which provides strong incentives for businesses to respond, so unlike voluntary surveys the mode of collection should have less impact on who responds.
  - iv. Internet usage by businesses is extremely high
6. However, much depends on the implementation and output managers and users are understandably cautious and keen the potential impact is gauged before fully implementing EDC. Results to date are as follows.

### Mode effects on microdata (cell level)

7. The differences in distributions of the main survey variables between EDC and paper are compared by month and stratum (in cells where there is enough data to enable comparison). Confidence intervals are calculated for the differences in means (electronic minus paper), using five different models. If there is no mode effect, we expect on average that 5 per cent of these confidence intervals will not include zero. The table below shows for three variables by month the number of cells/strata for which at least one confidence interval does not contain zero. Note that because five tests are applied to each cell, the probability that at least one will result in a confidence interval excluding zero is slightly greater than 5 per cent. The May-July figures have been included for completeness in table 1, but they involve too few cells from which to make any inference. We therefore restrict our analysis to months from August 2015 onwards.

**Table 1. Mode effects on microdata (cell level) by main survey variable (May to October 2015)**

Month	No. of cells eligible for analysis	% of cells with at least one confidence interval for the difference (eQ minus paper) which does not include zero		
		Gross Regular Pay	Bonuses	Employment
May-15	1	0	0	0
Jun-15	2	50	50	0
Jul-15	6	17	33	17
Aug-15	37	8	35	14
Sep-15	55	5	22	5
Oct-15	87	9	17	8

The figures for *gross regular pay* appear to be consistent with no mode effect.

8. The figures for *employment* appear to be mostly consistent with no mode effect. The exception is August 2015, but this may still be due to the relatively small number of eligible cells at this early stage of the pilot ramp-up. The situation will become clearer as more months' data become available.
9. The figures for *bonuses* are of more concern. However, the issue here may be the extreme positive skewness of the data for these months, which will invalidate some of the models used to calculate the confidence intervals. This situation will only become clear when data from March 2016 are available. This is because a larger number of companies pay their bonuses in March, so bonus data from March should be less skewed than for other months.
10. It should be noted that the data analysed to-date still do not cover all MWSS industries. Therefore any inferences made so far should at best be regarded as tentative. The first month with full coverage will be November 2015.

#### Mode effects on output estimates

11. Pseudo output-level estimates of Average Weekly Earnings (AWE), based on only those strata covered by the pilot, are calculated and compared with corresponding output estimates calculated from the paper survey for each period. Confidence intervals are again calculated for the differences in means (eQ minus paper). If there is no mode effect, we expect on average that 5% of these confidence intervals will not include zero.

**Table 2. Mode effects on output estimates (May to October 2015)**

Month	Pseudo Average Weekly Earnings (Regular Pay) estimates (£)		Difference (£)	95% confidence interval of difference	
	Paper	EDC		Lower limit	Upper limit
May-15	880.9	1030.0	149.1	-110.3	408.5
Jun-15	1027.0	976.5	-50.5	-241.8	140.8
Jul-15	452.6	460.6	8	-24.9	40.9
Aug-15	483.3	481.6	-1.7	-28.1	24.7
Sep-15	506.3	507.6	1.3	-16.3	18.9
Oct-15	429.2	429.4	0.2	-12.0	12.4

12. So far, the pseudo AWE aggregates show no evidence of a mode effect. All the confidence intervals of the difference include zero. They are getting narrower over time, showing the increasing coverage of the pilot improving the accuracy of the aggregates. Indeed, the paper and EDC estimates for pseudo AWE (regular pay) are within 20 pence of each other for the most recent month of the analysis.

13. It is worth noting that the changing coverage is producing an artificial volatility into the time series. This should stabilize once the pilot ramp-up is complete, from November 2015. This period should also give the best pseudo-AWE accuracies of the pilot.

**Mode effects when businesses switch mode**

14. The distributions of single month movements of new mode-switchers (paper to eQ) are compared with similar units in the existing paper survey (paper to paper). Test statistics are calculated for the differences in mean changes (paper to eQ minus paper to paper). If there is no mode-switching effect, we expect on average that 5 per cent of these tests will have p-values less than 0.05. Note that the sample size for mode-switchers is small (around 200 businesses from May to October), and so not large enough to provide a period or industry analysis.

**Table 3.**

Months	Test	p-value		
		Gross Regular Pay	Bonuses	Employment
May-Oct-15	Sign	0.70	0.02	0.14
	Wilcoxon signed-rank	0.17	0.18	0.07

15. With one p-value significant and another almost significant, these tests do not currently give a clear picture as to whether there is a mode-switching effect. These tests should be monitored as more data becomes available, especially with the pilot ramp-up completed from November 2015.



### Validation mode effects

16. A number of post-collection validation processes are carried-out for the paper survey including batch errors, standard tests, 23 user-defined tests and selective editing. The same tests are also performed for the pilot. The difference is that the user-defined checks are also coded within the eQ and so are self-validated by the respondent at the point of collection, with the expected benefit of reducing the need for re-contact.

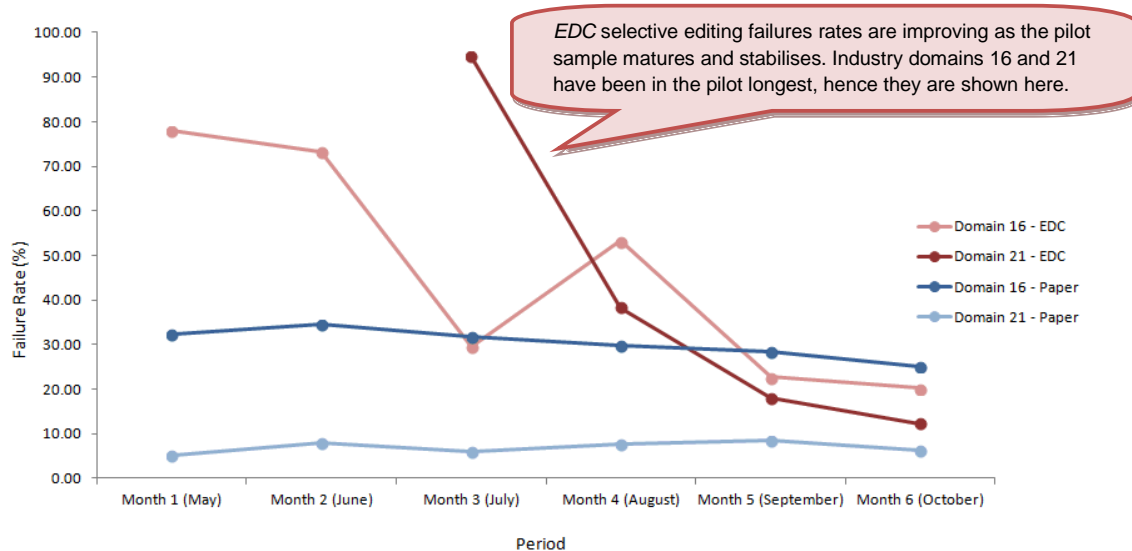
**Table 4. No. of responding unit failures (post-collection) – Paper vs. EDC (month 6 - October)**

Domain		Paper				EDC			
		Response	Edit Failures			Response	Edit Failures		
Description	No.		User Defined Checks	Selective Editing	Total		User Defined Checks	Selective Editing	Total
Agriculture, Forestry & Fishing	1	127	3	29	32	92	0	45	45
Mining & Quarrying	2	126	4	28	31	46	0	8	8
Food Products, Beverage and Tobacco	3	212	7	15	22	134	0	13	13
Textiles, Leather & Clothing	4	148	4	24	27	126	0	34	34
Chemicals & Man-made Fibres	5	123	5	23	27	64	0	55	55
Basic Metals & Metal Products	6	166	3	33	35	162	0	153	153
Engineering & Allied Industries	7	426	23	15	36				
Other Manufacturing	8	450	15	21	36				
Electricity, Gas & Water Supply	9	222	11	33	43	137	0	20	20
Construction	10	377	6	62	68	308	0	57	57
Wholesale Trade	11	214	8	41	47	165	0	50	50
Retail Trade & Repairs	12	373	21	36	55	188	0	37	37
Transport & Storage	13	395	7	18	24	184	0	21	21
Accommodation & Food Services	14	330	9	58	65	211	1	186	186
Information & Communication	15	476	24	36	59	328	0	35	35
Financial & Insurance Activities	16	413	15	90	104	233	0	47	47
Real Estate Activities	17	166	7	15	21	91	0	14	14
Professional, Scientific & Technical	18	701	25	46	70				
Administrative & Support Services	19	670	26	90	114	411	0	333	333
Public Administration	20	232	7	28	33	83	0	14	14
Education	21	611	13	26	39	213	0	26	26
Health & Social Work	22	841	21	51	70	315	0	293	293
Arts, Entertainment & Recreation	23	378	12	43	53				
Other Services	24	220	6	33	38				
Total		8397	282	894	1149	3491	1	1441	1441

User-defined failures eradicated for EDC by including these checks in the eQ.

17. As expected, the user-defined failures at post-collection have been eradicated. The potential size of this benefit can be seen in terms of the total number of user-defined failures the paper survey generates for a typical month: 282 failures in October, equal to 3 per cent of responses or 25 per cent of total failures. The scale of this effect will continue to be analysed across more domains and months as the pilot progresses.
18. Selective editing<sup>1</sup> failure rates were initially much higher for the pilot, but those failures proved to be spurious; caused by the absence of previous returns for newly selected businesses to use within the selective editing formula. As the pilot sample is maturing, the selective editing failure and hit rates are improving to levels typical of the paper survey, and better for some domains. Trends suggest they'll further improve as the pilot progresses (chart 2). The pilot is currently using existing selective editing thresholds, but these will need to be reviewed in due course to make them optimal for the new modes.

<sup>1</sup> Selective editing process is an automated process which targets error checking toward those returns which would have the most significant impact on key estimates.

**Chart 2: Failure rates (post-collection) – Paper vs. EDC (month 1 to 6 ) for Domains 16 and 21**

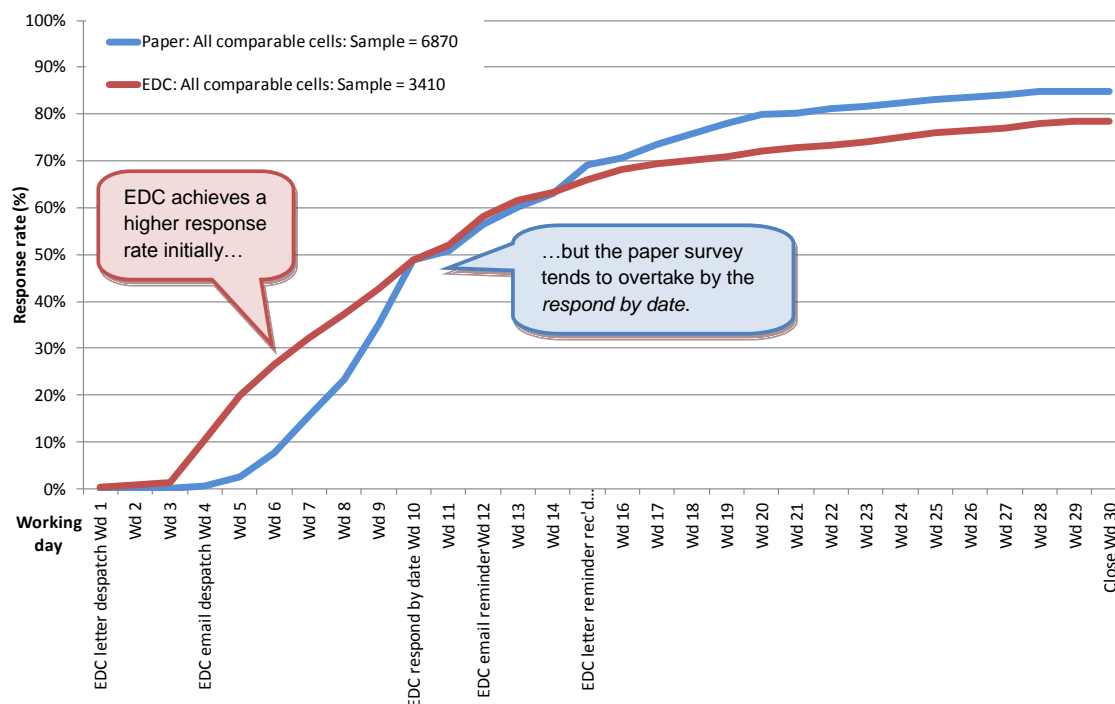
19. Overall, interim findings suggests EDC (eQ) will deliver validation efficiencies, with further scope to introduce functionality to introduce previous and/or external data sources to the eQ validation at the point of collection.
20. However, the call centre paradata suggests that these benefits will be offset initially by an increased number of incoming calls from respondents due to issues around the registration and login process. These issues are being prioritised for further user research, to understand and resolve them.
21. Further work: Additional eQ paradata is now available, which allows us to identify when and how frequently the various edit checks are triggered by respondents when completing the eQ and their journeys thereafter, in order to assess their effectiveness and refine their design. The GSS Methodology Advisory Committee (GSS MAC), also suggested investigating respondent journeys as a predictor for errors, and we are now seeking to take this work forward with Southampton University.

#### Imputation mode effects

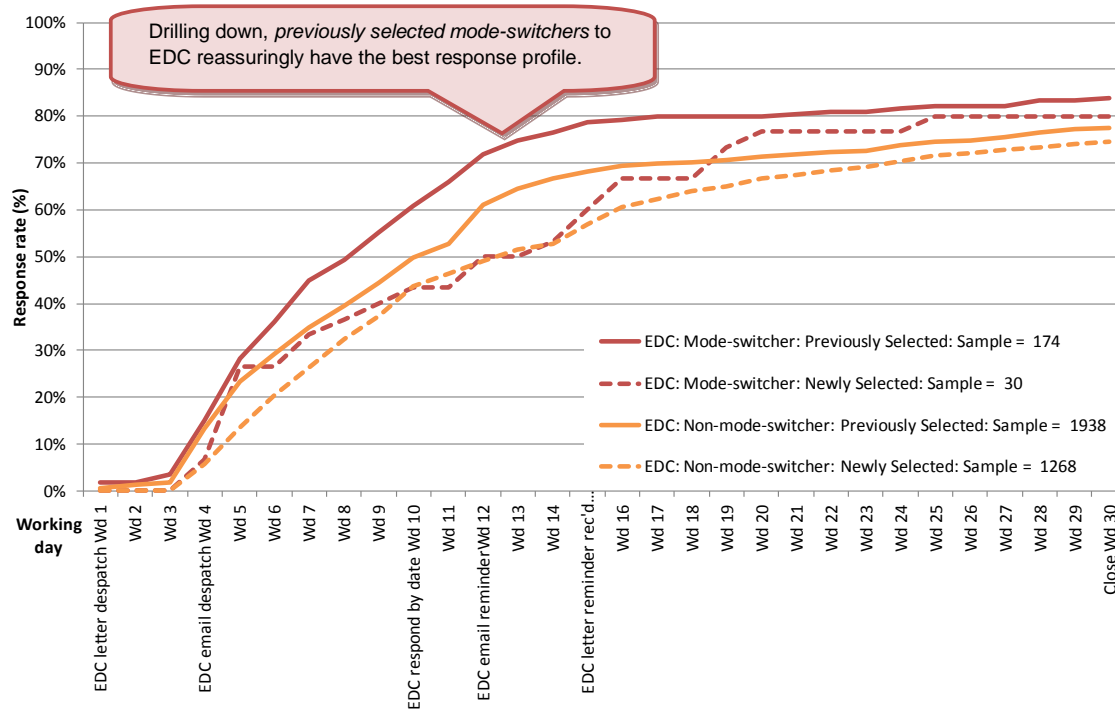
22. Non-response can either be at the unit (business) or item (question) level. MWSS uses a simple form of imputation, where returned data from previous periods is carried forward. The same imputation methods have been applied to the pilot, with the research aim to measure any impact on imputation bias. GSS MAC advised that this was valid research aim, but would not be achieved by the analysis method originally proposed. A revised approach is now being taken, with a first step of comparing missingness patterns.
23. Early findings suggest that overall pilot has both lower unit and item non-response than the paper survey, but there are differences by industry domain and employment size-band. Further work will look at donor methods of imputation (used by other surveys), comparing the impact of using eQ and paper returns.

#### Response rate mode effects

24. Response rates are key performance indicators that currently drive targets for business survey operations. The MWSS response rate target is set at 83 per cent by the end of the collection period. Running the EDC pilot in parallel to the existing paper-based survey enables us to compare response rates across the survey period and by business demographic, in order to assess anticipated timing and operational benefits from EDC, and inform reminder and response chasing strategies.

**Chart 3: Response Profile – Paper vs. EDC (month 6 – October 2015)**

25. Chart 3 compares the response profiles for those cells included and so comparable across both surveys. At this top level we typically find that EDC achieves a higher response rate initially, but the paper survey overtakes around the respond by date. However, in October the pilot sample contained over 38 per cent newly selected businesses, illustrating its relative immaturity compared to the well-established paper survey with less than 2 per cent newly selected.

**Chart 4: Response Profile – EDC by experience of survey and mode (month 6 – October 2015)**

26. Drilling down further, chart 4 splits the samples in terms of whether respondents were newly or previously selected in that month, and by whether they were mode-switchers (paper to EDC) or not (always EDC). Reassuringly, the previously selected mode-switchers have the quickest response profile, which clearly meets the 83 per cent response target. These respondents have the most experience of both the survey and mode of collection. This suggests learning effects for both the general survey process and mode of collection. It bodes well for the rollout of EDC, as most respondents will fall within this group after an initial registration period, although we should probably expect a small decrease to response rates while business survey respondents first make the switch to EDC (assuming similar levels of reminder and response chasing activity).
27. **The advantage EDC provides is the higher initial response within the period.** Email notifications remove the inherent postal lag of three working days out and three days in for paper responses. Businesses that are keen to respond straightaway can do so electronically as soon as they receive their email notification, and we receive their response immediately after submission. However, sending the email notifications the same day as dispatching the letter notifications is equivalent to starting the survey three days earlier. For MWSS we found that this coincides with response chasing activities for the previous period, whilst some respondents do not have their data available at that point. For these reasons, the email notifications for the pilot have been despatched to coincide with the arrival of the letter notifications (for newly selected business) from October onwards.

## UK STATISTICS AUTHORITY

SA(16)09

### *Authority Business Plan 2016/17 to 2019/20*

#### **Purpose**

1. This paper provides a draft medium term business plan, including budget information, for the Authority. The plan mirrors the spending review period and has been developed with wide engagement across the organisation.

#### **Timing**

2. Comments from the Board are needed in order to allow for the Business Plan to be finalised and for budgets and delivery plans to be ready for April 2016.

#### **Recommendations**

3. Members of the Authority Board are invited to consider and comment on the draft business plan at **Annex A**.

#### **Background**

4. The draft Business Plan builds on the current 'live' Authority Business Plan for 2015/16 to 2017/18. When the current plan was developed a number of key inputs were missing, for example, an understanding of the medium term financial position. The Authority Board's view was the plan represented a clear description of UK official statistics and the work of the Authority during a period of transition but it did not show the transformation the Board would expect in the next iteration. The integrated approach taken to planning in advance of the 2015 Spending Review has allowed for a clear view of this transformation to be developed, and reflected in the draft plan.
5. The business plan is a key link between the Better Statistics, Better Decisions strategy and delivery of specific objectives. The plan takes us to the end of the period set out in the strategy and the targets and activities set are stretching. The plan shows how the organisation will change to meet the needs of our customers and expectations of our users be it through the transformation of our economic statistics, fundamental reform of data collection or the preparations for a modern Census in 2021.
6. The plan sets the main outcomes for the organisation and will shape accountability through the monthly performance report and internal quarterly review process. This business plan is underpinned by Directorate Medium Term Business Plans.

#### **Discussion**

7. The draft plan has been presented in order to allow the Board to shape its development, some key points to note are:
  - i. For each dimension of the 'Better Statistics, Better Decisions' strategy, the business plan identifies the main priority areas, and the outcomes and high level activities to be delivered. This approach allows for an outcome based planning focus, giving a view of what the organisation will look like in the future which was missing from previous plans.
  - ii. We have not made major revisions to the Key Performance Indicators (KPI), although some additional, specific, measures for 'innovation' have been included. Some targets and end-year positions are still to be added for the KPIs.
  - iii. It is recognised the plan has an ONS focus, reflecting in part the significant ONS transformation agenda and the scope of the Authority's resources and accountability. For the previous plan we asked Government Statistical Service

- (GSS) Theme Groups to identify their top priorities and these were included in the plan. However, with the disbanding of theme groups this is no longer possible. The GSS capability issues and cross-cutting work is included throughout the plan to reflect the professional oversight role.
- iv. The Business Plan sets out the Authority's Spending Review funding envelope and multi-year budget breakdown for business areas and programmes. While the Authority's overall envelope is firm and business as usual breakdown is well developed, the internal planning round to allocate resources across investment programmes is ongoing. In addition, the budgets and income associated with new income agreements will be incorporated into the directorate baselines in late February.
  - v. The Monitoring and Assessment plan will be included as an appendix once approved by the Board.
  - vi. It should be noted that although the plan takes account of the interim recommendations from the Bean Review there may need to be late amendments to take account of the final report.
8. Detailed budget information and workforce projections will be included in the plan following the finalisation of funding decisions through Portfolio Committee and National Statistics Executive Group (NSEG). This detail will show the reductions we expect in our workforce on existing operations of around 500 FTE over the Spending Review (SR) period (an overall reduction of 700 but with recruitment of around 200 new posts with different skills). There will be two main peaks in terms of reduction, one in 2016/17 driven largely by Digital Technology and Methodology (DTM) transformation and one later in the SR period driven largely by Data Collection transformation. We are already starting to see delivery of these changes with the ongoing Voluntary Early Severance scheme. In addition to this reduction we will see some temporary increases in line with our transformation funding; these will fall away towards the end of the SR period. By the end of the SR period our workforce will be significantly smaller and will be higher skilled moving away from our current traditional 'pyramid' structure.
  9. For many areas of the organisation the delivery of the corporate plan will be a challenge. Targets and activities set in the plan are stretching and staff will have to deliver change while maintaining existing outputs and services. The design and resourcing of the ONS investment portfolio will mitigate against this risk.
  10. Progress towards the business plan will be reported through the monthly performance report, which will be updated from April 2016. We will report on all activities in the plan and the outcomes which they support. As some activities are described in a manner which is appropriate for external publication we will ensure we have clear internal traceability to link activities to SMART objectives and maintain accountability. It will also be important for the business plan to link through to local plans and personal objectives.
  11. The business plan takes account of the recent public consultation into changes to ONS products and services which closed on 8 February. However, the plan does not cover all of the detail and the formal response to the consultation will be published in tandem with the business plan. The consultation (which received over 400 responses) demonstrated that:
    - i. users supported the proposed approach to changing the ONS publication model and for some releases focusing on publication of data, metadata and headline analysis rather than detailed (and sometimes static) traditional bulletins;
    - ii. users were cautious about some of the proposed changes to survey sample sizes and response rates. Specific decisions are yet to be taken on how to address these concerns while still making the savings required in order to allow for transformation; and

- iii. users were concerned about any reductions in frequency or cutting of outputs. We are unlikely to progress proposals in these areas.

**Ben Whitestone, Integrated Planning Unit, ONS, 16 January 2015**

#### **List of Annexes**

**Annex A Draft Authority Business Plan 2016/17 to 2019/20**





## SA(16)09 – Authority Business Plan and Budget

3.1

### **Annex A - Authority Business Plan 2016/17 to 2019/20**

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

The document will be available at:

<https://www.statisticsauthority.gov.uk/about-the-authority/strategy-and-business-plan/>



SA(16)10 – Shaping the Future of Consumer Price Statistics

**UK STATISTICS AUTHORITY**

SA(16)10

4

***Shaping the Future of Consumer Price Statistics***

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

The document will be available at:

<https://www.statisticsauthority.gov.uk/reports-and-correspondence/consultations/>



## UK STATISTICS AUTHORITY

SA(16)11

*Report from the Director General for Regulation*

5

**Purpose**

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

**Recommendation**

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

**Discussion**

3. Our regulatory activities since the last Board meeting on 29 January have been as follows:
  - i. Health statistics roundtable: the round table takes place on Monday 22 February. The aim is to bring together senior leaders of organisations who produce health statistics for England to discuss the challenges facing health statistics, and agree principles for change and improvement. We are pleased by the senior level attendance, including the chairs of NHS England and the Health and Social Care Information Centre and the Chief Executive of the Care Quality Commission. I will update the Board on the outcomes of the meeting.
  - ii. Code stocktake: this is now in full swing. We will hold the first steering group meeting on Tuesday 23, and have been holding a range of workshops across the country. While it is a bit early to highlight any particular theme, what is clear is the energy we have generated: around 600 responses to our survey, lots of engagement with our workshops, and we also have held or are about to have further discussions with organisations who wish to comply with the Code on a voluntary basis: Monitor, Joseph Rowntree Foundation and the Crown Prosecution Service.
  - iii. Business Plan and budget for Regulation: following the January Board meeting, we presented an updated business plan to the Regulation Committee. The plan is at **Annex B**. The plan fleshes out a revised approach that is more sector-led, less driven by fixed programmes of work, and makes greater use of external expertise. We also have proposed an increase in resources allocated to regulation.
  - iv. Homelessness: although a planned meeting with the Secretary of State was cancelled, we continue to work with the Department for Communities and Local Government (CLG) to ensure that they make the necessary improvements to homelessness statistics. We remain hopeful that significant improvements will be made in 2016.
  - v. DWP breach: the Permanent Secretary replied to our letter on the breach of pre release access. [His letter](#) was helpful in committing the Department to high standards of compliance.
  - vi. EEA migrants: in the run up to EU membership renegotiations, the issue of Government estimates of benefits received by recent EEA migrants remains a salient issue. We have published strong interventions and continue to handle several public complaints, all revolving around full access to the analysis underpinning Government statements.

4. The main challenges include the below.

- i. Bean: we have had several interactions on governance with the Bean review team. The potential conclusions, and even the broad areas of analysis, remain far from clear to us, though my best guess is that they may cover the extent to which the regulatory function has a separate voice, and how to make National Statistics status more meaningful to users.
- ii. Business plan: implementing the business plan's new approach will be stretching for me and my senior team. In particular, developing a stronger and clearer public voice, and delivering a more strategic approach focussed on sectors rather than individual statistics, will be challenging. We also need to do work to develop our stakeholder engagement and our communications approach.
- iii. CPIH: we are in the final stages of a re-assessment of CPIH. Ensuring that we communicate our concluding clearly to multiple audiences will be a big challenge in March.

**Ed Humpherson, Director General for Regulation, 18 February 2016**

**List of Annexes**

<b>Annex A</b>	<b>Monitoring and Assessment activity since the last meeting</b>
<b>Annex B</b>	<b>Monitoring and Assessment Business Plan: 2016-17 to 17-18</b>

## Annex A Key outputs since the last meeting

### Assessment

New National Statistics designations/confirmations:

- Patient Experience Survey (Care Quality Commission)
- Police Recorded Crime in Northern Ireland (Police Service of Northern Ireland)

National Statistics status removed: none

### Strategic interventions

- **Health**  
Health round table – 22 February (see paragraph 3i).
- **City Regions**  
Statistics for City Regions seminar - 8 March.
- **Crime**  
Preparing an update report on progress on police recorded crime in England and Wales, for review by the Regulation Committee in April.
- **Quality Assurance of Administrative Data**  
Preparing an update report for the April Committee on the progress in rolling out the Authority's regulatory standard across the GSS.

### Casework

- [Complaint regarding the late release of statistics](#) – Complaint regarding the late release of housing market statistics.
- [Breach of pre-release access](#) - an indication of the substance of the Labour Market Statistics release was shared by the Department for Work and Pensions with up to 300 people through a social media network ahead of the publication of the report by someone not approved to have pre-release access to the statistics.
- [National Insurance Numbers issued to recent migrants](#) – an inquiry from Will Moy (Full Fact) regarding a Freedom of Information (FOI) request from the National Institute of Economic and Social Research on the numbers of National Insurance Numbers (NINOs) issued to recent migrants who were 'active', which was initially turned down by HM Revenue and Customs (HMRC).
- [Equality of access to statistics](#) – Drawing the HMRC Permanent Secretary's attention to Sir Andrew's letter on NINOs, in particular noting the comments on the delays in releasing data.
- Communication of crime statistics:
  - [Letter from Sir Andrew Dilnot to Jack Dromey MP](#) regarding the communication of crime statistics
  - [Letter from Sir Andrew Dilnot to James Cleverly MP](#) regarding the communication of crime statistics





## SA(16)11 – Report from the Director General for Regulation

### **Annex B – Monitoring and Assessment Business Plan 2016/17 to 2017/18**

This document will be included in the Authority Business Plan that will be published on the UK Statistics Authority website in due course.

The document will be available at:

<https://www.statisticsauthority.gov.uk/about-the-authority/strategy-and-business-plan/>