

# ONS Response to the National Statistics Quality Review (Series 2) of Labour Force Survey

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## 1 Introduction

The National Statistics Quality Review (NSQR) of the UK Labour Force Survey (LFS)<sup>1</sup> was published in February 2014.

The review focused largely on implications for **accuracy** arising from the LFS design, fieldwork and estimation procedures. In addition, it outlined that increasing requests for single month estimates have called into question the **timeliness** of results. It also considered **comparability** from the international perspective.

The review stated that

*The primary conclusion from the review is that currently the LFS enables the production of good quality estimates from the survey outputs, i.e. these are acceptable in terms of their accuracy and timeliness and are of comparable quality to those estimates produced elsewhere in the countries included in this review.*

However, it also stated that there is some room for improvement to the LFS design and procedures. In consequence it made a number of specific recommendations to explore potential improvements to the survey. The Review flagged that, at a time of constrained resources, the listed recommendations have been restricted to relatively low cost proposals.

Upon publication of the NSQR, ONS stated that, subject to funding, ONS would undertake these recommendations over the next 12 to 24 months.

This article provides details of ONS's response in terms of addressing the key recommendations.

## 2 ONS Response

ONS accepts the relevance of all recommendations made. A summary of actions taken to date in response to each recommendation is provided in Appendix A.

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<sup>1</sup> <http://www.ons.gov.uk/ons/guide-method/method-quality/quality/quality-reviews/list-of-current-national-statistics-quality-reviews/nsqr-series--2--report-no--1/index.html>

### **3 Summary**

Annex A details the actions taken by ONS to address the NSQR recommendations for exploring potential improvements to the survey. These steps have, we believe, provided some benefits to data users, for example via improvement to meta data and making more data available.

However, declining response rates - which the NSQR references as a driver for the review - have not been halted. Indeed, by July-September 2015 the wave 1 response rate had fallen to 55.5%, compared with 58.9% in the same quarter in 2013.

All (with the exception of recommendation 4) of the recommendations of the Review have either been addressed or are incorporated into other projects and further developments and outcomes will be reported as part of those projects.

## Annex A – Response to each recommendation

	Recommendation  (abbreviated – full wording can be seen in NSQR report, pages 10-12)	ONS response to recommendation
1	Allocate dedicated resource to continuous quality improvement on LFS.	<p>Examples of resource allocated to continuous quality improvement are as follows:</p> <p>From a response rate perspective: a Local Area Response Project team has been set up to a) research fieldwork patterns and b) develop action plans, in Interview Areas where response rates have fallen most since 2011.</p> <p>From a questionnaire perspective: ONS has implemented workshops aiming to identify questions for removal, such that questionnaire focus can be kept relevant whilst not increasing its length. Further, ONS has worked with BIS to initiate a review of LFS Education questions.</p> <p>From the perspective of providing data to meet user needs: ONS will conduct an LFS reweighting process each year, to utilise the most up to date population estimates and projections. Further, ONS has put in place regular production of longitudinal datasets based on APS data, to supplement LFS longitudinal data. Data from Eurostat Ad Hoc Modules is now available to government users on the main APS files.</p> <p>From the perspective of support for data users: In 2015, in addition to providing updated LFS user guides 2, 3, 4 and 6, resource was allocated to publishing a new User guide 10 ‘Analysis of data collected by the Labour Force Survey’.</p>
2	Ensure LFS representation/ liaison with ONS projects whose outcomes have major implications for design of LFS.	ONS is represented on Eurostat task forces, for example those considering the proposed introduction of household income questions and the 2018 Ad hoc Module. For the former task force, research was conducted by ONS recommending that household income not be included in LFS; this recommendation was implemented by Eurostat.

Recommendation	ONS response to recommendation
(abbreviated – full wording can be seen in NSQR report, pages 10-12)	<p>ONS also participates in Eurostat’s biannual Labour Market Statistics workshops and annual European LFS Methodology Conference, and will host the latter in 2016. Of particular note is Eurostat’s draft regulation IESS (Integrated European Social Statistics), targeted for introduction in 2019: ONS is actively planning and communicating necessary activities to comply with IESS. It will participate in IESS Implementation Task Forces in 2016/17.</p> <p>Substantial liaison has taken place with ONS’s Electronic Data Collection programme, and going forward with Social Statistics Transformation programme, focusing on implementing online data collection and utilising administrative and big data.</p>
3 Retain the PAF for now, but move to Address Base in future.	The relevance/benefit of PAF and Address Base is being considered by the ONS Address Register project which has a cross government focus. LFS, in line with other ONS surveys, will utilise Address Register findings to define future sample frame methodology.
4 Discontinue sampling of NHS accommodation.	A project will address this work package. It has not been given highest priority to date given the small number of NHS addresses in the LFS sample.
5 Explore the efficiency of interviewer stint areas, with a view to redesigning.	Analysis has suggested that the current interviewer areas are inefficient, as numerous fieldwork demands have changed since the areas were defined. As a result, ONS is conducting a project to implement a new re-stint design, in 2016 or 2017. It is anticipated that future re-stinting exercises will be required, driven by developments in the area of online interviewing and use of administrative data.
6 Explore potential for adaptive fieldwork to focus resources more efficiently.	A modelling approach has been developed (drawing on advice from ONS Methodology and from Southampton University) relating to cases entering week two of data collection in Telephone Operations. Domains of cases are identified and a propensity model applied to prioritise cases more efficiently. A test of the approach will be implemented in 2016.

	Recommendation (abbreviated – full wording can be seen in NSQR report, pages 10-12)	ONS response to recommendation
7	Further reduce the number of Wave 1 telephone interviews.	The proportion of wave 1 cases handled by telephone operations was halved in 2014, to approximately 10-15%. It is estimated that this helped improve wave 1 response rates by 1-2%.
8	Pursue international agreement on a more standardised approach to reporting response and for greater clarity in Eurostat publications about differences in how response is measured/reported.	A Eurostat Task Force presented recommendations that were proposed for testing by some NSIs in 2015. The results of the testing are awaited. ONS will review outcomes and consider best way forward, taking into account harmonisation with other surveys.
9	Explore ways of exploiting the option to have a longer data collection period.	This is being considered as part of ONS's Social Statistics Transformation programme, in particular online interviewing development.
10	Explore the option of using a moving reference week, in the context of Electronic Data Collection project	This will be considered as part of ONS's Social Statistics Transformation programme, in particular online interviewing development.
11	Work with EDC on other issues relating to reference week/field period as well as effects on response rate and non-response bias	This will be considered as part of ONS's Social Statistics Transformation programme, in particular online interviewing development.

	Recommendation (abbreviated – full wording can be seen in NSQR report, pages 10-12)	ONS response to recommendation
12	The potential costs and benefits of adding a sixth wave of interviews into the rotation design be explored	Analysis conducted by ONS Methodology identified that, in combination with Annual Population Survey targets requirement, this approach would provide very limited cost benefit, while producing some concerns relating to quality of time series data. As such, it is not being progressed. However, the approach may be revisited as an aid to meeting Eurostat precision targets at local level specified in Integrated European Social Statistics regulation (IESS).
13	Ensure that annual reviews are held aimed at reducing or containing interview length	A workshop has been conducted every six months over the past two years, with members of the LFS Steering Group. These workshops focus on use of existing questions, challenging need for asking them a) at all, b) on each type of dataset and c) at the current frequency of collection. The interview length has not increased since the workshops were introduced. The process has been extended to include a review of Education questions on LFS, as notified to wider users via StatsUserNet.
14	Assess the costs and benefits associated with non-response and attrition weighting and the desirability of integrative weighting.	Analysis has been conducted focusing on the impact of attrition on estimates, with an associated paper planned for publication in ONS Survey Methodology Bulletin. This analysis is to be reviewed and decisions to be taken regarding implementation of recommendations.
15	Assess the feasibility of adding APS boost samples to main LFS estimates.	Initial analysis conducted in 2015 will be considered further with particular reference to meeting IESS precision requirements.

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16	Assess more fully the process of attrition, its consequences for LFS estimates; and promote sample retention	Consequences of attrition are addressed against point 14, above. Attrition will be considered in more detail as part of Social Statistics Transformation.
17	Develop a new monthly weighting methodology based on that used for quarterly estimates.	This work was carried out successfully as part of the project to develop the State Space Modelling approach (point 24)
18	Investigate opportunities for re-weighting the longitudinal flow estimates	A paper was published with findings, in Survey Methodology Bulletin, Autumn 2015, which concluded that the current methodology is appropriate and will be retained. <a href="http://www.ons.gov.uk/ons/guide-method/method-quality/survey-methodology-bulletin/index.html">http://www.ons.gov.uk/ons/guide-method/method-quality/survey-methodology-bulletin/index.html</a> Following this review, more detailed flows statistics have begun to be published on a quarterly basis. These include estimates of job to job flows and flows between different occupational groups.
19	Continue to produce rolling quarterly estimates as the preferred monthly headline indicator	In place, unchanged.
20	Apply minor modifications to the seasonal adjustment of single month estimates	Completed – Series have been reviewed and seasonal adjustment has been improved. Wave data was previously using rolled forward seasonal factors but is now fully seasonally adjusted every month.

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21	Continue with current single month estimates benchmarking method	In place – continuing as usual until State Space Modelling approach is introduced.
22	Commence regular production of estimates of sampling variability at earliest opportunity	Not to be developed given progress against point 24
23	Improve metadata for single month estimates	From January 2016, wave analysis has been published alongside single month estimates with clearer series descriptions.
24	Continue the existing project to develop state space models, but with higher priority	A prototype state space model has been developed that produces single month estimates of unemployment, employment and inactivity from quarterly LFS microdata. In short the estimates represent time series with the identifiable survey design effects removed. The methodology has undergone initial peer review and is sufficiently developed to enable the monthly publication of an experimental time series. The plan is to publish these experimental statistics alongside the existing LFS single month estimates from mid-2016 onwards. In the longer term it is anticipated that the modelled estimates will replace the existing estimates and will be provided for use in the Eurostat monthly unemployment release. The quarterly LFS aggregates will remain as the headline National Statistics.
25	Developments of the communal establishment sampling frame from Beyond 2011 are considered for their potential for sampling purposes in the LFS	This is a longer-term recommendation of the NSQR. In the interim the estimated impact of not surveying communal establishments in the LFS was reviewed as part of the project that reconciles LFS estimates of jobs with those produced by ONS business surveys. The review took account of information from the 2011 Census of Population and a methodological article was published on the ONS web-site <a href="http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/articles-and-reports/review-of-the-reconciliation-of-ONS-jobs-estimates.pdf">http://webarchive.nationalarchives.gov.uk/20160105160709/http://www.ons.gov.uk/ons/guide-method/method-quality/specific/labour-market/articles-and-reports/review-of-the-reconciliation-of-ONS-jobs-estimates.pdf</a>



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26	When available, the potential of improving the weighting using administrative data be examined	This will be considered as part of Social Statistics Transformation
27	Introduce web data collection when systems and design issues are resolved	This will be considered as part of Social Statistics Transformation

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