

## Quality Assurance Framework for the Statistical First Release

### 1. Introduction

The Skills Funding Agency (the Agency) in conjunction with Statisticians from the Department for Business, Innovation and Skills (BIS) regularly publish a Statistical First Release on Further Education & Skills: Learner Participation, Outcomes and Level of Highest Qualification Held. These are used to monitor the Government's performance and the final tables are published on [GOV.UK](https://www.gov.uk) for wider use.

This Framework describes the procedures in place to quality assure (QA) the Statistical First Releases (SFR) that are produced by the Agency and BIS. It provides a general framework and an in-depth checklist to manage the quality of the data, outputs and any accompanying commentary. Lessons learned from previous publications have informed this Framework.

This policy is based on the [National Statistics Code of Practice](#) and states the general principles to be followed when dealing with data to be published as Agency outputs, and applies to all statistics released on the Agency sections of [GOV.UK](https://www.gov.uk).

### 2. Objectives of the QA Framework

The objectives of this Data Quality Assurance Framework are:

- a. To ensure that the Agency outputs are accurate and fit for purpose.
- b. To ensure that outputs meet user expectations/needs.
- c. To be transparent in the methods and implementation of data QA in the production of the SFR.
- d. To ensure that adequate resources are available to complete the QA procedures listed below.
- e. To seek continuous improvements in the statistical processes that the Agency and BIS use.

### **3. How we will address these?**

#### **a. To ensure that the Agency outputs are accurate and fit for purpose.**

In order to achieve this we have devised a quality assurance checklist (described in section 5) to apply to all our statistical outputs to ensure they are accurate and robust. We will ensure that our statistics are fit for purpose by pre-announcing the SFR and publishing the results and commentary via [GOV.UK](https://www.gov.uk) in a timely fashion.

#### **b. To ensure that outputs meet user expectations/needs.**

Data Dissemination User group meetings are organised at least a 8 weeks before the publication of the next SFR to discuss the content and any proposed changes to this and future SFRs. Any changes are documented and published along with template tables in advance on the website.

We continuously look at how we can best present our statistical outputs on [GOV.UK](https://www.gov.uk), making them accessible and coherent. The website allows users to provide feedback on the SFR via the Agency service desk [ServiceDesk@sfa.bis.gov.uk](mailto:ServiceDesk@sfa.bis.gov.uk) or the lead statistician. Please also see [SFR Response to Feedback](#)

#### **c. To be transparent in the methods and implementation of data QA in the production of the SFR.**

By publishing our QA framework and allowing users to provide feedback via [GOV.UK](https://www.gov.uk) we aim to be transparent in the methods and the implementation of our QA.

#### **d. To ensure that adequate resources are available to complete the QA procedures listed below.**

Project management principles including the implementation of a team plan, regular keep in touch meetings, action log and issues log are used throughout the planning and producing of the SFR, in order to ensure a robust and timely publication. A quality review log is used to ensure adequate resources are available to successfully quality review the SFR tables.

**e. To seek continuous improvements in the statistical processes that the Agency use.**

By reviewing the lessons learnt and the QA checklist after each SFR publication, we continuously seek to improve the processes that we use. In conjunction with the QA framework we have developed more automated methods to populate the SFR tables and are continually looking at ways to automate the production of tables. This has resulted in a greater number of supplementary tables being published alongside the main tables, less scope for human error and more efficient use of resources. An external review of the SFR process using LEAN principles provided an action plan for further improvements to the process that have been now been implemented. More information about LEAN can be found at: <http://www.lean.org/WhatsLean/Principles.cfm>

#### **4. Data Quality**

This framework does not include full information on data quality; we do provide information on quality statements of each datasets as well as any known data quality issues. Access to quality statements can be found on the website at: <https://www.gov.uk/government/publications/ilr-data-check-that-it-meets-standards-and-quality-requirements>

#### **5. Quality Assurance Checklist**

All Agency statistical outputs will be subject to the QA checklist which can be found in Annex A. This is an evolving document which is reviewed regularly and in particular at the start of the process for producing each SFR. Responsibility for ensuring this checklist is reviewed sits with the Agency SFR project manager. Prior to commencing the production of each SFR, this checklist will also be signed off by both the Agency and BIS SFR teams. The Agency SFR team also conducts regular training in quality assurance to ensure that full understanding of the checklist is maintained by all those working on the SFR.

In order to reduce the amount of checking during the production of the SFR and in the final stages before publication, tables without any figures in them will be produced in advance to agree the content, layout and format of the final tables. This will minimise the amount of QA required in section iii below.

Each SFR table produced will be quality assured by the producer of the table, an independent person and then signed off by the SFR manager. The tables are then checked by 2 members of the BIS SFR team. Copies of the QA checklist for each table will be kept on file and held by the Agency.

The QA checklist in Annex A includes the following sections:

#### **i. Data Provision**

These tasks are undertaken for data provided to BIS. Data and related files are transferred via a secure server with access restricted to those working on the SFR. The relevant details should be included to identify who carried out these checks.

#### **ii. Syntax and Cover Sheet**

The checks outlined here should be completed for each syntax/table file that is produced and accurately documented using the tables provided.

#### **iii. SFR Tables**

For each table two files are created:

- a working version which contains cover page, checklist, rounded, unrounded rounded minus unrounded, data and automatic QA;
- a final rounded version for publication which shows only the final values

The working Excel files (pre-final tables) will always contain a cover sheet with the relevant information for ii above.

At least 3 people will complete section iii to ensure that no mistakes are missed and these will be documented using the checklist provided in Annex A. These checks are completed on the initial figures before the final tables are produced. If figures are updated then these checks are repeated. The tables are then checked by 2 members of the BIS SFR team.

The footnote checks in iii are also completed once the SFR is in its final form prior to publishing.

#### iv. SFR Document

These checks are undertaken by at least 3 people. Whilst they can be undertaken at an early stage in the SFR process, they are also undertaken once the SFR commentary and figures are in their final form prior to publishing. The checks undertaken on the commentary are as follows:

<b>Commentary Checks</b>	
a. Spell check undertaken	<input type="checkbox"/>
b. Paragraph numbers are consecutive	<input type="checkbox"/>
c. Page numbers have been included and are consecutive throughout, starting with front page as 1	<input type="checkbox"/>
d. References to footnotes are correct	<input type="checkbox"/>
e. Links to external sources (e.g. other SFRs) are correct and presented as hyperlinks	<input type="checkbox"/>
f. References to tables are correct (figures of x% in table 1 really is in table 1 and not elsewhere)	<input type="checkbox"/>
g. Figures in the commentary are consistent with the tables	<input type="checkbox"/>
h. Font type and size is consistent throughout	<input type="checkbox"/>
i. Terminology is consistent throughout e.g. no interchange between 'achievements' and 'completions'	<input type="checkbox"/>
j. The reference number and contact details on the front page are correct	<input type="checkbox"/>
k. Tables are clearly presented, in accordance with style guide	<input type="checkbox"/>

<b>Final Checks</b>	
a. PDF version of SFR matches Excel files for tables and Word document for commentary	<input type="checkbox"/>
b. Filenames for PDF document and Excel files are consistent and match	<input type="checkbox"/>
c. Quality Statement provided by all data suppliers (Data Service, LFS team, VQ team) – see Annex D for example of quality statement	<input type="checkbox"/>

#### v. Sign Off

Sign-off should take place throughout the SFR production process, as required.

In conjunction with the checklist in Annex A, further documentation will be produced to ensure consistency and transparency of the data and methods used in the SFR. These are:

- A list of the data files and the version number used in the SFR published in the main SFR document, an example of this can be found in Annex B
- A list of the additional tables that have been published on the [Further Education and Skills website](#) is published, an example can be found in Annex D.

# Annex A

## STATISTICAL FIRST RELEASE - QUALITY ASSURANCE CHECKLIST

SFR		
DATE		
TABLE NAME		DATE COMPLETED
QA - DEVELOPER		
QA - ANALYST		
QA - SIGNOFF		

COVER SHEET	Check Cover Sheet and Automatic QA: use unrounded file to check this		QA1	QA2	QA3
			PAS	PAS	PAS
			S	S	S
			Y/N	Y/N	Y/N
	A	Version number and key changes since previous version			
	B	Details of author and second quality assurer are complete and up-to-date			
	C	Automatic QA included with comparisons across sheets or workbooks e.g. LA tab region totals match PCON region totals			
D	Automatic QA included to check supplementary tables match main tables				
E	Automatic QA included to check unchanged figures match previous SFR e.g. all full year figures should stay the same				
F	QA with comparisons between rounded and unrounded tables				

### Quality Assurance Notes:

1. The developer should email you a link to the folder where the files to be quality assured are kept. Each table/set of tables has a separate folder under the latest SFR folder.
2. The unrounded file will be the one ending with 'Analysis'.
3. The rounded file will be the one ending with 'Final'.
4. How to use the checkboxes: Put a 'Y' if there is no issue. Put 'N/A' if check isn't relevant. Put a 'N' if there is an issue and add comments to explain why.
5. Once the QA is complete and has passed all relevant checks. Print this checklist and staple all sheets together. This sheet should be at the front followed by any additional sheets.
6. If you find an issue go back to the developer to fix this. Do not fix it yourself.
7. If you don't find any issues then pass on to the next quality assurer.
8. QA1,2,3 will be completed on separate sheets relative to each version produced.

CHECK FIGURES	Check of Figures: use unrounded file to check this		QA1	QA2	QA3
			PAS	PAS	PAS
			S	S	S
			Y/N	Y/N	Y/N
A	Sum of all unrounded sub-totals equals the overall total				
B	Sum of all unrounded components equals sub-total e.g. LAs sum to region.				
C	Percentages are calculated on unrounded data				
D	Figures in supplementary tables match the main tables				
E	Same figures in different tables match				
F	Unchanged figures match between SFRs				
G	Trends look reasonable over time – if there are any known changes affecting figures, these should be documented/footnoted				
H	General sense check of figures e.g. 100% of learners are not male				
I	Formulae are correct and consistent, referencing the right data				
J	Exceptions should be checked e.g. Isles of Scilly is included with Cornwall LA (exceptions should be explicitly listed)				
K	For new (current year) figures, where it's the first appearance in the SFR, check against analysis manual/corporate key				
L	If any Skills for Life data, labelling and footnotes should refer to 'English and Maths' (Not 'literacy and numeracy')				
M	New funding stream names are being used throughout				

## Annex A

CHECK FORMATTING	Table Formatting: use rounded file to check this – OPEN IN EXCEL 2003		QA1	QA2	QA3
			PAS	PAS	PAS
			S	S	S
			Y/N	Y/N	Y/N
	A	Final file should be saved as Excel 2003 file.			
	B	'Active cell' is top left in final version so that table header is clearly displayed when file is opened			
	C	All borders are visible and are in line with the published templates			
	D	Cells are aligned consistently across tables and in accordance with published templates. Cell widths of figure cells are equal.			
	E	Headers and totals are bold in accordance with the template			
	F	Font type and size for headers and figures are consistent throughout tables and match formats laid out in the template			
G	Print layout setup to print complete table and all footnotes on one page where appropriate, and no footnotes outside of print area				
H	Figures in final table are values and not formulae				
I	Figures in final table are comma separated				
J	Percentages are given to 1 decimal place and formatted in italics (select cell and check display area at top of table to test for 1dp accuracy)				
K	Figures in final table have been rounded in accordance with public-facing product standards				
L	Figures in final table have been suppressed when below certain values in accordance with public-facing product standards e.g. no 0s				
M	Check table titles and tab titles refer to correct table number/names and have consistent phrasing across tabs				
N	Check table headings (e.g. years) are consistent across tabs e.g. formatting and in-year wording for current year.				
O	Views are set to 85%				
P	Background should be white (not 'no fill') or the gridlines turned off				
Q	Merged cells are across all relevant cells				
R	If 2011/12 is included, new ethnicity groupings should be included				
S	All figures (and '-' where suppression occurs) are right aligned				

CHECK FOOTNOTES	Table Footnotes: use rounded file to check this – OPEN IN EXCEL 2003		QA1	QA2	QA3
			PAS	PAS	PAS
			S	S	S
			Y/N	Y/N	Y/N
A	Footnotes are consecutively numbered				
B	Footnotes are consistently ordered across tables				
C	Text is in Arial, title is size 10 and footnotes are size 9				
D	All footnotes are relevant e.g. no footnote on age definition unless age breakdown is given in this table				
E	Terminology is consistent throughout e.g. no interchange between 'achievements' and 'completions'				
F	References to tables are correct (figures of x% in table 1 really is in table 1 and not elsewhere)				
G	Spell check undertaken				
H	Grammar is correct and full-stops included at the end of each footnote				
I	Row heights are in multiples of 15.				



## Annex B

### List of files used in SFR

This table should include all data files used in the SFR, an *example* given below.

Year	Data Source
2012/13	ALL Apprenticeships & Workplace Learning
	SILR R15 – final Employer Outcomes Pilot R15 - final
2013/14	ALL Apprenticeships & Workplace Learning
	SILR R10 Employer Outcomes Pilot R10

# Annex C

## List of files to be published

This table should include details of the final names to be used for published versions of documents and the 'link' which is displayed on the website, an example given below.

Supplementary Tables to the FE and Skills Statistical First Release (SFR) - Updated 19/09/15

Description	Measure	Period Covered (Last published)	Last Published	Period Covered (Next publication)	Next Publication (planned)	Frequency
<b>Further Education and Skills</b>						
All Age Demographic Summary of FE and Skills Participation	Participation	2013/14	May-2015	2014/15	May-2016	Annual
FE and Skills Participation and Achievements by funding stream	Participation and achievement	2002/03 to 2012/13	Mar-2014	2002/03 to 2013/14	Sept/Oct 2015	Annual
FE and Skills (adult) Participation and Achievements by funding type	Participation and achievement	2002/03 to 2012/13	Jul-2013	2002/03 to 2013/14	Sept/Oct 2015	Annual
FE and Skills (under 19) Participation and Achievements by funding stream	Participation and achievement	2002/03 to 2012/13	Jul-2013	2002/03 to 2013/14	Sept/Oct 2015	Annual
Overall FE and Skills participation by Geography and Equality and Diversity	Participation	2002/03 to 2013/14	Nov-2014	2002/03 to 2014/15	Nov/Dec 2015	Annual
Overall FE and Skills achievement by Geography and Equality and Diversity	Achievement	2002/03 to 2013/14	Nov-2014	2002/03 to 2014/15	Nov/Dec 2015	Annual
Learner Participation on Level 4+ courses in FE and HE	Participation	2005/06 to 2012/13	Sep-2014	2005/06 to 2013/14	Oct/Nov 2015	Annual
FE and Skills Participation on Qualifications and Credit Framework (QCF) by Qualification Type and Level	Participation	2009/10 to 2012/13	Sep-2014	2009/10 to 2013/14	Oct/Nov 2015	Annual
National Aims report by funding stream and level	Participation	2005/06 to 2013/14	Nov-2014	2005/06 to 2014/15	Nov-2015	Annual
<b>Further Education and Skills Equality and Diversity</b>						
FE and Skills Equality and Diversity Report	Participation, starts and success rates	2008/09 to 2012/13	Jul-2014	2008/09 to 2013/14	Sept/Oct 2015	Annual
FE and Skills Equality and Diversity Main tables	Participation, starts and success rates	2008/09 to 2012/13	Jun-2014	2008/09 to 2013/14	Sept/Oct 2015	Annual
FE and Skills Equality and Diversity Annex tables	Participation, starts and success rates	2008/09 to 2012/13	Jun-2014	2008/09 to 2013/14	Sept/Oct 2015	Annual
<b>Further Education and Skills Local Authority</b>						
Local Authority Tables by Provider by Funding Stream, Learner and Learning Characteristics	Participation	2013/14	Nov-2014	2014/15	Nov-2015	Annual
FE and Skills Aims by Learners living in each Local Authority District by Provider and Level	Enrolments	2012/13	Sep-2014	2013/14	Sept/Oct 2015	Annual
FE and Skills Aims By delivery in each Local Authority District by Provider and Level	Enrolments	2012/13	Sep-2014	2013/14	Sept/Oct 2015	Annual
FE and Skills Learner Participation breakdown by Local Authority District	Participation	2012/13	Aug-2014	2013/14	Sept/Oct 2015	Annual
<b>Education and Training</b>						
Education and Training participation (aims) by Sector Subject Area	Participation	2005/06 to 2012/13	Aug-2014	2005/06 to 2013/14	Oct/Nov 2015	Annual
Education and Training OLASS Participation and Achievement by Equality and Diversity	Participation and achievement	2010/11 to 2013/14	Dec-2014	2010/11 to 2014/15	Oct/Nov 2015	Annual
Offender Learning Participation English and Maths Assessments	Participation	2014/15 q3	Jul-2015	2014/15 q4	Nov-2015	Quarterly
<b>Skills for Life</b>						
Skills for Life participation by type and level by Geography and Learner Demographics	Participation	2005/06 to 2013/14	Dec-2014	2005/06 to 2014/15	Oct/Nov 2015	Annual
Skills for Life achievement by type and level by Geography and Learner Demographics	Achievement	2005/06 to 2013/14	Dec-2014	2005/06 to 2014/15	Oct/Nov 2015	Annual
Skills for life participation and achievement in English and maths only	Participation and achievement	2005/06 to 2013/14	Nov-2014	2005/06 to 2014/15	Oct/Nov 2015	Annual
<b>Apprenticeships</b>						
Apprenticeship starts by Geography, Learner Demographics and Sector Subject Area	Starts	2002/03 to 2014/15 q3	Jul-2015	2002/03 to 2014/15 q4	Oct-2015	Quarterly
Apprenticeship starts by Geography (LA/LEA/PCON) and Sector Subject Area	Starts	2002/03 to 2014/15 q3	Jul-2015	2002/03 to 2014/15 q4	Nov-2015	Quarterly
Apprenticeship achievements by Geography, Learner Demographics and Sector Subject Area	Achievements	2002/03 to 2014/15	Jul-2015	2002/03 to 2014/15	Nov-2015	Quarterly
Apprenticeship starts and achievements (Funded only)	Starts and achievements	2007/08 to 2013/14	Nov-2014	2007/08 to 2014/15	Feb-2016	Annual
Apprenticeship Participation by Level and Age	Participation	2002/03 to 2013/14	Dec-2014	2002/03 to 2014/15	Oct/Nov 2015	Annual
Quarterly starts and achievements by Level and Age	Starts and achievements	2002/03 to 2012/13	Sep-2014	2002/03 to 2013/14	Sept/Oct 2015	Annual
Apprenticeship starts by Framework (SASE grouped)	Starts	2002/03 to 2014/15 q3	Jul-2015	2002/03 to 2014/15 q4	Oct-2015	Quarterly
Apprenticeship achievements by Framework (SASE grouping)	Achievements	2002/03 to 2013/14	Jul-2015	2002/03 to 2014/15	Feb-2016	Annual
Apprenticeship Participation by Region and Sector Subject Area	Participation	2009/10 to 2014/15 q3	Jul-2015	2009/10 to 2014/15 q4	Oct-2015	Quarterly
Apprenticeship Participation by PCON & LEA/LA	Participation	2009/10 to 2013/14	Nov-2014	2009/10 to 2014/15	Mar-2016	Annual
Apprenticeship starts by Geography, Age and Level	Starts	2005/06 to 2014/15 q3	Aug-2015	2005/06 to 2014/15 q4	Nov-2015	Quarterly
Apprenticeships achievements by Geography, Age and Level	Achievements	2005/06 to 2013/14	May-2015	2005/06 to 2014/15	Dec-2015	Annual
Apprenticeship starts by Framework, Age and Level	Starts	2002/03 to 2014/15 q2	Apr-2015	2002/03 to 2014/15 q3	Sept/Oct 2015	Quarterly
Apprenticeships achievements by Framework, Level and Age	Achievements	2002/03 to 2013/14	May-2015	2002/03 to 2014/15	May-2016	Annual
Apprenticeships starts by Sector Subject Area, Age and Level	Starts	2002/03 to 2014/15 q3	Aug-2015	2002/03 to 2014/15 q4	Nov-2015	Quarterly
Apprenticeships achievements by Sector Subject Area, Age and Level	Achievements	2002/03 to 2013/14	Jan-2015	2002/03 to 2014/15	Jan-2016	Annual
Apprenticeships starts by Framework, Level and Gender	Starts	2002/03 to 2013/14	Apr-2015	2002/03 to 2014/15	Apr-2016	Annual
Apprenticeships achievements by Framework, Level and Gender	Achievements	2002/03 to 2013/14	Jan-2015	2002/03 to 2014/15	Jan-2016	Annual
Apprenticeship achievements by Geography & SSA	Achievements	2005/06 to 2013/14	Nov-2014	2005/06 to 2014/15	Apr-2016	Annual
Apprenticeships Grant Entitlement (AGE) 16 to 24 Incentive breakdown by Geography, Age and SSA	Starts	February 2012 to January 2015	May-2015	February 2012 to July 2015	Dec-2015	Annual
Apprenticeship estimates of length of stay	Length based on achievements	2009/10 to 2011/12	Jun-2013	2009/10 to 2013/14	Sept/Oct 2015	Annual
Apprenticeship Workplaces	Workplaces	2009/10 to 2014/15 q3	Aug-2015	2009/10 to 2014/15 q4	Oct-2015	Quarterly
<b>Community Learning</b>						
Community Learning participation by Region and Learner Demographics	Participation	2005/06 to 2013/14	Nov-2014	2005/06 to 2014/15	Oct/Nov 2015	Annual
Community Learning achievement by Region and Learner Demographics	Achievement	2005/06 to 2013/14	Nov-2014	2005/06 to 2014/15	Oct/Nov 2015	Annual
Community Learning participation by Gender, Age, Disability and SSA	Participation	2008/09 to 2013/14	May-2015	2008/09 to 2014/15	Oct/Nov 2015	Annual
<b>24+ Advanced Learning Loans</b>						
24+ Advanced Learning Loans by SSA, Level and Age	Participation	2013/14	Nov-2015	2014/15	Nov-2015	Annual
<b>Traineeships</b>						
Traineeship Starts by Core Element and Age	Starts	2013/14	Nov-2014	2014/15	Nov-2015	Annual
<b>Labour Force Survey (LFS)</b>						
Mean Hourly Wage by Level of Highest Qualification Held in England	Mean hourly wage	2006 to 2014 (provisional)	Apr-2015	2006 to 2015 (provisional)	Apr-2016	Annual
Economic activity by Level of Highest Qualification Held by People aged 19-59/64 in England	Economic activity	2006 to 2014 (provisional)	Apr-2015	2006 to 2015 (provisional)	Apr-2016	Annual
LFS regional and sub-regional estimates of education attainment	Highest qualification of learners	2014	May-2015	2015	May-2016	Annual
<b>Vocational Qualifications</b>						
Awards of NVQs/SVQs, VRQs and QCF by Academic Year and Geography	Achievements	Up to 2013/14	Mar-2015	Up to 2014/15	Mar-2016	Annual
Vocational Qualification Achievements in the UK by level	Achievements	2005/06 (Quarter 4) to 2014/15 (Quarter 3)	Apr-2015	2005/06 (Quarter 4) to 2014/15 (Quarter 4)	Nov-2015	Quarterly