

**Scotland's Census 2011
Data Quality Assurance Strategy**

May 2011

Glossary

Borrowing Strength	A contingency strategy for Local Authority estimates that are rejected in data quality assurance. The method involves producing new estimates based on data from areas with similar characteristics. Two methods are described in 12.3.1 .
Census Coverage Survey (CCS)	An interviewer-led follow-up survey designed to provide the information required to measure the degree of under-enumeration in the census
Census Quality Survey (CQS)	An interviewer-led follow up survey that asks the census questions again to provide an estimate of the accuracy of responses to each question
Data zones (DZs)	A statistical Geography consisting of groups of output areas and containing 500 – 1000 household residents
Defence Analytical Services Agency (DASA)	Source of comparator data on home armed forces
Department for Work and Pensions (DWP)	Source of comparator data on work and pensions
Downstream Processing (DSP)	The systems developed to clean and adjust the data, so that a fully consistent database of census records can be prepared as the basis for output dissemination
Dual System Estimation (DSE)	The method by which census estimates will be made based on both the census returns and the responses to the CCS
Edit and Imputation	The process of correcting errors in the census returns and creating household and individual records in accordance with the census estimates
Eurostat	The statistical office of the European Union
Hard to Count Index (HtC)	An index with a value of 1-5 based on certain characteristics of an area
Higher Education Statistics Agency (HESA)	Source of comparator data on students
HM Revenue and Customs (HMRC)	Source of labour market comparator data

National Records of Scotland (NRS)	The authority conducting the census for Scotland
Northern Ireland Statistics and Research Agency (NISRA)	The authority conducting the census for Northern Ireland
Output Areas (OAs)	Output Areas are the lowest level of Geography for the release of the census results. They consist of groups of postcodes and contain approximately 52 households on average.
Office for National Statistics (ONS)	The authority conducting the census for England and Wales
Placeholders	Forms completed by census enumerators when a questionnaire has not been received for a property. Reasons for completion of a placeholder include vacant and non-residential properties.
Processing Unit (PU)	A processing unit contains one or more Local Authorities. There are 10 PUs for Scotland in total.
Scottish Continuous Recording System (SCORE)	Source of comparator data on registered housing associations
Scottish Funding Council (SFC)	Source of comparator data on students
Scottish Longitudinal Study (SLS)	A large-scale linkage study which has been created by using data available from current Scottish administrative and statistical sources
Sex Ratio	The ratio of males to females
Statistical Disclosure Control	Methods that reduce or remove the risk of disclosing information on individuals, businesses or organisations that are based on restricting the amount or modifying the data that is released. The methods can be applied to tabular data (aggregated information) or microdata (individual statistical records).

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1. Introduction

This strategy describes plans for data quality assurance of Scotland's 2011 Census. The aims are to:

- monitor changes as the data passes through downstream processing;
- ensure that census statistics for 2011 are of a high quality and that differences when compared to other sources are explained and justified where possible; and
- outline processes for quality assurance, adjustments and sign-off of the quality assured data.

This strategy is part of a wider UK quality assurance strategy for the 2011 Census. This may be found at the following link:

[2011 Census Quality Strategy](#)

The 2011 Census Quality Strategy has five key strands:

- design quality
- operational quality management
- data quality assurance
- quality measurement and reporting
- project quality management.

This strategy contributes to data quality assurance and quality measurement and reporting.

Design quality will be primarily achieved through regular and open discussions with users about their requirements from the Census, looking specifically at:

- Content - User consultation on the scope, definition and format of questions to be included in the 2011 Census Questionnaire.
- Methodology - Ensuring that the operational design is focussed on engaging the public to maximise response and return rates.
- Output - User consultation on the scope, definition and format of data to be derived, tabulated and disseminated from the completed questionnaires.

Operational Quality Management / Project Quality Management are covered by:

- Governance - A governance infrastructure that provides a structured and consistent approach to managing the delivery of the key outcomes for the census, including supporting systems and services, geared towards delivering efficiency and value for money.
- Plan, do, check, act - A continuous cycle of evaluation and implementation of lessons learned into final designs and implementation of workstream strategies.

- Performance - Ensuring that a quality culture is imbedded into the governance infrastructure, workstreams and associated contracted services with a quality management targets and plans, reviews and overarching standards including a range of measurable critical success factors for the key workstreams, linked to the principles of the UK Statistics Authority (UKSA) Code of Practice.

2. The Data Quality Assurance Strategy

A diagrammatic overview of the plans for data quality assurance processes is in [Appendix A](#).

The three phases and timings, as at May 2011, are:

Phase 1 – July 2011 to December 2011

Load and validation, variable distributions and response rates, early stages of downstream processing.

Phase 2 – January 2012 to April 2012

Demographic quality assurance in preparation for first release of Local Authority (LA) estimates by age and sex.

Phase 3 – August 2012 to November 2012

Detailed quality assurance following creation of 2011 output areas and final stages of downstream processing.

Each of the phases is outlined in more detail in sections 3 to 5.

3. Phase 1 – Initial Checks after Data is Loaded and Early Stages of DSP

Load and validation will ensure that data is received as expected in terms of numbers of records, variables and integrity between records.

Variable distributions and response rates will be examined and recorded. This will be repeated as each processing unit passes through downstream processing. Profiles of each LA have been prepared using published data to aid in these initial checks.

The numbers of households and person records for each LA will be examined against comparator data and recorded.

It is unlikely that adjustments will be made to the data at this stage unless an error in capture and coding is detected. If major differences are observed between the census data and the high level profiles for each LA, these will be recorded and monitored throughout downstream processing. Later stages in downstream processing such as coverage adjustment and edit and imputation may correct for these issues.

4. Phase 2 – Demographic Quality Assurance

A coverage survey will take place approximately 6 weeks after Census day. The results of this will be used to make a coverage adjustment for under-enumeration (households or people who did not respond to the census). A shared coverage adjustment methodology will be used across the UK.

The coverage process will be quality assured in detail using a range of comparator sources (please go to [section 7](#) for a list of sources). Management data from the field will also be used to identify areas of possible under-enumeration for particular attention. For example, data on return rates for census questionnaires and interview rates for the CCS will be utilised.

Analysis against comparator sources will be carried out primarily at LA level but functionality is in place to drill down to data zone level as required.

Depending on the comparator source and timings, this analysis may be used to adjust the parameters of the coverage estimation system or an adjustment may be made after this process is complete.

The cumulative picture for Scotland will be considered as each processing unit completes this stage of downstream processing.

5. Phase 3 – Output Area Level Quality Assurance and Final Stages of DSP

2011 output area creation is one of the later stages of downstream processing. After the 2011 output areas are created, additional quality assurance is required on the data at this geographic level. This will involve variable tabulations and checks on the number of people and households within output areas. The LA estimates are quality assured in phase 2 and it is intended that these will not be changed after that phase.

This phase will also involve monitoring changes made by the final stages of DSP including statistical disclosure control.

6. Quality of Downstream Processing

As outlined in the previous sections, quality assurance checks will be carried out to monitor changes as the data passes through downstream processing. In addition, each process will have been tested in advance. The methodology has been subject to internal review and external review by Office for National Statistics (ONS), Northern Ireland Statistics and Research Agency (NISRA), the UK Census Design and Methodology Advisory Committee and independent experts. Recommendations made in independent reviews of the ONS coverage and quality assurance processes have been considered.

7. Comparator Data Sources

The main comparator data sources to be used are as follows:

Data Source	Date relating to	Data Source	Date relating to
National Health Service Central Register (NHSCR)	27 th March 2011	Birth and death registrations	Year to 27 th March 2011
Pension Age Client Group (Department for Work and Pensions - DWP)	27 th March 2011	Child benefit claimants (HM Revenue and Customs - HMRC)	27 th March 2011
School Census	September 2010	Higher education students (Higher Education Statistics Agency - HESA)	2010/11 Academic year
Further Education Students (Scottish Funding Council - SFC)	2010/11 Academic year	Home armed forces (Defence Analytical Services Agency - DASA)	1 st April 2011
Prisoners	27 th March 2011	Traveller numbers	July 2011
Homelessness applications	31 st March 2011	Assessors' Portal address register	27 th March 2011
Council tax	September 2010	Electoral Register	1 st April 2011
Housing association and council properties – (Scottish Continuous Recording system - SCORE)	April 2010 – March 2011	Migrant Workers Scan (DWP)	31 st March 2011
Lifetime Labour Market database (HMRC)	Year to March 2010	Customer Information System (DWP)	27 th March 2011

In addition, a request has been sent to each LA for summary data to be considered in quality assurance.

8. Consultation

This strategy has been developed in consultation with the Census Demography Data Quality Integrated Project Team and the Census Data Quality Advisory Working Group.

The Census Demography Data Quality Integrated Project Team is a group internal to the National Records of Scotland (NRS), including members from census quality assurance, population and migration statistics, household estimates and alternative sources. This group will meet approximately once per week for the duration of each phase of quality assurance. If cross-cutting UK issues are to be discussed, representatives of ONS and NISRA will be invited to attend.

The Census Data Quality Advisory Working Group includes LA members, academics and representatives from Scottish Government (SG) Scottish Neighbourhood Statistics and Local Government Finance. Terms of reference for this group are included at [Appendix B](#).

Meetings of the Census Data Quality Advisory Working Group will be arranged to coincide with the main phases of quality assurance.

Each member of the Census Data Quality Advisory Working Group will act in an independent capacity to quality assure the census results for Scotland. The group will have access to data appropriate for this purpose under tightly controlled conditions. This will be the main route for external quality assurance of the census results and there will not be a formal challenge process. This is considered the most appropriate approach for quality

assurance for Scotland, allowing engagement with the process before the census results are released. NRS has the responsibility for making a final decision on the census estimates.

Each LA has been sent three templates requesting provision of data or information to be considered in quality assurance. These are attached in Appendices [3a](#), [3b](#) and [3c](#).

Contact has been made with Analytical Service Divisions (ASD) in SG, in conjunction with outputs consultations, to identify sources of comparator data and to raise awareness of possible involvement in quality assurance analysis.

9. Reports on Quality Assurance

Quality assurance measures will be included in the metadata accompanying outputs. The content of reports accompanying outputs is to be decided but will be in line with Eurostat requirements. Information relating to imputation rates, for example, will be included.

The method and details of any additional adjustments made after completion of the coverage estimation and adjustment process will be published.

10. Census Quality Survey

A Census Quality Survey (CQS) will be carried out approximately 8 weeks after Census day. This interviewer-led survey asks the census questions again to gain an estimate of the accuracy of responses to each question.

The sample size (1560) for the CQS is too small to make adjustments to the census data directly but the results could be used in establishing whether differences between census and comparator data may be due to respondent error. The results will be published to give an indication of the quality of response to each question.

11. Census Coverage Survey

The Census Coverage Survey (CCS) is an interviewer-led survey carried out after the census to allow the level of under-coverage of the census to be estimated. The results of this survey are matched to the census results to identify those who were found in both the census and CCS, the census only and the CCS only. This is used to estimate the true population of the areas covered by the CCS, including those missed by both the census and CCS. Ratio estimates are then applied to the census counts to produce population estimates for the whole of Scotland.

Once the estimates have been made, an adjustment and imputation process is used to create additional census records and to populate them, providing a complete and consistent database for outputs.

The estimation process will be run with a range of parameters and groupings to allow refinement of the estimates. Additionally, placeholder data and results from linkage of the census with the Labour Force Survey (LFS) will be used to make adjustments for household bias if necessary. This involves ensuring that the balance between wholly missed households and persons missed within households is estimated and adjusted for accurately. Results of quality assurance checks against comparator sources will also inform the parameters for the estimation and adjustment processes.

12. Analysis of Quality Assurance Results, Contingencies and Adjustment Methodology

12.1 Identifying the Cause of Differences Between Census and Comparator Data

Where comparator data and census data are not consistent, this may be due to:

- errors introduced by census processes
- respondent error or under/over enumeration
- quality of comparator sources
- definitional differences between the census data and the comparator.

The cause will be investigated by identifying if an error was introduced during a particular stage of processing, using the results recorded on the quality checks at each stage of downstream processing. Management information from the field will also be utilised to investigate if the difference is possibly due to enumeration difficulties. Data owners and LA's will also be consulted where this may help to identify the cause of differences between the census and comparator sources.

12.2 Responses to differences – Contingencies

If there is evidence that inconsistencies are attributable to errors in Census processes, respondent error or over/under enumeration (that is not sufficiently adjusted for by coverage processes) then changes will be made to processes or edits applied to the data if possible.

Where issues are found with processes these will be resolved before later processing units are processed. If possible, areas that have already been processed will be rolled back to before this process and re-run after the process has been improved. Otherwise, data edits will be required. The downstream processing system will allow controlled implementation of data file amendments. Where possible, all edits will be applied to the outputs database rather than being contained in a separate database.

If inconsistencies are attributable to respondent error, depending on the severity this may be reported or data edits applied. The potential level of improvement in data quality and reliability of estimates used to make edits are considerations. Many respondent errors will be addressed by edit and imputation.

Coverage will be assessed by detailed demographic analysis against comparator sources. However, as the census is used as a benchmark for population estimates, care will be taken not to force the census to match population estimates which may have diverged. Instead, differences will be reported and explained and adjustments made only where there is clear evidence that the census estimates are in error (e.g. where they differ in the same direction from a range of comparator sources). If this case arises, an adjustment may be made to the census data using one of the methodologies outlined in [section 12.3](#).

Where results are inconclusive, topic experts from ASDs and LA's will be consulted as necessary.

12.3 Possible Adjustment Methodologies

The results of quality assurance checks against comparator sources will be used to provide evidence for the acceptance or rejection of census estimates. For each sub-group of the population, analysis will be carried out against each comparator source available. Tolerances will be utilised within a data quality management system to allow efforts to be concentrated on the largest differences in relation to comparator sources.

Use of comparator sources to make adjustments directly will be limited by quality and comparability issues. However, there are some sources that could potentially be used to make adjustments directly including:

- school census (as a lower bound for numbers of children)
- higher education students (for students resident in communal establishments)
- home armed forces
- prisons data
- traveller numbers
- communal establishment records
- the assessors' portal address register.

Additionally, as noted in [section 11](#), the results of quality assurance analysis can be used to make changes to the parameters of the estimation and adjustment system.

12.3.1 Borrowing Strength¹

In 2001 a technique called 'borrowing strength' was used to make adjustments to estimates which failed quality assurance for a small number of LA's in England and Wales². There are a number of factors that may prevent this methodology being used in some cases in Scotland. The main issue is that the method relies heavily on identifying comparator LA's. Some LA's in Scotland will not have any suitable comparator LA's or will have too few to utilise these methods. However, in appropriate circumstances, this method could be a useful tool and will be considered alongside the other potential adjustment methodologies outlined in this section. It is also possible that this method could be used for lower level Geographies rather than at LA level.

The method for identifying comparator LA's is currently being investigated but is likely to involve use of data on which the hard to count index is based.

Two methods of 'borrowing strength' may be used to make adjustments if the combined evidence from analysis of comparator sources indicates that this is required and appropriate.

These options are now outlined.³

Method A) Put the census count back into Dual System Estimation (DSE) using different parameters.

¹ This section utilises methodology in 'A Quality Assurance and Contingency Strategy for the One Number Census', ONS, September 2001.

² 'Census 2001. One Number Census Quality Assurance Information: Quality Assurance Themes. Borrowing Strength', ONS. http://www.statistics.gov.uk/census2001/pdfs/borrowing_strength.pdf

³ **Note:** All counts are for illustrative purposes only and are not true figures. The LA's listed here are for illustrative purposes only and are not established comparator LA's.

Each LA will have a ratio estimate that is applied to the census count to provide the census estimate. Comparator LA's are assigned to each LA and if any should fail quality assurance based on a range of comparators, then an average ratio estimate will be calculated using the comparator LA's. The census count of the failed LA is then fed back into the DSE System using the average ratio estimate as the parameter to calculate a new census estimate for that LA. The new census estimate will then be investigated to determine whether it is to be accepted or rejected.

The comparator LA's must have passed quality assurance at the first attempt. If any of the comparator LA's have failed quality assurance then they will be replaced by another suitable 'substitute' LA if possible.

The example below outlines how this process works:

1. For West Lothian the census estimate is calculated based on the ratio estimate:

LA	Age Group	Sex	Status	Census Count	Ratio Est.	Census Est.
West Lothian	20 – 24	Male	Rejected	4000	1.1	4400

2. For the five comparator LAs that have passed quality assurance, the ratio estimates are:

LA	Age Group	Sex	Status	Census Count	Ratio Est.	Census Est.
Falkirk	20 – 24	Male	Accepted	3600	1.14	4100
North Lanarkshire	20 – 24	Male	Accepted	4100	1.12	4600
Edinburgh	20 – 24	Male	Accepted	4150	1.12	4650
East Lothian	20 – 24	Male	Accepted	4000	1.16	4650
Fife	20 – 24	Male	Accepted	4200	1.15	4850

3. The mean of these five comparator ratio estimates is:

$$(1.14 + 1.12 + 1.12 + 1.16 + 1.15) / 5 = 1.138$$

4. The re-estimate for West Lothian is:

$$4000 * 1.138 = 4552$$

Method B) Calibrate the estimate to a comparator data source.

An adjustment may be made to the census estimate based on the average percentage distance of comparator LA's from the same source.

In the same way that 'borrowing strength' uses comparator LA's in the method, so will calibrating to an external source. Again, the comparator LA's used must have passed quality assurance at the first attempt.

If an estimate falls outwith an acceptable tolerance and fails quality assurance then the comparator LA's will be used to calculate the average percentage distance from the same

source. An adjustment can then be made by moving the LA estimate that failed quality assurance to within the average percentage distance of the comparator LA's to the same source.

The example below outlines how the process works:

1. For West Lothian the percentage distance from the external data source is:

LA	Age	Sex	Status	Census Estimate	Child benefit claimants	% Dist.
West Lothian	5 – 9	Male	Rejected	1000	1250	20

2. For the five comparator LAs that have passed quality assurance, the percentage distances are:

LA	Age	Sex	Status	Census Estimate	Child benefit claimants	% Dist.
Falkirk	5 – 9	Male	Accepted	1600	1700	5.9
North Lanarkshire	5 – 9	Male	Accepted	1100	1200	8.3
Edinburgh	5 – 9	Male	Accepted	1150	1200	4.2
East Lothian	5 – 9	Male	Accepted	1000	1150	13
Fife	5 – 9	Male	Accepted	1200	1210	0.8

3. The mean of these five percentage distances is:

$$(5.9 + 8.3 + 4.2 + 13 + 0.8) / 5 = 6.44.$$

4. The re-estimate for West Lothian is:

$$1250 - (6.44\% \text{ of } 1250) = 1170$$

Clearly, this method relies on the comparator source. Care will be taken to utilise this method only where the evidence from comparing the comparator source to other LA's is consistent and there are no special circumstances to indicate that it would be inappropriate to utilise this method. An example where the method would be inappropriate would be if a LA has a high number of children attending independent schools and so the difference compared to the School Census could be unusual.

12.3.2 Record Linkage

Another possible contingency is the use of record level linkage. Extensive record level linkage will not be possible within the timeframes available⁴. It may be carried out on small areas if major differences are found against comparator sources relative to other areas or if there are pockets of severe under-enumeration.

12.3.3 Use of the Scottish Longitudinal Study (SLS) in quality assurance and adjustment

⁴ Except for the linkage of SLS members to the National Health Service Central Register (NHSCR) for the analysis outlined in [section 12.3.3](#).

Use of the SLS will be prioritised for those LA's without suitable comparator LA's for application of the 'borrowing strength' method. This analysis is highly dependent on the time required to complete the linkage of the NHSCR to the SLS members found in the 2011 census. This linkage will be carried out in tightly controlled conditions, within the standard procedures of the SLS.

There will be two main uses of the (SLS) in Census quality assurance:

- Analysis of the characteristics of those SLS members not found in the 2011 Census (including those in the 2001 Census and new entrants through births or migration).
- Analysis of the proportion of SLS members enumerated more than once in the Census.

Reports will be provided from the SLS to Census on tracing rates, multiple enumerations, and possible under-enumeration (expected SLS members not found in the 2011 Census). These analyses will provide further evidence relating to data quality issues and may provide estimates to allow adjustments to be made if necessary.

Methodology for making an adjustment based on evidence from the SLS is under development. It is likely to involve analysis of SLS attrition rates for population sub-groups from 1991 to 2001. The numbers of expected SLS members not found in the 2011 census may then be compared and an estimate made of the numbers that can be attributed to census under-enumeration in 2011.

12.3.4 Sex ratios

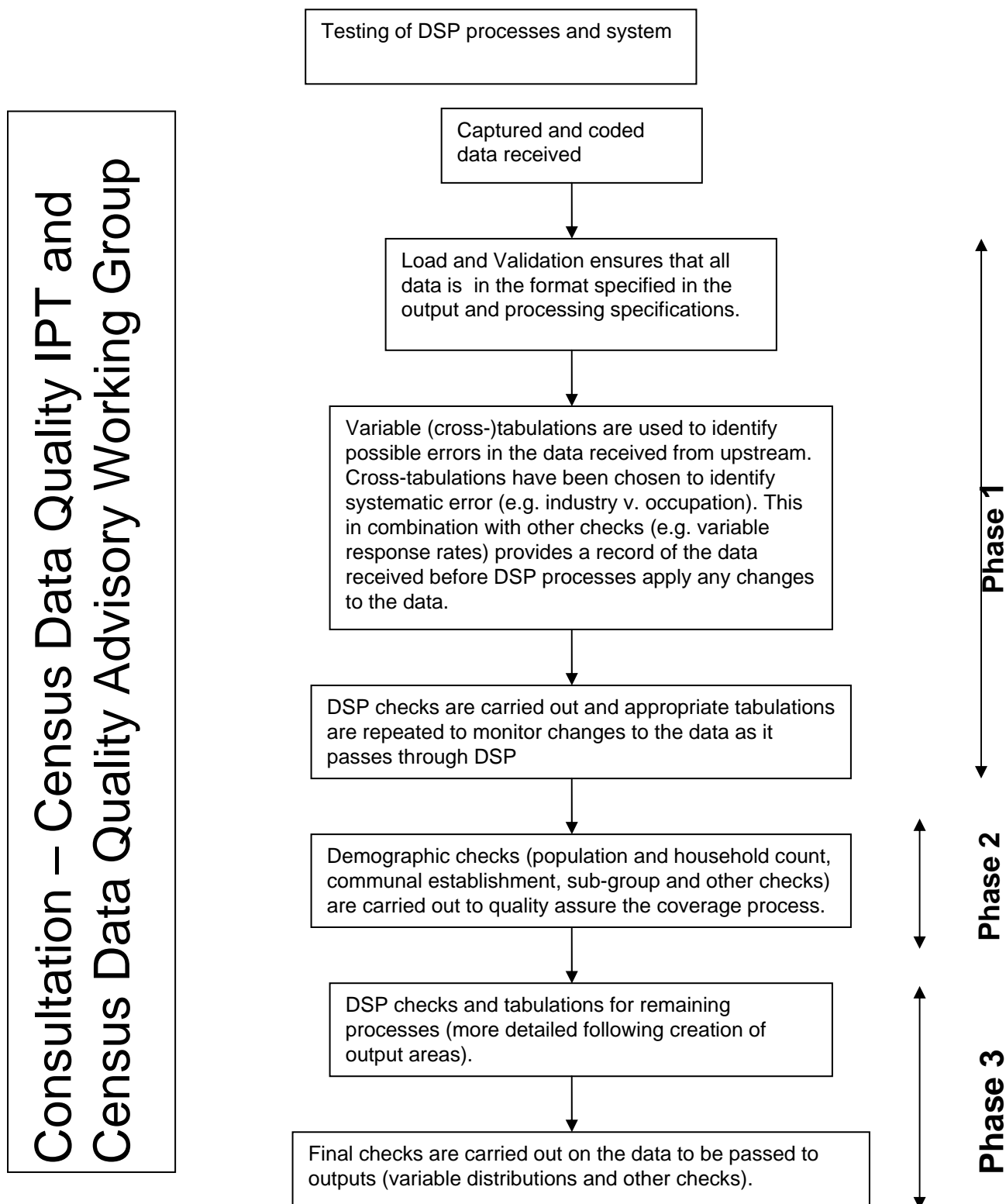
Analysis of sex ratios will be carried out at national and LA level. The main comparator for this analysis will be summary data from the Lifetime Labour Market database. Evidence from this analysis in combination with other analysis against comparator sources will be used to assess the need for a national adjustment to sex ratios.

12.3.5 Summary – Adjustment Methodologies

A range of comparators and methodologies will be used to quality assure the census estimates. The evidence gathered will be used to decide whether an adjustment to the initial estimates from the coverage estimation process is required. If there is strong evidence from a reliable comparator source or from a range of comparator data sources, then an adjustment to the census estimate will be considered. The possible adjustment methodologies have been outlined in this section.

If these adjustment methodologies are required, details of the methods applied and the results will be published.

Appendix A – Diagrammatic Overview of Census Quality Assurance



Appendix B – Terms of Reference for the Census Data Quality Advisory Working Group

TITLE: Census Data Quality Advisory Working Group

FORMATION DATE: July 2010

PURPOSE: To involve organisations external to NRS in Census data quality assurance, utilising local knowledge and data sources.

AIMS:

This working group will:

- Promote external awareness of Census data processing and quality assurance methods.
- Provide and analyse local knowledge and comparator data in preparation for Census data quality assurance.
- Advise on issues found during Census data quality assurance and on contingencies. This may be at Scotland, Local Authority (LA), or lower levels of geography and each member will act in an independent advisory capacity.
- Share data in a controlled environment to allow discussion and resolution of data anomalies, including review of the first downstream processing quality checks carried out on Census data.
- Ensure that an appropriate contact for Census data quality assurance is available for each LA not represented on the working group and consult them as necessary.

EXCLUSIONS:

This working group will not involve:

- Detailed planning/design of Census processing or data quality assurance.
- Final sign-off of Census figures.

REPRESENTATION:

Chair: Peter Scrimgeour (Census Director)

Members: NRS Census Data Quality representatives

LA representatives (approximately 10)

NRS Demography representatives

SG representatives (Scottish Neighbourhood Statistics and Local Government Finance)

Independent advisors (e.g. from academia)

FREQUENCY OF MEETINGS:

Meetings will be held approximately every 6 months from July 2010 to June 2013.

Meetings will be held more frequently during live running of processing and data quality assurance. The frequency will depend on the volume of issues found in Census data quality assurance but at this stage, January 2012 to May 2012 is likely to be the most intensive period. Meetings may be held on a monthly basis at that time. Other meetings will be scheduled to coincide with major stages in quality assurance, for example, when all of the data has been received from upstream and variable distributions have been analysed.

Meetings can generally be held in NRS with phone links as necessary but could also take place at a range of locations depending on the membership of the working group.

CONFIDENTIALITY

Each member of the Census Data Quality Advisory Working Group will act in an independent advisory capacity.

An agreement will be signed by each member of the working group, stating that they will not share data or analysis outside of the working group meetings, except where agreed with the working group chair.

Appendix 3a – Local Authority Template – Comments on Comparator data Sources

Comments on Comparator Data Sources to be used in Census Quality Assurance

Local Authority:	
Contact Person:	
Telephone Number:	
E-mail Address:	

Please outline any known issues with the 2001 Census and Mid Year Estimates in your Local Authority and provide details of sources used as evidence. Feel free to leave sections blank if there is no relevant information to add.

2001 Census		
Geography	Issue	Evidence
<i>e.g. output area 60RF001691</i>	<i>e.g. undercount of student population</i>	<i>e.g. HESA data</i>
<i>e.g. 60RF001692</i>	<i>e.g. undercount of student population</i>	<i>e.g. School Census</i>
Mid Year Estimates		
Geography	Issue	Evidence
<i>e.g. data zone S01002350</i>	<i>e.g. over count of female population in datazones</i>	
<i>e.g. S01002398</i>	<i>e.g. undercount of male and female population</i>	<i>e.g. Electoral Register</i>

Other data sources to be utilised in census quality assurance include:

Data Source	Date relating to	Data Source	Date relating to
National Health Service Central Register (NHSCR)	27 th March 2011	Birth and death registrations	Year to 27 th March 2011
Pension Age Client Group (DWP)	27 th March 2011	Child benefit claimants (HMRC)	27 th March 2011
School Census	September 2010	Higher education students (HESA)	2010/11 Academic year
Further Education Students (SFC)	2010/11 Academic year	Home armed forces (DASA)	1 st April 2011
Prisoners	27 th March 2011	Traveller numbers	July 2011
Homelessness applications	31 st March 2011	Assessors' Portal address register	27 th March 2011
Council tax	September 2010	Electoral Register	1 st April 2011
Housing association and council properties (SCORE)	April 2010 – March 2011	Migrant workers scan (DWP)	31 st March 2011

If you have comments on any of these sources for your Local Authority then please provide details below:

Appendix 3b – Local Authority (LA) Template – LA Summary Data

Local Authority Summary Data

Local Authority:	
Contact Person:	
Telephone Number:	
E-mail Address:	

Please outline details of any data sources held by your LA that may be useful for comparison with the 2011 Census.

Plans are already in place to utilise the following sources:

Data Source	Date relating to	Data Source	Date relating to
National Health Service Central Register (NHSCR)	27 th March 2011	Birth and death registrations	Year to 27 th March 2011
Pension Age Client Group (DWP)	27 th March 2011	Child benefit claimants (HMRC)	27 th March 2011
School Census	September 2010	Higher education students (HESA)	2010/11 Academic year
Further Education Students (SFC)	2010/11 Academic year	Home armed forces (DASA)	1 st April 2011
Prisoners	27 th March 2011	Traveller numbers	July 2011
Homelessness applications	31 st March 2011	Assessors' Portal address register	27 th March 2011
Council tax	September 2010	Electoral Register	1 st April 2011
Housing association and council properties (SCORE)	April 2010 – March 2011	Migrant workers scan (DWP)	31 st March 2011

Please provide details overleaf of any sources in addition to these or with timings closer to Census day (27th March 2011). Aggregate/summary data should be provided rather than record level data. Please indicate the lowest level of aggregation that can be provided without data protection issues (e.g. data zone, Local Authority).

Data relating to counts of households and persons is a high priority but sources relating to Census topics (e.g. employment, education, language) would also be useful.

Please provide details of each data source below.

Data Source	Description	Geographic Level available at	Quality	Time Period Relating to	When available	Contact for access
<i>e.g. Registrations of multiple occupancy properties</i>	<i>Maximum and actual occupancy</i>	<i>Data zone</i>	<i>e.g. Not all multiple occupancy properties registered.</i>	<i>27th March 2011</i>	<i>30th April 2011</i>	<i>Name and tel.</i>

Appendix 3c – Local Authority (LA) Template – LA Knowledge

Local Authority Knowledge

Local Authority:	
Contact Person:	
Telephone Number:	
E-mail Address:	

Please provide any information which may prove useful when investigating the Census results for your LA. Leave sections blank if there is no relevant information to add. Please note that all examples are for illustration purposes only.

Inwards Migration		
Geography	Issue	Evidence
<i>e.g. ML3 5</i>	<i>e.g. Large Spanish community.</i>	<i>e.g. School records</i>
Outwards Migration		
Geography	Issue	Evidence
Existing migrant population		
Geography	Issue	Evidence

S01002358		
Significant Communal Establishment Change		
Geography	Issue	Evidence
<i>e.g. ML3 8NN</i>	<i>e.g. Prison opened on 15th March 2011</i>	<i>Local Authority communal establishment records</i>
Other Comments		
Geography	Issue	Evidence