Business Register Employment Survey (BRES) QMI

Contact:

BRES@ONS.gsi.gov.uk
+44 (0)1633 456903

Release date:
28 November 2014

Next release:
To be announced

Table of contents

1 . Methodology background

-

National Statistic | **Survey name** | Business Register and Employment Survey
| **Frequency** | Annual
| **How compiled** | Sample survey based
| **Geographic coverage** | UK
| **Sample size** | 80,000
| **Last revised** | 28 November 2014

2 . Overview

- provides data on the number of employees in the UK in the public or private sector and full time or part time basis

- the survey sample, of approximately 80,000 businesses, is weighted up to represent the economy covering all sectors

- BRES data is also used to update the Inter Departmental Business Register (IDBR), which is the main sampling frame used for most of our business surveys

- for the purpose of the survey, part time is classified as 30 hour per week or less

- data are available from 2009

The Business Register and Employment Survey (BRES) publishes employee and employment estimates at detailed geographical and industrial levels. It is regarded as the definitive source of official government employee statistics by industry.

Employment is calculated by adding the number of working owners to the number of employees employed by a business, where working owners include sole traders, sole proprietors and partners who receive drawings and/or a share of the profits, but are not paid via pay-as-you-earn (PAYE).

High level estimates are published on our website and more detailed estimates are published on the National Online Manpower Information Service (NOMIS) ® website.

The BRES data and estimates are widely used, both within and outside government, and are a vital source of business employee information. The main users and uses of the output include: Eurostat, the Scottish and Welsh Government, Department of Business, Innovation and Skills (BIS), Workforce Jobs and the Annual Business Survey (ABS).

3 . Executive summary

The Business Register and Employment Survey (BRES) publishes employee and employment estimates at detailed geographical and industrial levels. It collects comprehensive employment information from businesses in England, Scotland and Wales, representing the majority of the Great Britain economy. Independently collected Northern Ireland data are then combined to produce estimates on a UK basis. High-level estimates are published on Office for National Statistics (ONS) website and more detailed estimates are published on the National Online Manpower Information Service (NOMIS)® website. BRES is regarded as the definitive source of official government employee statistics by industry.

This document contains the following sections:

- Output quality

- About the output

- How the output is created

- Validation and quality assurance

- Concepts and definitions

- Other information, relating to quality trade-offs and user needs

- Sources for further information or advice

4 . Output quality

This document provides a range of information that describes the quality of the output and details any points that should be noted when using the output.

We have developed Guidelines for Measuring Statistical Quality; these are based upon the five European Statistical System (ESS) quality dimensions. This document addresses these quality dimensions and other important quality characteristics, which are:

- relevance

- timeliness and punctuality

- coherence and comparability

- accuracy

- output quality trade-offs

- assessment of user needs and perceptions

- accessibility and clarity

*Quality and Methodology Information' (QMI) replaced 'Summary Quality Reports' (SQR) from April 2011.

More information is provided about these quality dimensions in the following sections.

5 . About the output

Relevance

(The degree to which the statistical outputs meet users' needs.)

The Business Register and Employment Survey (BRES) publishes employee and employment estimates at detailed geographical and industrial levels. It collects comprehensive employment information from businesses in England, Scotland and Wales representing the majority of the Great Britain economy. The Department of Finance and Personnel Northern Ireland (DFPNI), collects the same BRES information independently in Northern Ireland. Both data sources are then combined to produce estimates on a UK basis.

BRES is regarded as the definitive source of official government employee and employment statistics by industry. Employment is obtained by adding the number of working owners to the number of employees employed by a business, where working owners include sole traders, sole proprietors and partners who receive drawings and/or a share of profits, but are not paid via Pay-As-You-Earn (PAYE).

In terms of data, the survey sample of approximately 80,000 businesses is weighted up to represent the Great Britain economy covering all sectors. BRES data are not only used to produce employee and employment statistics but also to update the Inter-Departmental Business Register (IDBR), which is the main sampling frame used for most of our business surveys.

One of the strengths of BRES is that estimates are provided at detailed geographical and industrial levels (down to a lower super output geography at a five-digit standard industrial classification (SIC)). No other ONS employment survey output provides such information at these low levels and this enables a detailed analysis of employment at low-level geographies and industries.

It should be noted that BRES is a sample survey and produces estimated employment figures. These estimates are of a good quality at higher levels of geography (for example, region). The quality of the estimates deteriorates as the geographies get smaller and this should be taken into account when considering the quality of sub-national estimates.

BRES is a point-in-time snapshot of the Great Britain and UK economy and is not designed to be used as a time series, although it is recognised that users do use them in this manner. BRES is subject to discontinuities caused by standard industrial classification change, reference date change and source data change, potentially making any time series analysis difficult.

Publication on the National Statistics website

BRES figures published on our website are released within a statistical bulletin along with a number of detailed supplementary tables. The levels at which the estimates are published are indicated by a tick in Table 1 below. Most published estimates have a quality measure attached and all figures on our website are subject to our standard disclosure rules.

Table 1: The levels at which Business Register and Employment Survey (BRES) estimates are published

Geography/Industry	Five-digit SIC*	BIG**	Overall Totals
UK and Great Britain			
including private and public sector splits			
Region			
including private and public sector splits			
Local authorities (district, county, metropolitan) including private and public sector splits			

Source : Office for National Statistics

Notes:

*SIC: Standard Industrial Classification

**BIG: Broad Industrial grouping

_*SIC: Standard Industrial Classification _**BIG: Broad Industrial grouping

Publication on the National On-line Manpower Information Service (NOMIS®)

BRES publishes Great Britain based estimates on NOMIS®. Estimates that can be obtained through NOMIS® are potentially disclosive aggregate estimates down to a lower super output area (LSOA) geography at a five-digit UK Standard Industrial Classification 2007 (SIC 2007). Access to these BRES estimates is only possible via the acquisition of a Chancellor of the Exchequer's Notice, which contains an associated Data Access Agreement (DAA). The acquisition of a Notice requires users to abide by the terms of the DAA. There is currently no financial cost for obtaining a Chancellor of the Exchequer's Notice.

In addition, BRES publishes a higher-level open access dataset on NOMIS®. This dataset provides public and private based employee and employment estimates at a country, regional, local authority county, local authority district and local enterprise partnership (LEP) geography. This open access public and private dataset does not require the acquisition of a Chancellor of the Exchequer's Notice.contains an associated Data Access Agreement (DAA). The acquisition of a Notice requires users to abide by the terms of the DAA. There is currently no financial cost for obtaining a Chancellor of the Exchequer's Notice.

In addition, BRES publishes a higher-level open access dataset on NOMIS®. This dataset provides public and private based employee and employment estimates at a country, regional, local authority county, local authority district and local enterprise partnership (LEP) geography. This open access public and private dataset does not require the acquisition of a Chancellor of the Exchequer's Notice.

Table 2: Main points of the Business Register and Employment Survey and methodology

	BRES
What it publishes	On the ONS website: the number of employees or employment in the UK on a public and private and full-time and part-time basis. Results are available at Great Britain five-digit (UK three-digit) SIC 2007 level and local authority district and county total. On NOMIS®: the number of employees or employment in the Great Britain economy on a full-time and part-time basis down to a five-digit SIC and LSOA geography level. Employee/employment estimates by public/private split.
Frequency	Annual.
Sample size	Approximately 80,000.
Periods available	From 2009.
Sample frame	Inter-Departmental Business Register (IDBR).
Sample design	Stratified random sample where the strata are defined by SIC 2007, country and employment size of a business.
Weighting	Each responding business represents a number of similar businesses from the IDBR, based on number of employees and the SIC 2007. The sampling weights are adjusted for non-response and births and deaths within the BRES business universe and are combined with calibration weights, based on IDBR employee counts, to produce overall weights. Calibration is carried out at enterprise level. Weights are calculated annually.
Estimation	Estimation is based on local unit returns: direct domain estimation is used for high levels of aggregation whereas minimum domain estimation is used for lower levels.
Outliers	Winsorisation is the outlier treatment method used, which requires specifying parameter values using past data which is updated regularly.
Part-time definition	For the purpose of the survey, part-time is classed as 30 hours per week or less.

Source : Office for National Statistics

The BRES data and estimates are used widely, both within and outside government and are a vital source of business employee information. The main users and uses of the output include:

- Eurostat – BRES is a source of annual structural statistics for the Structural Business Statistics Regulation (SBSR), used for policy monitoring and formulation by the EU via Eurostat

- the Scottish Government (SG) and the Welsh Government (WG)** – BRES provides estimates on employee numbers, which are essential in the analysis of Scottish Government and Welsh Government employment trends; estimates on all sectors are incorporated into the Scottish and Welsh figures and may also be used in internal briefings

- Department for Business, Innovation and Skills (BIS)– the UK Department for Business, Innovation and Skills (BIS), which was replaced by the Department for Business, Energy and Industrial Strategy in July 2016, uses BRES estimates to assess the structure and performance of industries

- workforce jobs – it is usual for the workforce jobs series (WFJ), much of which is initially based on the Short-Term Employment Survey's estimate of employee jobs, to be benchmarked to the BRES estimate; this benchmarking usually takes place in time for the December Labour Market Statistics First Release in the following year

- Annual Business Survey (ABS) the ABS collects financial data via the BRES questionnaire, which are then matched to employment estimates to calculate turnover per head

- Local government local government planning departments are major users of BRES using the estimates published on NOMIS® to forecast trends in employment in their specific areas and to claim for central government and European funding;

- BRESis one of the main data sources used to compile Nomenclature of Units for Territorial Statistics (NUTS) 2 and 3 gross value added (GVA) data, with the NUTS2 data the main input to the allocation of EU structural funds to deprived regions of the EU

- Additional users include national government departments and bodies, businesses, academics and the general public. User groups are consulted to ensure that the data remain relevant to their needs.

Timeliness and punctuality

(Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the gap between planned and actual publication dates.)

The following list shows the time lag between publication and the reference period to which the data refer. These timings are for the publication of the BRES estimates for the 2011 survey period.

1. provisional national results release: 12 months after the reference period

2. revised national results release: 24 months after the reference period

The time lag between publication and the period to which the data refer is considered the minimum required to produce estimates of a high enough quality to meet user needs, taking into consideration:

- the amount of time it takes contributors to complete and return the BRES forms (as BRES asks for detailed local unit information it can take contributors with a large number of local units a significant period of time to return all the completed forms)

- the large size of the BRES sample (some 80,000 contributors)

- the validation and quality checking of the data and estimates prior to publication

BRES revisions policy

The BRES revisions policy states the following:

Following the initial publication of the data for year t in September of year t plus 1, the data will be revised and re-released in September of year t plus 2 (that is, at the same time as the release of the provisional data for year t plus1). The revisions will arise from a complete rerun of survey results, including reweighting and taking on any new returned data. The complete revised dataset will be rereleased as the final dataset. Proposed revisions outside of this regime will be logged by the results team and considered for release if appropriate.

Revisions might also arise under other circumstances, for example, following a change in methodology or the introduction of a new SIC. If so, these revised datasets will be re-released in a planned and co-ordinated way. Significant revisions will be explained to both internal and external users at the time of release, subject to the usual rules on confidentiality.

For more details on related releases, the release calendar is available online and provides 12 months' advance notice of release dates. If there are any changes to the pre- announced release schedule, public attention will be drawn to the change and the reasons for the change will be explained fully at the same time, as set out in the Code of Practice for Official Statistics.

6 . How the output is created

Coverage

Business Register and Employment Survey (BRES) estimates cover UK businesses registered for Value Added Tax (VAT) and/or Pay-As-You-Earn (PAYE) and are classified using the Standard Industrial Classification 2007 (SIC 2007). It covers all major industry groups, such as production, construction, distribution, service trades and many more groups in SIC 2007.

BRES obtains the required details on these businesses from the Inter-Departmental Business Register (IDBR), which is used as the survey sampling frame.

The sample does not cover Northern Ireland. Northern Ireland contributor data are supplied directly to ONS by DEPNI. These data are added to the Great Britain based tables produced by the BRES results system to produce UK-based tables. It should be noted that low-level aggregate estimates published on NOMIS® cover Great Britain only.

Likewise, the survey does not collect farm agriculture data. These data are supplied at an aggregated level by the Department for Environment, Food and Rural Affairs (DEFRA), the Scottish Government, the Welsh Government and the Department of Agriculture and Rural Development Northern Ireland (DARDNI). This means it is only possible to include farms agriculture in the BRES estimates at the lowest aggregated level of geography supplied, which is a region level. These data are added to the estimates after BRES estimation has been run and are then included in the aggregate estimates.

Sample design

The BRES sample currently contains around 80,000 businesses from across the Great Britain economy. The IDBR is used as the sampling frame from which a stratified random sample is drawn. The strata are defined by SIC 2007, by country and by employment size, with all employment sizes of businesses being covered. The design is a stratified one stage clustered sample, where the stage 1 units (or clusters) are enterprises, or reporting units (RUs), and the elements in each cluster are local units.

An enterprise can be defined as the smallest combination of legal units that is an organisational unit producing goods or services, which benefits from a certain degree of autonomy in decision- making, especially for the allocation of its current resources. An enterprise may carry one or more activities at one or more locations. An enterprise may be a sole legal unit.

A reporting unit (RU) is the unit used for collection of information through statistical surveys. In most instances it equates to the enterprise but for the more complex businesses, it is part of an enterprise defined by a list of local units (LU) ("local unit list reporter").

The LU is an enterprise or part thereof (for example, a workshop, factory, warehouse, office, mine or depot) situated in a geographically identified place. At or from this place economic activity is carried out for which, save for certain exceptions, one or more persons work (even if only part-time) for one and the same enterprise.

If an enterprise is selected for BRES, then all its constituent local units are selected. Data are requested from each local unit. Broadly, the sample is stratified into: large or complex enterprises, unusual enterprises, and medium and small enterprises. Medium and small enterprises are further stratified by country (England, Scotland and Wales) and two-digit SIC 2007. The strata containing large or complex or unusual businesses and medium enterprises in Scotland and Wales are take-all strata.

Adjusting design weights to unit non-response and births and deaths

Unit non-response is addressed via re-weighting and our standard method for births and deaths adjustment is used: both adjustments are carried out at either sampling stratum level or post-stratum level. The adjusted design weight is given by the following equation:

$$dweight = \frac{N}{n_r} \left(1 + \frac{n_d h_{bd}}{n_r - n_d}\right)$$

Where N is the total number of enterprises in the universe in a given stratum, n_r is the number of responding enterprises, n_d is the number of dead enterprises among the respondents, and h_{bd} is the births-to-deaths ratio. The design weight is also referred to as the a-weight. In ONS, the birth-to- deaths ratio h_{bd} is set to 0 for businesses with a very large employment and 1 for other businesses.

To implement this adjustment, we post-stratified the cells containing very large businesses (cells 1, 3 and 7) into two sub-cells each: a sub-cell for businesses with an employment equal to or exceeding a specified threshold and a sub-cell with employment below the threshold. The threshold has been set to 250. In the three sub-cells containing businesses whose employment equals or exceeds the threshold, the births-to-deaths ratio has been set to 0; elsewhere, this ratio has been set to 1.

Calibration

The adjusted design weights are calibrated with respect to total register employee counts. It is a two-way calibration with respect to industry classification (by section) and region (by region), and it is carried out at RU level. Two calibration, or model, groups are defined: one group for cells containing large businesses, and another group for the remainder of the cells. It is assumed that the variance of RU returns is proportional to the register employee counts.

Within each calibration group, the adjusted design weights are calibrated so that, in each section and each region, the estimate of total register employee count is equal to the total register employee count. Because calibration is at RU level, there is no need to adjust for births and deaths of local units. This is dealt with directly at the estimation stage. The estimation tool used to compute the calibration weights is the Generalised Estimation System (GES).

Outlier treatment

The estimation for the survey variables in BRES is based on local unit returned values; the treatment of outliers is also applied at local unit level. Winsorisation is the outlier treatment method used; this requires obtaining predicted values for the local units with returns.

Winsorisation parameter values (often referred to as L-values) have been derived for all three survey variables: total employees, full-time employee and part-time employees. Once all three variables have been winsorised, the components (full-time and part-time) are scaled to add up to the winsorised total employee value.

Estimation

Estimation is based on local unit level returned data, which means domains are defined on the basis of local unit SIC 2007 and region. So, the estimate of the total of a given variable Y in domain D is given by using the following equation:

$$T_{y,D} = \sum_{i \in s_r} \sum_{l \in D} a_i g_i \widetilde{y_{i,l}}$$

where a_i and g_i are the adjusted design and g-weights for responding RU i, respectively, s_y is the set of responding RUs and equation3 is the winsorised value of the return from local unit l in RU i.

Variance estimation

Standard errors and coefficients of variation for every specified domain are produced by the tool GES, apart from those below the minimum domain.

Minimum domain methodology

Minimum domains are the lowest level at which direct estimates, that is, those obtained by applying weights to the returned data, are considered robust. Although BRES collects data at the individual local unit level, it estimates employment for all non-sampled local units in the BRES business universe. The weighted employment less the returned employment is spread pro-rata across the non-surveyed units on the basis of their IDBR registered employment, while returned values are preserved, giving estimates with relatively low variance even at very detailed levels, but at the expense of introducing some bias. The current minimum domains are set at region geography and a combination of two-digit and three-digit SIC 2007 industry levels. The use of minimum domains provides good quality estimates at low-level geographies, although this method means that accurate standard errors cannot be calculated for estimates below the minimum domain level.

The estimates produced by GES do not reflect the use of minimum domains and tend to be very large for low levels of aggregation. Approximate standard errors that take into account the minimum domain methodology but that ignore the bias introduced can be produced using the bootstrap method (resampling techniques for inferring the distribution of a statistic derived from a sample). The approach taken is to use GES for levels of aggregation at or above the minimum domains, overall and by public and private, and to use the bootstrap for levels below the minimum domains.

Statistical disclosure

BRES is conducted under the Statistics of Trade Act (STA) 1947. This Act imposes restrictions on the way that data collected during the survey may be used. The provisions of the STA are further regulated by the Employment and Training Act 1973 (ETA) as amended by the Employment Act 1989, which states that local planning authorities may use confidential data only for purposes that relate to development plans.

The main aim of these restrictions is to protect the identity of individual businesses, which have made statistical returns, from being disclosed or otherwise deduced. Some of the outputs have already been subjected to disclosure control and, therefore, the issue of confidentiality does not arise. However, employee information extracted by users of the NOMIS® database has not been suppressed and contains potentially disclosive cells.

Access to NOMIS® is restricted, by the provisions of the ETA 4(3) (f), to holders of Chancellor of the Exchequer's Notices. Users are required to agree a data access agreement (DAA) and agree to be bound by the conditions contained within it, in order to access the estimates.

Users of BRES estimates on NOMIS® are personally responsible for ensuring that any information that they publish or pass on to other users does not contain disclosive figures. More information is provided via the BRES guide to use of potentially confidential data.

7 . Validation and quality assurance

Accuracy

(The degree of closeness between an estimate and the true value.)

Estimates are subject to various sources of error. Total error consists of two elements, the sampling error and the non-sampling error. More detail on estimates and measures of these errors can be found via the Business Register and Employment Survey (BRES) homepage. Quality measures are also published alongside all standard outputs, which provide useful information for the users on the quality of the data.

Sampling error

BRES is based on a sample survey estimating the number of employees, which gives rise to sampling error. The actual sampling error for any estimate is unknown but we can estimate, from the sample, a typical error, known as the standard error. This provides a means of assessing the accuracy of the estimate when an unbiased or approximately unbiased estimator is used. The lower the standard error, the more confident we can be that the estimate is close to the true value. The coefficient of variation (CV) can be calculated as the standard error divided by the estimate and it is used to compare the relative accuracy across surveys or variables. The CV is one indicator of the quality of the estimate; the smaller the CV the higher the precision.

Quality measures are published alongside outputs, which will provide useful information for the users on the quality of the data. The CVs and standard errors are available at all geographies published on the BRES product page. The CVs and standard errors are calculated from current Geography estimates.

Non-sampling error

Non-sampling error is not easy to quantify and includes errors of coverage, measurement, processing and non-response. Response rates give an indication of non-response bias in estimates when it can be assumed that the differences between responders and non-responders are the same, regardless of response rates.

In seeking to maximise the accuracy of the survey estimates, the sample selection is carried out after the annual Inter-Departmental Business Register (IDBR) update processes are complete. This should minimise the selection of misclassified businesses and inadequate coverage of newly established businesses and defunct reporting units.

Various procedures are in place to ensure that errors are minimised. Year-on-year comparisons are made at respondent, local unit and aggregate level. Disparities are investigated to ensure the consistent annual returns. Congruence checks are made against other surveys to ensure consistent values across industries from different surveys.

As BRES is used both to update the register and to produce estimates, there is a risk of feedback bias. To reduce this bias to a minimal level, the register employee count is modelled using survey data and the modelled values are used in the auxiliary variable in calibration.

Another indicator of accuracy is reliability, which can be measured by assessing the difference between the first published estimate and the final revised figure. BRES adheres to a revisions policy whereby current survey estimates together with a revision of the previous year's survey estimates are published. Late returns or information received in the course of the following year's survey may lead to changes to the estimates after the provisional publication. Such changes are incorporated into the figures when the revised estimates are published in the following year.

Coherence and comparability

(Coherence is the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar. Comparability is the degree to which data can be compared over time and domain for example, geographic level.)

BRES replaced the Annual Business Inquiry part 1 (ABI/1) employee survey. It represents a change in methodology and data source when compared to the ABI/1, which had been published on a comparable basis since 1997. Any comparison to the ABI/1 estimates must be treated with caution. Work has been undertaken to identify and explain the reasons for, and impact of, any discontinuity and a paper relating to this can be found on both NOMIS® and the BRES product page. Scaling factors can be calculated by using the estimated BRES and ABI/1 2008 estimates to produce a time series on a consistent basis.

Individual returns are classified using Standard Industrial Classification 2007 (SIC 2007) in line with Eurostat guidelines. With regards to the ABI/1, data for 1997 to 2002 were collected under SIC 1992 and data from 2003 onwards were collected under SIC 2003. Both the 2007 and 2008 ABI/1 estimates were published on a SIC 2003 and SIC 2007 basis.

Users of BRES require that ONS employment statistics be coherent with each other; this is achieved by applying congruence checks between BRES and Monthly Business Survey (MBS) returns and using common methods where possible. As the BRES sample size is bigger than that of MBS, BRES outputs are more accurate and hence estimates from the workforce jobs Series are benchmarked to BRES estimates on an annual basis.

The Labour Force Survey (LFS) is regarded by ONS as the best measure of total jobs in the economy. The BRES outputs are regarded as the best estimates at a detailed regional and industrial level. The main differences between them are:

- BRES is a point-in-time survey requesting employee counts on a specific date in the year. The LFS estimates are averages for 3-month periods

- the LFS definition of employment is anyone (aged 16 or over) who does at least one hour's paid work in the week prior to their LFS interview, or has a job that they are temporarily away from (for example, on holiday). On the other hand, BRES produces point-in-time estimates of full and part-time employees on the payroll

- unlike BRES, LFS includes people who do unpaid work in a family business, government-supported trainees and HM Forces and that includes the self-employed as long as they are registered for VAT or Pay-As-You-Earn (PAYE); as the LFS includes these "below the threshold" very small businesses, employee estimates from LFS and BRES are not directly comparable

- LFS is a household survey while BRES is a survey of businesses – there is often a conflict between which industry people actually work in and which they think they work in, and LFS relies on respondents to self-classify to an industry; the answers that employees give in response to the LFS industry question may be influenced by the nature of their own job, which may not reflect the main activity of the organisation and as a result, BRES figures give a more reliable industry breakdown than LFS

BRES also improves the timeliness of the employment data on the IDBR through an increased sample size and improved design. This improves the accuracy of all estimates produced from register-based surveys through increased accuracy of the auxiliary variable (for example, employment).

8 . Concepts and definitions

(Concepts and definitions describe the legislation governing the output, and a description of the classifications used in the output.)

The Business Register and Employment Survey (BRES) definition of an employee is anyone working on the BRES reference date who is aged 16 years or over that the contributor directly pays from its payroll(s), in return for carrying out a full-time or part-time job or being on a training scheme. Part-time workers are classed as those who work 30 hours per week or less.

This includes:

- all workers paid directly from the business' payroll(s)

- those temporarily absent but still being paid, for example, on maternity leave

- employees at sites where the planned activity is for less than 1 year

- employees at sites manned for less than 20 hours per week

This excludes:

- any agency workers paid directly from the agency payroll

- voluntary workers

- former employees only receiving a pension

- self-employed workers (not paid via the business' payroll(s)) where identified

- working owners who are not paid via Pay-As-You-Earn (PAYE)

Employment is obtained by adding the number of working owners to the number of employees. Working owners include sole traders, sole proprietors and partners who receive drawings and/or a share of profits, but are not paid via PAYE.

BRES also collects data to fulfil the UK's obligations under the Structural Business Statistics (SBS) Regulation of the European Union, established by the Council Regulation (EC, Euratom) No 58/97 of 20 December 1996. This established a common framework for the production of Community statistics on the structure, activity, competitiveness and performance of businesses in the Community. Data are transferred to Eurostat and used for policy monitoring and formulation by the EU and as a source for annual structural statistics.

The figures are collected and presented using Standard Industrial Classification 2007 (SIC 2007) in line with Eurostat guidelines.

9 . Other information

Output quality trade-offs

(Trade-offs are the extent to which different dimensions of quality are balanced against each other.)

Business Register and Employment Survey (BRES) provisional national results are published 12 months after the reference period. The time lag between publication and the period to which the data refer is the minimum required to produce estimates of a high enough quality to meet all user needs. These results are revised 24 months after the reference period and can be considered more reliable in that they include late responder data and/or the correction of data errors that were not identified in time for the provisional release.

Further information on release dates and the BRES revisions policy are contained in the "Timeliness and punctuality" section.

Assessment of user needs and perceptions

(The processes for finding out about uses and users, and their views on the statistical products.)

A number of forums exist to obtain user views and the uses to which BRES data are put. The BRES User Group (BUG) comprises delegates selected from government bodies who have been identified as main users of the BRES estimates.

Information on how BRES data is used as well as users' experience of the service provided is obtained in a number of ways, such as:

- information obtained from NOMIS$^{®}$ regarding who requests access to BRES data and their reasons for wanting this access

- internet-based research looking at what uses are made of the BRES tables published

- regular consultation with users in local government via the Central Local Information Partnership

- frequent ad hoc meetings with Welsh and Scottish Governments

- during the development of BRES, a web consultation invited users of annual employment estimates (which at the time was from the Annual Business Inquiry) to provide their views and comments; these comments were used in developing BRES to ensure user needs were met and a paper was published summarising the views of users in response; a copy of both the consultation document and response are available: Business Register and Employment Survey for Users

- placing a voluntary questionnaire on the BRES web page asking those using the site to provide information regarding their use of the BRES data

- feedback and questions posted on StatsUserNet

An analysis of BRES users who apply for a Chancellor's Notice to access BRES employee estimates on NOMIS® was used to ascertain the main users of BRES and can be found in Table 3. This shows that around half of the users who held a notice to access the 2011 BRES estimates were from central and local government, with commercial organisations also making up a significant percentage at 31%.

Table 3: Main users of BRES estimates on NOMIS®

Description	Areas selected	percentage
Central and local government and NHS	10,900	48
Commercial	8,700	38
Not-for-profit organisation	1,300	6
University	1,200	5
Training body	400	2
Personal	200	1
School or college	100	0
Total	22,800	100

Source: Office for National Statistics

There are a number of plans to further our knowledge of the uses of BRES and who uses it. These include:

- expanding the BRES user group by using responses to the voluntary web questionnaire to see if there are any main users of BRES that might be interested in attending the user group

- annually reviewing the usage made of the BRES data from NOMIS®

- consulting local government users regarding the specific uses made of the BRES statistics

10 . Sources for further information or advice

Accessibility and clarity

(Accessibility is the ease with which users are able to access the data, also reflecting the format in which the data are available and the availability of supporting information. Clarity refers to the quality and sufficiency of the release details, illustrations and accompanying advice.)

Our recommended format for accessible content is a combination of HTML web pages for narrative, charts and graphs, with data being provided in usable formats such as CSV and Excel. We also offer users the option to download the narrative in PDF format. In some instances other software may be used, or may be available on request. Available formats for content published on our website but not produced by us, or referenced on the ONS website but stored elsewhere, may vary. For further information, please contact us via email at BRES@ONS.gov.uk.

For information regarding conditions of access to data, please refer to:

- Terms and conditions

- Copyright and reuse of published data

- Accessibility

In addition to this Quality and Methodology Information, basic quality information relevant to each release is available.