

# Information paper

## Quality and Methodology Information

### Construction output QMI

Frequency: Monthly

How compiled: Sample survey-based

Geographic coverage: Great Britain

Sample size: 8,000

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Related bulletins: Construction output in Great Britain

### Important points about the construction data

- Data are sourced from the Monthly Business Survey for Construction (also known as the Construction Output Survey), which collects information from businesses in the construction industry within Great Britain; the survey's results are used to produce estimates for output in the construction sector of the economy.
- Data by regional splits and further sub-divisions of the type of work are published on the first month of each quarter: this split is modelled from new orders data where the level of granular data is indicative only.
- The survey also does not collect information regarding the output of Property Developers (Standard Industrial Classification (SIC) 41.1); this is consistent with many other European national statistics institutes (NSI).
- Published estimates no longer include estimates of unrecorded output (work is carried out by sole proprietors who do not pay PAYE and are below the VAT threshold and therefore cannot feature in the sample); estimates are, however, included in the calculation of national accounts estimates of activity in the construction industry.
- Northern Ireland is excluded from the sample as they carry out their own survey of construction activity.

### Overview of the output

The survey measures the value and volume of output in the construction industry on a monthly basis. The Monthly Survey for Construction was introduced from January 2010, replacing the earlier Quarterly Inquiry of Activity for Construction and Allied Trades and the Building and Civil Engineering Employment and Output Inquiry. The survey collects output by sector from businesses in the construction industry within Great Britain, the change, part of the development of construction statistics, followed the transfer of responsibility from the

Department of Business Enterprise and Regulatory Reform (BERR), now the Department for Business, Energy and Industrial Strategy (BEIS), to the Office for National Statistics (ONS).

The Inter-Departmental Business Register (IDBR) is used as the sampling frame to select 8,000 businesses which are sent a questionnaire to be completed and returned to ONS. Returns for businesses that do not respond are imputed and the data are weighted to provide estimates for the full population. Statistical disclosure control methodology is applied to avoid identifying any individual organisations.

The main output measures include value and volume estimates, in both seasonally adjusted and non-seasonally adjusted forms. The value estimates reflect the total value of work collected by businesses over a standard period, while the volume estimates are calculated by adjusting the value estimates for the impact of price changes, a process known as deflation. The value and volume estimates are widely used in private and public sector institutions, particularly by the Bank of England (BoE) and Her Majesty's Treasury (HMT), to assist in informing decision and policy making.

The data are published in the Output in the Construction Industry statistical bulletin on the second Friday of the month. The main users of the data are:

- national accounts, where estimates are fed into gross domestic product (GDP) at month 1, month 2 and month 3 of the quarter
- Eurostat, in order to comply with statutory requirements
- industry analysts requiring estimates of the construction industry output of Great Britain
- trade associations making UK and international comparisons
- other government departments including: BEIS, HM Treasury (HMT) and the Department for Communities and Local Government (DCLG); named individuals with pre-release permission within these departments have access to construction statistics outputs 24 hours before they are released to the public.

## Output quality

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

We have developed [Guidelines for Measuring Statistical Quality](#); these are based upon the 5 European Statistical System (ESS) quality dimensions. This document addresses the quality dimensions and important quality characteristics, which are:

- relevance
  - timeliness and punctuality
  - coherence and comparability
  - accuracy
  - output quality trade-offs
  - assessment of user needs and perceptions, and
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- accessibility and clarity

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

## About the output

### Relevance

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

The needs of construction output users were assessed by a public consultation when the responsibility for the series moved to us. A detailed look at how the survey was designed to meet those needs and where it does not, is given in the report on the [consultation](#). In particular, Appendix 2 gives a table of the unmet user needs, while Appendix 3 looks at the details of the changes made and their impact on users.

All issues relating to the collection and dissemination of construction statistics are discussed at the Consultative Committee on Construction Industry Statistics (CCCIS). This is a joint forum which meets biannually and consists of members of the industry, BEIS and us.

Data are sourced from the Monthly Business Survey for Construction (also known as the Construction Output Survey), which collects information from businesses in the construction industry within Great Britain. The survey's results are used to produce estimates of output in the construction sector of the economy.

The Monthly Business Survey for Construction was introduced from January 2010, replacing the earlier Quarterly Inquiry of Activity for Construction and Allied Trades and the Building and Civil Engineering Employment and Output Inquiry. The change, part of the development of Construction Statistics, followed the transfer of responsibility from BERR, now BEIS to us.

Data by regional splits and further sub-divisions of the type of work are published on the first month of each quarter. This information is not collected directly from the Construction Output Survey for logistical and burden reasons. Instead, this split is modelled from new orders data in conjunction with information collected from the Projects in Progress Survey (now discontinued), which mapped the duration of projects for differing sectors. It has been pointed out to users that this level of granular data is indicative only. User reaction has been that they still want the data regardless of the concerns regarding accuracy.

The survey also does not collect information regarding the output of Property Developers (Standard Industrial Classification (SIC) 41.1). This is consistent with many other European National Statistical Institutes (NSI). Property developers tend to sub-contract work to other businesses in the construction sector that carry out the actual building activity. Businesses are asked to exclude any sub-contracted work to avoid any double-counting. Output does not include payments made to architects or consultants from other firms – this would cover engineers and surveyors. Output would, however, include wages paid to such people if they were directly employed by the business.

Published estimates no longer include estimates of unrecorded output. This is work carried out by sole proprietors who do not pay PAYE and are below the VAT threshold and therefore cannot feature in the sample. Estimates are, however, included in the calculation of national accounts estimates of activity in the construction industry.

Northern Ireland is also excluded as they carry out their own survey of construction activity.

## **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.)

Provisional results, produced from the Monthly Business Survey, are delivered approximately 2 months after the reporting month. Revised results, for previously published periods, are published for the following 12 months on the same date as the latest provisional data.

The provisional estimates are published in the Output in the Construction Industry statistical bulletin. Provisional estimates and revised estimates are also available in MS Excel format on the ONS website.

For more details on related releases, the [release calendar](#) is available online from the GOV.UK website 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](#).

## **How the output is created**

### **Output objectives**

The Monthly Business Survey for Construction measures output from the construction industry in Great Britain. It samples 8,000 businesses, which includes all businesses employing over 100 people or with an annual turnover of more than £60 million receiving a questionnaire by post every month. Each business sampled receives a questionnaire by post each month and is asked to return information on work carried out in the previous month.

Output is defined as the amount chargeable to customers for building and civil engineering work done in the relevant period excluding VAT. As well as work charged to customers, businesses are asked to include the value of work done on their own initiative on buildings such as dwellings or offices for eventual sale or lease and of work done by their own operatives on the construction and maintenance of their own premises. The value of goods made by businesses themselves and used in the work is also included.

As well as being an important indicator of the performance of construction companies, the construction estimate also contributes approximately 5.9% to the UK estimate of gross domestic product.

Our survey is the largest and broadest ranging survey of the sector. There are several other surveys that are smaller in size and focus on particular parts of the industry. They also differ in what they ask. Many of them ask whether business is up or down or about the same as a previous period.

## Coverage and sample

There are 24 construction industries in the Monthly Business Survey (see the UK SIC 2007 classification – industry description table), as defined by the UK Standard Industrial Classification 2007 (UK SIC 2007), covering 11 sectors (see the Concepts and Definition section). Output is collected in £ thousands for all industries. In 2014, approximately 96,000 questionnaires were sent out to businesses in Great Britain (Northern Ireland is not included) collecting data on construction output. The sampling frame used is the IDBR. Industry classification and size, based on the number of employees recorded in the register, are used as the basis for stratification; businesses with 100 or more employees are fully enumerated every month. An additional band covering businesses with low employment and exceptionally large turnover, defined as having 10 to 99 employees with an annual turnover of £60 million or more, are fully enumerated.

List of the 24 construction industries surveyed in the Monthly Business Survey:

<b>UK SIC 2007 classification</b>	<b>Industry description</b>
41201	Construction of commercial buildings
41202	Construction of domestic buildings
42110	Construction of roads and motorways
42120	Construction of railways and underground railways
42130	Construction of bridges and tunnels
42210	Construction of utility projects for fluids
42220	Construction of utility projects for electricity and telecommunications
42910	Construction of water projects
42990	Construction of other civil engineering projects not elsewhere classified
43110	Demolition
43120	Site preparation
43130	Test drilling and boring
43210	Electric installation
43220	Plumbing, heat and air conditioning installation
43290	Other construction installation
43310	Plastering

**UK SIC 2007 classification****Industry description**

43320	Joinery installation
43330	Floor and wall covering
43341	Painting
43342	Glazing
43390	Other building completion and finishing
43910	Roofing activities
43991	Scaffold erection
43999	Other specialised construction activities not elsewhere specified

A random sample is selected in each of the other strata. The size bands used for all industries are: 0 to 4, 5 to 19 and 20 to 99 employees. Businesses are thus allocated to one of a total of 57 strata. The sampled industries (those with fewer than 100 in employment) are selected for the survey for approximately 27 months, except for businesses with 0 to 9 employment which are only included for 15 months, after which they are guaranteed not to be selected for this or any other short-term business survey for another 3 years while remaining small. The sample allocation by employment size band is shown in Table 1 of the Constructions QMI Tables .PDF (this will vary slightly month by month as population data changes). The register employment of businesses is updated annually in January.

Until January 2014, the 5 to 9 and 10 to 19 size bands were merged into 1 size band. The size band was split in order to reduce coefficients of variation and the rotation effects seen in the sample.

**Editing and validation**

Responses from businesses are validated using rules built into the processing system (Common Software), which are used to calculate the current price estimates. Validation gates use information from previous responses, or from register information, to identify any possible response errors. Such errors are reported to the editing and validation team, who will contact the businesses to check the data and provide an explanation for the provided values. Any incorrect data is changed at this stage. All contact with businesses is recorded to provide an audit trail for future validation purposes.

**Weighting and estimation**

As it is not possible to survey every business in the population, it is necessary to weight the data from the sample of businesses to provide estimates for the full population. In strata that are not fully enumerated, 2 weights are applied to data collected in the Monthly Business Survey:

1. Design (“a”) weight. This is the inverse of the inclusion probability of businesses in the sample, essentially the ratio of the size of the population from which the sample is selected to the size of the sample. The “a” weight calculation is adjusted for closedowns, based on

assumptions about the births to deaths ratio: this ratio is assumed to be 1 except in large businesses where it is assumed to be 0.

2. Calibration (“g”) weight. This adjusts for the imbalance of the selected sample compared with the population from which the sample is selected, where the imbalance is defined in terms of average register turnover. The “g” weight is given by the average population register turnover divided by the average sample register turnover within a group, which can be either a stratum or a combination of strata.

## Imputation

Each month approximately 70% of respondents return data. Businesses that do not respond are response-chased via reminder letters and telephone calls; the data for remaining non-responders are then imputed. Imputed values are estimated based on the pattern of responses for similar businesses. A link factor, based on growths of returns from businesses in the same industry, is calculated and applied to previous returns for each non-responder. The original construction for a never-responding business is calculated from a ratio (calculated as the ratio between the returned value and register turnover of those businesses that have made returns) being applied to the register turnover from the IDBR of that never-responding business.

## Disclosure

Statistical disclosure control methodology is applied to output data. This ensures that information attributable to an individual or individual organisation is not identifiable in any published outputs. [The Code of Practice for Official Statistics](#) and specifically the Principle on Confidentiality, sets out practices for how ONS protects data from being disclosed. The Principle includes the statement that ONS should “ensure that official statistics do not reveal the identity of an individual or organisation, or any private information relating to them, taking into account other relevant sources of information”. More information can be found in [National Statistician’s Guidance: Confidentiality of Official Statistics](#) and also on the [Statistical Disclosure Control Policy](#) page on the ONS website.

When data are shared with other bodies, for example Eurostat, it is done so under legislation and using secure electronic file transfer methods.

## Deflation

The quarterly Construction Output Price Indices (OPIs) are used in the production of chained volume measures for output in the construction industry and estimating, cost checking and fee negotiation on construction works. Responsibility for these indices transferred to ONS on 1 April 2015.

Information about the [methods used to compile the interim construction price index](#) can be found in the first article published in June 2015 as well as the main strengths and limitations of this interim solution.

## Seasonal adjustment

The monthly chained volume measures are seasonally adjusted (CVMSA) using a seasonal adjustment software tool called X-13 Arima. This monthly series is aggregated to form the quarterly seasonal adjusted chained volume measure series. The seasonal adjustment parameters for output in the construction industry are reviewed annually. However, due to the volatility of these statistics and a high volume of revisions as a result of seasonal adjustment, time series analysis experts are regularly asked to review the seasonal adjustment.

You should note that 60 months is the minimum time span recommended by Eurostat for seasonal adjustment. While the seasonal pattern is generally established after 60 months in a monthly time series, there is still potential for increased revisions until the seasonal pattern has matured. The seasonal adjustment parameters for construction output data are reviewed annually. However, due to the volatility of these statistics and a high volume of revisions as a result of seasonal adjustment, the data are often reviewed on a more frequent basis.

## Chained volume measures

The chained volume measures (CVM) of construction output are annual re-weighted chain Laspeyres indices referenced to current price values, currently 2012. As with constant price estimates, chained volume measures only vary with changes in the quantities of commodities produced or sold. However, unlike constant price estimates and fixed-weight indexes, which value quantities using the prices of some base period which were updated (or reweighted) once every 5 years, chained volume measure value quantities by using prices in a base period that is updated annually. These annually reweighted (rebased) volume change measures are then linked, or “chained” together to produce a time series of chained volume measures.

A chained volume series is an economic series for successive years put in real terms by computing the volume for each year in previous year’s prices and then chain-linking the data together to obtain a time series of volume figures from which the effects of price changes have in theory been removed. The chain-linking method used is consistent with the standard [national accounts method](#).

## Outliers

Outliers are detected automatically and are treated by applying a weight based on the one-sided [Winsorisation method](#), thereby reducing the outliers’ impact on the overall estimate. The parameters used in the Winsorisation process are regularly reviewed.

## Modelling of output by type of work and by region

The output by type of work and new work output by region series are modelled using new orders survey data. The new orders data includes information from businesses on contracts won by type of work and by region where the work is to be carried out. New orders data from

Barbour ABI are used to calculate type of work weights and regional weights by which sector output estimates from the output survey are broken down into types of work and into regions.

Estimates for repair and maintenance by region are calculated from the output survey, assuming that repair and maintenance work is carried out in the region in which a business is registered. The model includes parameters that make assumptions as to timing and magnitude of conversion of new orders won into output produced. These assumptions are based on the previous Quarterly Inquiry of Projects in Progress (PROBE) survey, which was carried out by BIS. The purpose of PROBE was to track the output of projects through their life cycles. The table below shows the details of these assumptions based on PROBE data.

For further information please see Table 2. Periodic weights applied to New Orders sectors in the Construction QMI .PDF.

For example, for the purposes of producing type of work and regional splits, it is assumed that public housing output in quarter “n” (latest quarter) is due to 0.07 of the value of new orders for public housing won in quarter “n” plus 0.14 of the value of new orders won in quarter “n-1” and so on.

As mentioned previously, there are 2 elements to the calculation of output by region: new work (accounting for around two-thirds of output) and repair and maintenance (accounting for the other third).

The new work estimates by region are produced from the orders that have been placed, which ask for information on the site to which they relate. They therefore provide a very good picture of the geographical breakdown of these orders. The orders are translated into output using the lag distributions shown previously. These lag factors were derived from surveys undertaken in the 2003 to 2007 period. They have however, been tested on much earlier data and been found to be appropriate so they would seem reasonably reliable, though it could be that in particular periods, such as the recent economic downturn, the actual lags change slightly.

The lag factors enable the production of estimates of new work output by region. These estimates may not add exactly to the level directly estimated for Great Britain as a whole from the output survey so they are scaled to it, using the same factor for each region.

There are a number of reasons why orders information may not relate directly to the subsequent level of output. Among these are:

- not all new orders will be proceeded with
- the price or specification of the eventual output differs from that at the time the order was placed
- the lags used to translate new orders into output may no longer be appropriate

However, to the extent that any effect may have a broadly equal impact on each region, they would not materially weaken the regional estimates. To do that, they would need to affect some

regions more than others. From time to time, that will undoubtedly occur but users have accepted that starting with site-based information provides a strong starting point for these data.

The position for repair and maintenance is slightly less clear. The reported output in this category is allocated directly to the region in which the address of the respondent falls. For smaller businesses, it is almost certainly a reasonable assumption that they undertake repair and maintenance in the region in which they are based. But for larger businesses – and businesses with over 100 employees, which account for approximately 40% of all repair and maintenance – this may be less true. Then the quality of the estimates will be influenced by the extent to which any cross-region working cancels out. The time series may also be affected by the occasional changes of address of respondents, when that change moves them from one region to another.

User engagement suggests that, despite the assumptions made in producing regional estimates, users value them for the broad purposes to which they tend to be put. Potential users should bear in mind the inevitable limitations of the data. We would be happy to discuss the quality of the information further with those who want to use it.

## Validation and quality assurance

### **Accuracy**

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

The survey obtains its samples from the IDBR, which is a database of UK businesses maintained by us (Northern Ireland businesses are not selected). The sample is periodically reviewed and optimised. Targeted survey response rates are set at 70% by number of questionnaires and 80% by turnover. Respondents are sent reminder letters to encourage response and are also contacted by telephone to achieve the response targets. Enforcement of persistent non-responders has also been introduced. Response rate at the time of publication are included for the current months and 3 months prior.

Estimates produced from the survey data are subject to various sources of error that can be categorised into sampling and non-sampling error.

### **Sampling error**

This occurs because estimates are based on a sample rather than a census. Sampling error is minimised for the Monthly Business Survey through the use of a scientifically chosen sample, which is reviewed and refined periodically. Sampling error is continually monitored with standard errors and coefficients of variation calculated for each output question asked.

## Non-sampling errors

Non-sampling errors can occur due to errors of coverage, measurement, processing and non-response. Response rates give a possible indication of the presence of non-response errors on the estimates (for example, non-response bias). Non-sampling error is minimised through comprehensive input and output editing processes.

The Monthly Business Survey uses the IDBR as its sampling frame and uses it to calculate the design and calibration weights used in the estimation. The IDBR is updated frequently but inevitably suffers from some frame error. The IDBR is based on VAT and PAYE registered businesses, so small construction businesses may be missed. Responses are checked for internal consistency and compared with those for similar units. Quarter-on-quarter comparisons are made at respondent level and aggregate level. Disparities are investigated to ensure consistent returns. The definition of output is complex and it is possible that measurement errors result from businesses returning turnover data or another measure of activity which better matches their accounting processes. For smaller businesses, where there is little sub-contracting, turnover will equate to output. Further discrepancies may occur if figures provided are based on invoices, which may lag actual activity rather than confirm work carried out in a particular period.

## Reliability

Assessing the difference between the first published estimate and the final revised figure provides an indication of reliability. The survey estimates revise up to 12 previous periods by taking on late responses or cases where a business revises its own return. A late response replaces a previously imputed value. The reason for revising 12 previous periods is the possible need to revise the previous year if, when querying a year-on-year movement, the business realises that last year's return was incorrect. Revisions are monitored on a monthly basis.

Revisions are an inevitable trade off between timeliness and accuracy. In general, revisions will follow the [standard revisions policy for national accounts](#).

In March 2012, as part of our [Statistical Continuous Improvement programme](#), we published a [Review of Sample Design and Estimation Methodology for Construction Output](#). This report evaluated the sample design and estimation methods used on the Construction Output Survey. The conclusions of the review were that the current sample is performing well and that the current methodology for estimation within the survey produces the smallest standard error.

## Coherence and comparability

(Coherence is the degree to which data 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.)

The Output Survey began in 1955, with the Board of Trade (later BERR) having responsibility for producing the data. Ownership of responsibility transferred to us in March 2008. The subsequent redevelopment of the output statistics has meant that a revised back series of data at sector level to 1955 and at type of work and regional level to 1980 has been produced.

To ensure that the output series is coherent, period-on-period growths are analysed appropriately. Employment data are collected in the survey on the third month of every quarter. These data will feed into short-term employment and vacancies statistics.

In June 2009, we announced [major changes](#) to the arrangements for producing construction statistics and indicated that the changes would take effect from the beginning of 2010.

From January 2010, a new Monthly Business Survey replaced the quarterly output surveys for construction and a quarterly New Orders Survey replaced the previous monthly New Orders Survey. Publication dates for the new surveys have been placed on the forward [release calendar](#).

It is difficult to make a comparison of the Great Britain estimates of output in the construction industry with the Euro area or EU28 as each country measures construction output in different ways. We follow the A (ideal) method for the compilation of these statistics as described by the Short-Term Statistics Regulation – no other European country follows this method.

Construction output data for Northern Ireland is now consistent with data for Great Britain after the Northern Ireland Statistics and Research Agency moved from constant price estimates to chained volume measures. However, when making a comparison of these data, you should note that the Northern Ireland data are not as timely as the Great Britain data and you will have to wait approximately 3 months after the Great Britain data are published to make an assessment.

## Concepts and definitions

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

The statutory basis of the Monthly Business Survey for Construction is the Statistics of Trade Act 1947.

### **The construction industry**

The industry is defined in accordance with Divisions 41 to 43 of the UK Standard Industrial Classification of Economic Activities 2007 ([UK Standard Industrial Classification of Economic Activities 2007 \(SIC 2007\)](#)).

The concept of allied construction activities (also known as allied trades) has been introduced in SIC (2007), replacing the division structure of the previous version SIC 2003, which was based largely on the stage of the construction process.

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This industry definition includes general construction and allied construction activities for buildings and civil engineering works. It includes new work, repair, additions and alterations, the erection of prefabricated buildings or structures on the site and also construction of a temporary nature.

General construction is the construction of entire dwellings, office buildings, stores and other public and utility buildings, farm buildings etc., or the construction of civil engineering works such as motorways, streets, bridges, tunnels, railways, airfields, harbours and other water projects, irrigation systems, sewerage systems, industrial facilities, pipelines and electric lines, sports facilities etc. This work can be carried out on own account or on a fee or contract basis. Portions of the work and sometimes even the whole practical work can be subcontracted out. A unit that carries the overall responsibility for a construction project is classified to the construction industry. Also included is the repair of buildings and civil engineering works.

The industry definition includes the complete construction of buildings (division 41), the complete construction of civil engineering works (division 42), as well as allied construction activities, if carried out only as a part of the construction process (division 43).

The renting of construction equipment with operator is classified with the specific construction activity carried out with this equipment.

## **Breakdown of published sectors**

Business data is broken down into the following areas for publication:

1. New housing a. public and housing association b. private
2. Other new work a. infrastructure b. other new work excluding infrastructure i. public ii. private  
1. private industrial 2. private commercial
3. Repair and maintenance (R&M) a. housing i. public and housing association ii. private b.  
other work i. public ii. private iii. infrastructure

Further information on definitions and concepts involved in Output can be found in appendix 2 of the [Construction Statistics Annual 2012 edition](#).

## **Summary of output estimates produced**

Table 3 in the Construction QMI Tables .PDF summarises the output estimates that we publish.

## **Other information**

### **Output quality trade-offs**

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

The amount of data collected quickly means that provisional outputs are timely, but more reliable estimates are available in subsequent months since imputed values are replaced with

data received from businesses and forecast deflators are replaced with provisional and final values.

## **Assessment of user needs and perceptions**

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

The needs of construction output users were assessed by a [consultation](#) when the responsibility for the series moved to us. A detailed look at how the survey was designed to meet those needs and where it does not, is given in the report on the consultation. In particular, Appendix 2 gives a table of the unmet user needs, while Appendix 3 looks at the details of the changes made and their impact on users.

All issues relating to the collection and dissemination of construction statistics are discussed at the Consultative Committee on [Construction Industry Statistics \(CCCIS\)](#), which meets twice a year.

## **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. Our website also offers users the option to download the narrative in PDF format. In some instances other software may be used, or may be available on request. For further information please refer to the contact details at the beginning of this page.

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

- [Terms and conditions \(for data on the website\)](#)
- [Accessibility](#)

In addition to this Quality and Methodology Information, quality information relevant to each release is available in the relevant [Statistical Bulletin](#).