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Quality and Methodology Information

General details

Title of output: Civil Service Statistics
Designation: National Statistics
Coverage: Civil Service organisations
Contact details: civilservicestatistics@cabinetoffice.gov.uk

Summary
Civil Service Statistics is an annual publication that describes the home Civil Service workforce in terms of its size, composition, salaries, and location. It also includes information on numbers joining and leaving the Civil Service. Data are sourced from the Annual Civil Service Employment Survey (ACSES) — see 'How the output is created' below.

This document provides an overview of the statistics and the process by which the annual National Statistics bulletin and associated data tables are brought together. It includes sections on:

- Output quality
- About the Output
- How the output is created
- Validation and quality assurance
- Coherence and comparability
- Concepts and definitions
- Other information, relating to quality trade-offs and user needs

Output quality
This section gives users information that describes the quality of the data and statistics and it details any points that should be noted when using Civil Service Statistics.

ONS has developed Guidelines for measuring statistical quality based upon the five European Statistical System (ESS) Quality dimensions. We address these quality dimensions here and other important quality characteristics, including:
- Relevance
- Timeliness and punctuality
- Coherence and comparability
- Accuracy
- Output quality trade-offs
- Assessment of user needs and perceptions
- Accessibility and clarity

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To also address quality concerns associated with the use of administrative data in the production of National Statistics, ONS developed a Good practice guidance for using administrative data and an Administrative Data Quality Assurance Toolkit.

Using the quality assurance self-assessment matrix in the toolkit, Civil Service Statistics has been rated as having a low level of risk of quality concerns and a medium public interest profile, entailing an enhanced level of quality assurance (please see Appendix A for a full description of the QA matrix). The Cabinet Office team is confident that the quality assurance processes embedded in the production of these statistics and described in this document are of an appropriate level for the assessed risk.

About the output
Relevance
(The degree to which statistical outputs meet users' needs)

Table 1: Overview of the output

What it measures	ACSES requests detailed information from all Civil Service organisations on their workforce. This includes: sex, ethnic origin, disability status, age, national identity, earnings, profession and regional location of employees at the appropriate reference date. Civil Service Statistics follows UK National Accounts concepts and definitions to determine whether an organisation is part of Civil Service.
Frequency	Annual collection.
Sample size	All staff in post at the specified reference date (circa 450,000 civil servants). The collection also includes all civil servants who have left the Civil Service during the previous 12 months
Periods available	Recent versions of Civil Service Statistics are on the publication page, with earlier versions back to 1970 available from the National Archives website.
Sample frame	Complete census of Civil Service employees at the reference point. All Civil Service organisations are required to complete a return that contains an individual record for each of their employees as per the detailed specification.
Sample design	Census.

Weighting and estimation	No weighting or estimation is used. A unit (organisation) response rate of 100% has been achieved since ACSES commenced in 2007. Statistics are based on actual returns only; no item non-response adjustment is applied.
Imputation	No imputation is undertaken.
Outliers	No filtering of outliers.

Civil Service Statistics is published annually. However, headline employment numbers and a breakdown of these headline figures by sex and employment status i.e. whether an employee is permanent or not, are also published each quarter by ONS. This ONS publication — Quarterly Public Sector Employment Survey (QPSES) — represents the official source for measuring changes in employment levels in the Civil Service and in comparing it with other sectors of the economy.

Whilst Civil Service Statistics present overall and organisations' employment levels at the same reference date as ONS' Q1 end of March publication QPSES publication, numbers do not always align. Therefore, in the output a reconciliation table is produced to draw users' attention to the magnitude of these differences. Where users wish to understand overall employment changes in the Civil Service, the relevant series from the ONS quarterly statistics should be used.

Civil Service Statistics provides users with a detailed picture on the Civil Service in terms of its structure and composition, presenting this information in a statistical bulletin (in PDF format) as well as some 40+ statistical tables and an associated csv file. The statistics include information on the Civil Service workforce as follows:

- **Size**: Number of employees
- **Composition**: Employees by grade, profession and diversity characteristics
- **Pay**: Median and mean pay and differences between men and women
- **Location**: Regional breakdowns
- **Flows**: Entrants and Leavers from the Civil Service

Figures are a 'snapshot' as at the appropriate reference date i.e. 31 March. Flow information i.e. entrants and leavers, refers to the 12 months prior to the reference date.

The Cabinet Office (CO), through policy officials in Civil Service HR (CSHR), leads on overall workforce policy development across the Civil Service. Ministers and officials with responsibility for developing workforce policy are key users of Civil Service Statistics, monitoring changes in the make-up of the Civil Service and in developing appropriate policy responses. It provides Cabinet Office officials with a robust evidence base to enable it to deliver on its vision of creating a Brilliant Civil Service, improving its overall capability and effectiveness.

Civil Service organisations who supply the underlying data from which Civil Service Statistics is drawn also use the figures to compare themselves with similar organisations and to the Civil Service overall.

The media, think tanks and lobby groups may also use these statistics to make an assessment of changes taking place across the Civil Service and its constituent organisations, and reuse the data to provide additional commentary.

Other non-governmental bodies and individuals will also make use of these statistics.

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 proposed month of publication is announced on gov.uk at least twelve months in advance of publication. In the event of any changes to the pre-announced release schedule, the change and the reasons for it will be announced.
Publication is currently around 16 weeks after the end of the reference period.

The following timeline outlines the major steps in the production process for the annual bulletin:

Table 2: Civil Service Statistics production process broad timings

Timelines for the collection process	Duration
Prior to the commission	
The ACSES specification is agreed following consultation with main users and engagement with data suppliers	Ongoing up to January each year
Organisations prepare for the collection, making changes to HR systems as necessary e.g. where new variables have been introduced	Ongoing but focused on the two months leading up to collection
The data commission is sent to Civil Service organisations	
Organisations extract their data and input it into the required format, quality assuring the figures, and sending to CO team	4 weeks

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Deadline for responses from monitored bodies	
CO team follow up on returns, querying inconsistencies and accepting necessary revisions and late returns	10 weeks
Validated returns that pass CO internal checks are returned to organisations for sign-off	
CO team send html dashboards for organisations for sign-off by senior officials	3 weeks
The bulletin is produced, all tables and figures are quality assured	3 weeks
Documents are finalised and sent to publication team to be set up for release on gov.uk	1-3 days

As part of the production process, data suppliers are notified of the return deadlines in advance, and the CO team follow up with them over the course of the collection and production cycle.

How the output is created

The statistics in the bulletin are derived from returns completed as part of the Annual Civil Service Employment Survey (ACSES). The formal commission covers all Civil Service organisations, including all major Departments. Relevant officials in government organisations are responsible for sending in their returns to Cabinet Office.

ACSES requests from organisations an individual level record of all their Civil Service employees 'in post' as at the reference date, along with records for leavers and joiners from/to the Civil Service in the preceding 12 months. ACSES collects information via a standard Excel template and includes data fields on pay, contractual hours, grade and location. It also includes personal characteristics, such as age, sex, religion, and sexual orientation. The data collected are anonymous in that no employee names are requested. However, the data are considered and handled as 'personal data' because in certain circumstances individuals may be identifiable (see Statistical disclosure control section below).

Collection, validation and reporting of ACSES is facilitated and controlled by computer software written using the R programming language. The code constitutes a "Reproducible analytical pipeline" in that the process of getting from the raw data to the published tables and figures is automated. All raw data files supplied by departments are maintained in their unprocessed form. The R code maintained by the CO team takes this raw data, checks for invalid data (more detail in the validations section), then derives additional columns based on raw data values e.g. age is derived from date of birth.

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Validation and quality assurance

Data validation

The raw data from organisations undergo four distinct rounds of checks and quality assurance prior to it being assessed as suitable for publication:

1. Initial checks by supplying organisations:
   - All organisations are expected to undertake a level of assurance ahead of sending in their initial returns to CO. This process will vary by organisation.
   - In addition, the spreadsheet supplied to organisations by the CO team automatically generates summary information for the purpose of checking the data e.g. headcounts by grade. There are some 20+ validation routines that will highlight data inconsistencies ahead of organisations sending their return to CO.

2. Raw data validation checks by CO team, of which there are 13 routines, including, for example:
   - Civil Service start date needs to be on or before the department start date.
   - FTE should be calculable from the part-time hours and full-time hours figures supplied.
   - Salaries fall within an expected range

3. Contextual checks by CO team, including:
   - Data is visualised alongside previous years' data for every variable supplied.
   - Any clear changes from previous years are queried with departments.
   - Headcounts are also compared to figures collected by ONS as part of the Quarterly Public Sector Employment Survey (QPSES). The March QSPES collection has the same reference date and inclusion criteria, so any differences between headcounts require an explanation by the supplying organisation.

4. Final sign-off checks by data supplying organisations
   - Organisations are supplied by CO team with an html 'dashboard' that provides tables and visualisations of their data and comparisons to previous years' data.
   - This will be checked by officials, often including senior HR officials such as the departmental HR director.

In addition, during the final stages of the production process, detailed final checks and quality assurance will be undertaken by the CO team.

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

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Civil Service Statistics are derived from information sourced from individual organisations' HR systems. The key stages in the production of the statistics are outlined below, covering the stage of production, the potential sources of risk or error, and the steps taken at each stage to mitigate these potential risks.

The data collection is a census in design and receives a 100% response across all Civil Service organisations. However, it is still important to be aware of accuracy issues associated with the data collection.

- Organisations are not always able to provide complete information for every variable collected and users should consider under-coverage when interpreting the statistics, particularly over time.

- Statistics are published on the sex, ethnicity, disability status, national identity and age of the Civil Service workforce. All diversity statistics relate to civil servants on a headcount basis and are presented as a percentage of known status i.e. employees who have either not responded or actively chosen not to declare their status are excluded. The same calculations of known status are used in national identity tables.

- Item-level response and under-coverage, in general, has improved since the first Annual Civil Service Employment Survey (ACSES) collection in 2007. The most recent non-response comparisons are displayed in the table.

Table 3. Percentage non-response (all employees), 2016 to 2019

Data field	2016	2017	2018	2019
Sex	0	0	0	<0.1
Age	<0.1	<0.1	<0.1	<0.1
Responsibility level	3.1	3.3	3.4	3.4
Disability status	14.4	17.9	18.8	21.5
Ethnicity	9.0	10.2	20.1	15.6
National identity	24.9	39.5	43.1	42.3
Profession	4.0	5.3	26.6	27.0
Gross Salary	0.2	0.1	0.4	0.2

Under-coverage can occur because there is a known lag in recording information in HR systems following someone joining a Civil Service organisation. Organisations are also increasingly moving to self-service systems that require individuals to maintain their own record. Whilst it is the responsibility of organisations to review the quality of information held and encourage regular updates by their employees, an element of non-response can be expected.

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The section below shows the broad production process, helping to identify risks of error in the process and how these are minimised with relevant mitigating actions.

Production processes

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1) ACSES specification drafted
Each year the specification will be refreshed to ensure all variables remain relevant or are amended as appropriate. This process will be informed by discussion with primary users — mainly officials who lead on specific workforce policy areas.

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2) Engagement with data suppliers
Ahead of the formal commission, the CO team reaches out to data suppliers and organises a cross-government meeting. This will highlight any changes in the specification for that year's commission, timings, and other process changes that data suppliers should note. It also provides an opportunity for data suppliers to raise any concerns or issues so that these can be addressed prior to the commission. This process also acts as a refresh of the data suppliers contact details ahead of the formal commission.

Potential source of risk or error
Data suppliers do not engage directly with CO team on changes to the specification.

Risk or error mitigation
The CO team will work with those organisations to ensure alignment to the specification as appropriate. In addition, any specific changes to the specification will only occur alongside discussions with lead policy officials who will have their own engagement plans and working level groups within Civil Service organisations.

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3) ACSES commissioning, reporting and data extraction
The CO team will issue the formal commission of ACSES data on or just after the reference data i.e. 31 March. Organisations supply CO team with the required data as per the specification.

Potential source of risk or error
The statistics generated from the organisations' returns may be incorrect, inconsistent or unavailable.

Risk or error mitigation
See validation and quality assurance above.

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4) Civil Service Statistics Publication

Once the data set is finalised, the bulletin and accompanying tables and data-set are produced.

Potential source of risk or error

Errors may be introduced during the production phase.

Risk or error mitigation

See validation and quality assurance above. In addition, separate quality assurance checks are undertaken outside of the automated process by senior statisticians. Independent checks are made of all data tables generated using different and distinct routines. The bulletin undergoes a number of quality assurance checks, including cross-referencing all numbers quoted in the bulletin against the final data tables. A final sense check is undertaken before being signed off by the Cabinet Office Head of Profession for statistics.

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5) Revisions

Organisations submit revisions to their data after publication

Potential source of risk or error

Revisions may significantly change the message of the published statistics.

Risk or error mitigation

The lead in time from reference date to publication allows organisations time to revise their data close to publication date i.e. some 14 weeks after the reference date (although this will be on an exception basis). As organisations have already supplied ONS with their QPSES data for the same reference period this also acts as a secondary check for organisations, and the CO team query any major differences between QPSES figures and those submitted for ACSES. The CO team also automate some tolerance testing of organisations data, comparing the latest results with previous years' figures, querying large differences.

Revisions

Our policy on revisions will follow that as per our [published guidance](link).

In general, once Civil Service Statistics are published, given this is an annual publication, no further revisions take place. However, if significant revisions to organisations' data are received after publication, the Head of Profession will make a decision as to the extent that these revisions impact the overall statistics for users. If necessary a revised bulletin and table revisions may be necessary and an appropriate note placed on the publication website.

The headline measure for understanding changes in the overall size of the Civil Service and comparing these to the wider economy, is the ONS Quarterly Public Sector Employment Survey (QPSES). Where organisations make revisions to their

overall end of March employment estimates, these will be reflected in the ONS September QPSES publication.

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)

Following an ONS development programme in 2007, outputs were subsequently compiled from a single source, ACSES. Prior to 2007, government departments supplied information either via the 'Mandate' collection or by a separate 'paper' return. These paper returns lacked the coverage of the Mandate collection and organisations were only required to supply certain fields in the form of summary tables and did not supply individual records. The Mandate collection accounted for approximately 85% of the Civil Service. In contrast ACSES has 100% coverage.

Whilst reference dates in recent years have remained consistent i.e. 31 March, earlier publications may have used a different reference date. Appropriate caution is therefore advised when comparing latest statistics with those prior to 2008.

An important measure of quality is how well overall employment levels in Civil Service Statistics align with the ONS Quarterly Public Sector Employment Survey (QPSES). Whilst the CO team work with organisations to minimise any differences between the two outputs, they will never be fully reconciled. Differences arise mainly due to timing variation. QPSES is published 11 to 12 weeks after the end of the reference period. As only summary statistics are required, data can often be sourced from organisations' payroll systems, whereas Civil Service Statistics will be primarily based and drawn from information held by HR systems. The timeliness of the collection means that HR systems continue to be updated after the snapshot date whereas payroll systems are static. This live updating of systems means that there is always the possibility of differences arising before the more comprehensive annual collection is completed.

Civil Service organisations publish a range of information on their workforce. This may be as a result of Parliamentary Questions (PQs) or Freedom of Information (FOI) requests. In addition, organisations will also publish workforce information in their annual report as well as in fulfilling transparency commitments.

Civil Service workforce information published through other processes may not necessarily align with that presented in Civil Service Statistics due to differences in timing, coverage and scope.

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Civil Service Statistics includes information on the Scottish Government and Wales Government. The Northern Ireland Civil Service is not included and they produce their own personnel statistics each year.

Concepts and definitions
(Concepts and definitions describe any legislation governing the output and a description of the classification used in the output)

Civil Service Statistics counts the number of employees with an employment contract who are being paid by the organisation. Employees can be permanent, on a fixed-term contract or employed on a casual basis. The self-employed, contract workers and agency workers, sometimes referred to as 'contingent workers', are excluded. Employees not on the payroll and not being paid during the reference period are also excluded e.g. those on unpaid maternity leave, unpaid sick absence and career breaks.

Excluding lunch breaks, full-time employees are generally those who are contracted to work 37 hours per week (36 hours per week in London for those employed up to 2013). Civil Servants employed or promoted after 2013 are required to work 37 hours per week. Part-time employees are those who work less than the normal contracted hours.

Full-time equivalents (FTEs) are based on converting part-time employees' hours into a full-time employees' equivalent and provides a better indicator of total labour input than a headcount.

Permanent employees are employees with a contract that has no agreed expiry date or a fixed-term contract of more than 12 months. Temporary or casual employees are those with a fixed-term contract of 12 months or less or employed on a casual basis. Temporary employees must be paid through the department's payroll. Employees hired through employment agencies are not included.

Entrants and leavers are employees entering or leaving the Civil Service in the 12 months period 1 April to 31 March. These figures exclude transfers and loans between departments. Employees leaving on 31 March are counted as both being in post and leaving. A number of organisations are unable to provide a 'date of entry' for civil servants in their employment. Some departments are also unable to distinguish between those civil servants entering their department for the first time via transfer or loan and those new to the Civil Service. Therefore, the number of net entrants and leavers will not necessarily reconcile with the change in employment levels between two consecutive collection reference periods.

Gross salary is the annual salary inclusive of basic pay (including consolidated performance pay) and pay-related allowances such as regional and skills

allowances. It does not include bonuses. The headline earnings statistics are based on the median rather than the mean. The median is the value below which 50% of employees fall. Unlike the mean the median is influenced less by extreme values and because of the skewed distribution of earnings data.

Since 1 April 1996, all Civil Service organisations have had delegated responsibility for the pay and grading of their employees, except for those in the Senior Civil Service (SCS). The concept of broad 'responsibility levels' is therefore used, in which departmental grades have been assigned or 'mapped' to levels broadly equivalent (in terms of pay and job weight) to the former Service-wide grades.

Civil Service standard grade structure
Senior management
SCS – Senior Civil Service level

Other management grades
Grade 6
Grade 7
SEO – Senior Executive Officer
HEO – Higher Executive Officer
EO – Executive Officer

Administrative grades
AO – Administrative Officer
AA – Administrative Assistant

Differences in pay between men and women have been published for a number of years in Civil Service Statistics. Published figures show the median and mean differences between men and women over time based on the historic ACSES methodology that uses full-time equivalent earnings and excludes non-consolidated bonuses. There are methodological differences between these data and those that are required by the Equality Act (Specific Duties and Public Authorities) Regulations 2017. Therefore any differences in pay presented in ACSES do not represent the official measure of the 'Gender Pay Gap' for individual organisations. Government departments will be separately publishing their gender pay gap data on the Government Equalities Office (GEO) portal to comply with the legal requirements. However, work is currently underway aimed at aligning the reporting of pay differences between men and women in Civil Service Statistics with the statutory reporting requirements. This will require a change in methodology for ACSES – three new data fields are due to be collected to enable alignment for 2020.

The professions of civil servants were collected for the first time in 2007. The professions relate to the post occupied by the person and are not dependent on any qualifications the individual may have. The range of professions includes

economics, science and engineering, finance, human resources, legal, and tax. Employees can alternatively be assigned to operational delivery (delivering frontline services) or policy delivery (designing or enhancing services to the public). If a post could be considered operational delivery but also matches one of the specific professions, the person is assigned to the specific profession. It should not be assumed that those classified to operational delivery represent all those delivering frontline services.

Statistical disclosure control
Statistical disclosure control methodology is applied to Civil Service statistics data. This ensures that information attributable to an individual 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 we protect data from being disclosed. The Principle includes the statement that our outputs 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 the National Statistician's Guidance: Confidentiality of Official Statistics. Users should also refer to our published Privacy Notice and refer to our published policy on Arrangements for protecting the confidentiality of information used for statistical purposes

Other information

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

In producing Civil Service Statistics, the timeliness of the publication must be balanced against the quality of the data produced. Users have a need for statistics to be produced as soon as possible after the end of the reference period in order to ensure their relevance. However, as outlined in the section on timelines and punctuality, considerable time is dedicated to quality assuring the final values received from organisations in order to mitigate potential sources of error.

The CO team have assessed the previous timelines used by ONS for the production of these statistics and concluded that these were acceptable; they are currently the minimum required to produce the statistics at a National Statistics standard given the involvement of multiple data suppliers throughout the process. For 2019, the publication date of the statistics was brought forward by one week compared to the previous ONS publication (24 July compared to 3 August).

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

In order to engage with both known and potential users, our engagement strategy includes both active and passive elements, allowing both structured engagement with known users and open lines of communication for potential new users. Unstructured feedback has proved useful in identifying particular issues with the collection, while structured feedback is essential in setting out the areas for development that will address broad user needs.

As the 2019 publication represents the first year Cabinet Office have published Civil Service Statistics since their transfer from ONS, engagement with users has focused primarily on policy officials and data suppliers. The CO team have committed to delivering the output to the same or higher quality as ONS, building on the improvements ONS have made over recent years. However, our plan is to engage as much as possible with as wide a range of users of these statistics as possible. This will take the form of both proactive engagement through direct communication with known users, as well as reacting to the immediate responses following publication via a survey to be included on the publication landing page. This will help give immediate feedback on the publication contents and to identify areas for future improvement.

A list of known users has been established.

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)

The different users of these statistics have a range of needs in terms of presentation of the results, and we therefore provide multiple formats for use:
- Headline results, trends, and narrative are provided in a statistical bulletin in pdf format. This summarises the data with explanatory charts, visualisations and figures for general consumption.
- Key figures at an overall and organisational level are shown in the 40+ tables that sit alongside the bulletin, with a csv file of the data in the tables made available to facilitate reuse (3 stars on the Open Data Plan).
- Data up to 2018 are also made available via NOMIS. Nomis is a service provided by the ONS to give users free access to a range of UK labour market statistics from official sources. Following the transfer of responsibility for Civil Service Statistics from ONS to Cabinet Office, the CO team are working on making 2019 data available through the NOMIS tool.

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Appendix A: Quality assurance of administrative data toolkit results

In using administrative data rather than purpose collected data to produce statistics there are particular additional quality concerns that may arise. To aid statistical producers in assessing the risk of these issues and developing an appropriate response ONS has produced an Administrative Data Quality Assurance Toolkit. This toolkit provides a framework for assessing the necessary level of quality assurance across two dimensions in the following risk / profile matrix:

Level of risk of quality concerns	Public interest profile		
	Lower	**Medium**	**Higher**
Low	Statistics of lower quality concern and lower public interest [A1]	Statistics of low quality concern and medium public interest [A1/A2]	Statistics of low quality concern and higher public interest [A1/A2]
Medium	Statistics of medium quality concern and lower public interest [A1/A2]	Statistics of medium quality concern and medium public interest [A2]	Statistics of medium quality concern and higher public interest [A2/A3]
High	Statistics of higher quality concern and lower public interest [A1/A2/A3]	Statistics of higher quality concern and medium public interest [A3]	Statistics of higher quality concern and higher public interest [A3]

On the first dimension, the Cabinet Office statistics team has assessed these statistics as being at a low level of risk of quality concerns. Whilst the risk of data quality issues is increased by the number of organisations involved, this is mitigated by the established procedures for collection and quality control, as discussed in the section on validation and quality assurance in this document. The public interest profile of these statistics has been assessed as a medium risk, due to the moderate political sensitivity of the results, and user and media interest.

The requisite level of quality assurance for this level of risk is A2: Enhanced assurance. This covers four practice areas associated with data quality, which are covered in this document as follows:

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1) Operational context and admin data collection – our evaluation of the administrative data QA arrangements is discussed under 'Validation and quality assurance'.

2) Communication with data supply partners – details of the collection arrangements are covered in the sections 'Timeliness and punctuality', 'Accuracy', and 'Assessment of user needs and perceptions'.

3) Quality Assurance principles, standards and checks by data suppliers – the data quality assurance and audit processes of suppliers are presented in of the production processes under 'Validation and quality assurance'

4) Producers' QA investigations and documentation – our data quality assurance processes are discussed in steps 4 to 6 of the production processes under 'Validation and quality assurance' and in the section on 'Revisions'.