

Quality and Methodology Information

General details

Title of output: Civil Service Statistics

Designation: National Statistics

Coverage: Civil Service organisations

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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 release 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 <u>Guidelines for measuring statistical quality</u> 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



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

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

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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, function and office postcode 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 500,000 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. The 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 align¹. 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. In 2022, to increase accessibility, the release has been published as HTML, rather than in PDF format. In addition, more accessible MS Excel statistical tables (40+) and associated .ods files will continue to be released, alongside a newly developed data tool (see below).

The release includes information on the Civil Service workforce as follows:

- Size: Number of employees
- Composition: Employees by grade, profession (of post), function and diversity characteristics
- Pay: Median and mean pay and gender pay gaps
- Location: Regional breakdowns
- Flows: Entrants to and leavers from the Civil Service

¹ Temporary census staff: consistent with the approach taken in 2011, temporary census staff were excluded from the statistics in the Civil Service Statistics bulletin 2021 and in the associated tables. This is due to: (i) the very short term nature of census staff employment and the consequent lack of standard information available on these individuals; (ii) their significant temporary effect on a range of statistics at the snapshot annual reference date; the fact that the vast majority of these staff were no longer employed at the next QPSES reference period of 30 June; and to ensure greater consistency in the statistics and presentation of trends over time.



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. Leavers on the reference date are included within both leaver statistics and 'in post' employment numbers.

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 developing appropriate policy responses.

Civil Service organisations who supply the underlying ACSES 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 <u>gov.uk</u> 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 statistical release:

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			
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 statistical release is produced, all tables and figures are quality assured	3 weeks			
Documents are finalised 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 release 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 record² 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, socio-economic background, and sexual orientation. The data collected are anonymous i.e. no employee names are provided. The data are, however, 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 primarily 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.

Validation and quality assurance

Data validation

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

- 1. Initial checks by supplying organisations:
 - o 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 the CO team include, for example:
 - o 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, include:

² In 2020, DEFRA did not supply individual level data for protected characteristics, providing aggregated information instead.



- o Data is visualised alongside previous years' data for every variable supplied and any clear changes from previous years are queried with departments; headcounts/FTE are 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, so any significant differences are queried with organisations.
- 4. Final sign-off checks by data supplying organisations:
 - o Organisations are supplied 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.

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)

Civil Service Statistics are derived from information sourced from 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 for users of these statistics to be aware of accuracy issues associated with the data collection. For example:

- 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 currently published on the sex, ethnicity, disability status, sexual orientation, national identity and age of the Civil Service workforce.
 All these diversity statistics relate to civil servants on a headcount basis and are usually presented as a percentage of known status i.e. employees who have either not responded or who have actively chosen not to declare their status are excluded from the calculation. 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 values for selected characteristics are displayed in the table below.



Table 3. Percentage non-response (all employees), 2016 to 2021

Selected Data Fields	2017	2018	2019	2020	2021	2022
Sex	0	0	<0.1	<0.1	<0.1	<0.1
Age	<0.1	<0.1	<0.1	0.1	<0.1	<0.1
Responsibility level	3.3	3.4	3.4	3.4	3.4	4.6
Disability	17.9	18.8	21.5	18.0	17.5	18.3
Ethnicity	10.2	20.1	15.6	15.9	13.8	14.2
Sexual Orientation	46.4	45.5	34.0	25.6	21.7	20.7
Religion and belief	50.3	48.1	35.9	24.6	22.5	21.6
National Identity	39.5	43.1	42.3	31.4	34.1	29.5
Profession	5.3	26.6	27.0	24.3	24.9	6.3
Function	N/A	N/A	N/A	61.8	34.4	15.6
Gross salary	0.1	0.4	0.2	0.1	<0.1	<0.1
Socio-economic	N/A	N/A	N/A	75.2-75.7	64.0-64.7	54.5-55.4
background						

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 still be expected. Where there are larger than expected non-response levels, these are queried with organisations through our routine validation processes. In the published tables and statistical release, a statistical note drawing users' attention to variables with relatively high levels of non-response will generally be applied, especially where item non-response may impact on the quality of the statistics presented.

Where item non-response, especially for new variables, exceeds a specific threshold e.g. 50%, then summary statistics from these variables are unlikely to be published as quality concerns will override any value considerations that may be derived from their publication.

For Socio-economic background (SEB), response rates in the above table are presented as a range. This better reflects the fact that measuring SEB requires responses to a number of different questions (variables) in order to describe an individual's SEB in a meaningful way.



There is a difference between what is referred to as a declaration rate and a response rate:

- Declaration rate: the percentage of available active responses that can be applied to one of the diversity characteristics
- Response rate: the percentage of all available active responses

Where variables do exhibit high levels of non-response, users should bear this in mind when drawing conclusions from relevant statistics, and especially when making comparisons between organisations or over different time periods

Production processes

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.

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.

2) Engagement with data suppliers

Ahead of the formal commission, the CO team reaches out to data suppliers and organises cross-government meetings, engaging with individual organisations and communicating via email and phone as necessary. This engagement 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.



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.

4) Civil Service Statistics Publication

Once the data set is finalised, the statistical release 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 statistical release undergoes a number of quality assurance checks, including cross-referencing all numbers quoted in the release against the final data tables. A final sense check is undertaken before being signed off by the Cabinet Office Head of Profession for statistics.

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 generally follow that as per our published guidance.

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, the initial statistical release will be revised or updated and table revisions may be necessary with an appropriate note placed on the publication website.

As stated previously, 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)³. 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

³ In 2021, QPSES figures included temporary census field staff employed by the UK Statistics Authority (ONS). These staff were excluded from Civil Service Statistics.



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 generally 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.

Civil Service Statistics includes information on the Scottish Government and Welsh Government. The Northern Ireland Civil Service is not included: they produce their own <u>personnel statistics</u> 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 (NB: different rules apply for those individuals that are included in the Gender Pay Gap methodology included for the first time in the 2020 statistics. Users should refer to the methodology document published separately).

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 non-consolidated performance related payments (NCPRP), more commonly known as 'bonuses'. The salary statistics presented in the main tables show both the median and the mean. The median is the value below which 50% of employees fall, which, unlike the mean, is influenced less by extreme values and because of the skewed distribution of earnings data. NB: Different rules apply for calculating 'pay' as defined by the methodology for gender pay gap reporting aligned to the statutory reporting requirements. Users should refer to the separately published GPG methodology for further information.

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 level4

⁴ There are two measures of the SCS: the Senior Civil Service and SCS level. ACSES measures SCS level employees, and includes a number of health professionals, military personnel, and senior diplomats that are not part of the Senior Civil Service. As such, the Civil Service Statistics release does not contain the official headline figures used for monitoring diversity, pay and other key measures of the Senior Civil Service. These are monitored using the Cabinet Office SCS Database that collects more frequent and comprehensive information on those individuals that make up the Senior Civil Service.



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

Gender Pay Gaps

Differences in pay between men and women have been published for a number of years in Civil Service Statistics.

Figures in the main tables 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 (see above). There are methodological differences between these statistics and those that are required by the Equality Act (Specific Duties and Public Authorities) Regulations 2017.

The methodology for calculating gender pay gaps (GPG) in the Civil Service was updated in 2020. For the first time, Civil Service Statistics presented organisations' GPG figures that aligned to the GEO statutory reporting requirements. Whilst, for comparison purposes, the set of standard data tables will continue to include differences in gender pay based on gross salary, a separate Annex presents, for all organisations⁵,⁶, their GPG figures aligned to the regulations. Government departments will continue to separately publish this gender pay gap data on the Government Equalities Office (GEO) portal in order to comply with the legislation.

The GEO regulations do not require organisations with under 250 employees to publish their GPG on the GEO portal. In Civil Service Statistics, however, relevant organisations' median and mean GPG figures, aligned to the regulations, will be published. The other GPG data fields required by the regulations are not presented for these smaller organisations due to concerns over statistical reliability given the smaller numbers involved.

⁵ Excludes Scottish government and Welsh government.

⁶ In 2021, an exception to GPG reporting was made for UK Statistics Authority departmental GPG information: temporary census field staff were included in their reporting to comply with their statutory reporting obligations and to ensure alignment of all published departmental statistics on GPG. Temporary census workers were not, however, included in the overall GPG figures for the Civil Service presented in both the bulletin and tables.



This move to aligning the ACSES methodology with the statutory requirements, allows users to view Civil Service organisations GPGs in one place, calculated to a consistent methodology.

Professions and Functions

The professions of civil servants were collected for the first time in 2007. Profession relates to the 'post' occupied by the person and is 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.

For the first time in 2020, organisations were also required to provide data on the 'Function' within which an employee works. This differs from a 'profession' in that a function delivers a defined and cross-cutting set of services to a department – and the Civil Service as a whole – through a collection of roles, and can contain a mixture of professions.

Users should note the variable and high non-response rates for professions and functions for a number of organisations and should exercise appropriate caution when drawing conclusions from these statistics or when making comparisons between organisations or over time.

Location

We have continued to refine how we identify the main place of work of individual civil servants, ensuring reporting organisations are better able to provide a postcode location for an individual's main place of work. In addition, we now use the new UK-managed international statistical geography - International Territorial Levels (ITL). This was introduced on 1 January 2021, replacing the former NUTS classification. ITL align with international standards, enabling comparability both over time and internationally. To ensure continued alignment, the ITLs mirror the NUTS system and follow a similar review timetable – every three years.

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 <u>Code of Practice for Official Statistics</u> 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.

Specifically, in ACSES and Civil Service Statistics, the main disclosure control rules applied are:

- **Headcount suppression** suppress cell counts if between 1 and 4
- FTE suppression suppress the sum of the FTE if between 1 and 4
- Median/mean salary suppression Suppress headcounts of less than 30 where salaries are known
- **Reporting rate suppression** Suppress if the reporting rate for diversity characteristics is less than 50%
- 100% in one category suppression If declaration rate for a protected characteristic is 100%, and 100% of people fall under one positive response category e.g. everyone is declared white for ethnicity, we suppress all other zeros in the positive entry categories e.g. Asian.
- **GPG suppression** if there are fewer than 250 in-post employees at an organisation, we only publish the Mean and Median GPG figures for that organisation. However, if there are fewer than 30 men or women in the calculation for that department, we suppress those too.
- **Rounding** data are rounded to the nearest 10 (£10 for monetary values)

Additional disclosure control rules will be introduced for a new 'Data interrogation tool' that we plan to release in 2022 following the publication of Civil Service Statistics 2022. This will have higher levels of rounding and suppression due to the number of variables that can be queried.

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.

In 2020, the publication date of the statistics was moved back 5 weeks compared with 2019. This delay proved necessary due to the additional requirements in 2020,



especially the new GPG methodology, as well as the impact of the coronavirus pandemic on organisations.

Assessment of user needs and perceptions

(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 represented the first year Cabinet Office published Civil Service Statistics since their transfer from ONS, engagement with users 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.

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 HTML format (previously as a PDF bulletin for 2019 and 2020). This summarises the data with explanatory charts, visualisations and figures for general consumption.
- Key figures at an overall and organisational level are shown in MS Excel tables that sit alongside the statistical release, with a .ods file of the data in the tables made available to facilitate reuse.



- In 2022, we plan to introduce an ACSES data exploration tool. This will allow users to interrogate more of the underlying ACSES dataset. This is part of our ongoing work to make available as much of the ACSES data as possible, whilst maintaining robust disclosure control mechanisms.
- Data up to 2018 were made available via <u>NOMIS</u>. This is a service provided by the ONS to give users free access to a range of UK labour market statistics from official sources.



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 <u>Administrative Data Quality Assurance Toolkit</u>. 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	Public interest profile				
quality concerns	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:



- 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'.