



# Ministry of Defence

Analysis (Tri-Service)

## Background Quality Report

This Background Quality Report (BQR) reports on the quality of all the Official Statistics, using UK Armed Forces personnel data, applications statistics, Location statistics for UK Regular Armed Forces and MOD Civilians and Intake into the UK Regular Forces by Parliamentary Constituency, produced by Analysis (Tri-Service).

This provides background information on our statistical outputs and indicates the level of quality of data used in our statistical outputs. Information is provided on the quality of the statistics used within our publications detailing the strengths, weaknesses and methods used.

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# Background Quality Report: UK Full-time Armed Forces Statistics

1. Contact	<b><i>This section provides details on the Analysis (Tri-Service) Head of Branch, the Responsible Statistician for these statistics.</i></b>
2. Introduction & Statistical Presentation	<p>Contact details are:</p> <p>Analysis (Tri-Service) Ministry of Defence Floor 3 Zone M Main Building, Whitehall London SW1A 2HB</p> <p>E-mail: <a href="mailto:Analysis-Tri-Hd@mod.gov.uk">Analysis-Tri-Hd@mod.gov.uk</a></p> <p>The Ministry of Defence (MOD) publishes a wide range of Armed Forces personnel statistics. The main purpose of these statistics is; to inform policy and decision making within the Department, to measure the performance of the Ministry of Defence against Government and Parliament targets, and also to inform general debate in Government, Parliament and the wider public.</p> <p>These personnel statistics are primarily counts of the number of Service personnel in the Armed Forces (or 'strengths'), the number of personnel joining (intake) and numbers of personnel leaving (outflow) all of which are reported by various categories of interest and at differing levels of detail.</p> <p>'Strength' counts are reported against Workforce Requirement figures for the Trained (RN/RM &amp; RAF) and Trade Trained (Army) UK Full-time Armed Forces, which enables surpluses and deficits to be calculated.</p> <p>This background quality report covers the primary military personnel statistics published on the Analysis (Tri-Service) website on GOV.UK: <a href="http://gov.uk/government/organisations/ministry-of-defence/about/statistics">gov.uk/government/organisations/ministry-of-defence/about/statistics</a></p> <p>The publications we produce which contain statistics on UK Full-time Armed Forces personnel are:</p> <p><b>Quarterly Service Personnel Statistics</b> <b>Biannual Diversity Statistics</b> <b>Annual Location Statistics</b></p> <p>On 29 June 2016, the MOD <a href="#">announced</a> that the Army will in future plan to use Regular and Reserve Phase 1 trained personnel in response to crises within the UK. Following this, the term 'Trained Strength' will include all Army personnel trained in the core function of their Service (i.e. those who have completed Phase 1 training). The MOD has <a href="#">consulted</a> on these changes and the resultant impact it will have on Analysis (Tri-Service) publications and a consultation response were published on 7 November 2016.</p> <p>From 1 October 2016 edition of Monthly Service Personnel Statistics onwards, Army personnel who have completed Phase 1 training (basic Service training) but not Phase 2 training (trade training), are considered Trained personnel. This change will enable the Army to meet the Strategic Defence and Security Review (SDSR) 15 commitment to improve support to UK resilience. The Trained Strength definition for the Royal Navy, RAF, Maritime Reserve and RAF Reserves has not changed, reflecting the requirement for their personnel to complete Phase 2 training to be able to fulfil the core function of their respective Services. Army personnel who have completed Phase 2 training will now be called 'Trade Trained'. This population aligns with the old definition of trained personnel, therefore maintaining the continuity of the statistical time series and will continue to be counted against the Workforce Requirement and SDSR target for 2020.</p>

### 3. Statistical Processing

Previous reports containing statistics on UK Full-time Armed Forces personnel can be found on the archived Analysis (Tri-Service) website on the National Archives site:

UK Armed Forces Monthly Personnel Report (MPR)

UK Armed Forces Quarterly Personnel Report (QPR)

UK Armed Forces Annual Personnel Report (APR)

UK Regular Forces Diversity

Dashboard

UK Defence Statistics Bulletin 2.01 (excluding reserve forces)

UK Defence Statistics Bulletin 2.03 (excluding location, civilian and compensation statistics) Tri-Service publications (TSP 1 – TSP 10).

These historic reports can be found on the archived Analysis (Tri-Service) website on the National Archives site:

<https://webarchive.nationalarchives.gov.uk/20140116145022/http://www.dasa.mod.uk/index.php/publications>

#### 3.1 Source data

The statistics are principally derived from the Department's Joint Personnel Administration (JPA) system, which is used for the administration of all Armed Forces personnel, supplemented by information from single Services' management systems and other centrally managed databases. Prior to the introduction of JPA in 2006/07, legacy single Service administration systems were used to produce the statistics.

#### 3.2 Frequency of data collection

Extracts are taken from JPA each month and stored on separate databases to form a time series.

#### 3.3 Data collection

The extracts are taken six calendar days after the end of the month and the situation as at the first of the month is calculated. This ensures most late-reporting is captured.

#### 3.4 Data validation

Data goes through a series of automatic validation checks and edits to ensure the basic quality of the data and a series of derived fields are calculated.

The data is then made available to Analysis (Tri-Service) single Service manpower branches. They undertake a wide range of validation checks and implement specialist editing rules using their expert knowledge and experience as well as data obtained from other sources within the Department.

#### 3.5 Data compilation

Once the data is confirmed as being accurate the database is queried to produce the range of tables published. These tables undergo several layers of scrutiny to ensure the outputs are accurate and consistent.

The statistics are counts of military reserve personnel by a range of categories, including breakdowns by: Navy, Army and RAF; officer and other ranks; trained and untrained.

<b>4. Quality Management</b>	<p><b><i>This section will briefly describe the overarching processes in place to manage quality e.g. annual risk assessments, and offer the opportunity to outline results of recent quality assessments.</i></b></p> <hr/> <p><b>4.1 Quality Assurance</b></p> <p>The MOD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are publishing alongside reports and are updated regularly.</p> <p><b>4.2 Quality Assessment</b></p> <p>At the time of the last Quality Assessment in December 2022, the Quarterly SPS received a low risk rating as the overall summary in terms of quality risk.</p>
<b>5. Relevance</b>	<p><b><i>This section is about the degree to which the statistical product meets user needs in both coverage and content.</i></b></p> <hr/> <p>Analysis (Tri-Service) frequently meet with customers within the Department to discuss data, results, interpretation, and any changes to requirements. They also seek feedback from a wider range of internal and external customers.</p> <p>We have made our own assessment of what these statistics could be used for using the categorisation in the UKSA paper <i>The Use Made of Statistics</i>.</p> <p>We believe the statistics could be used as follows: -</p> <ul style="list-style-type: none"> <li>i. Informing the general public's choices: <ul style="list-style-type: none"> <li>a. about the performance of government and public bodies</li> </ul> </li> <li>ii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>b. policy monitoring</li> </ul> </li> </ul> <p>The underlying data also allow for:</p> <ul style="list-style-type: none"> <li>iii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>c. policy making</li> </ul> </li> <li>iv. Facilitating academic research.</li> </ul> <p>The Service Personnel Report should be used as the authoritative source of regular strengths and flows statistics.</p> <p>The MOD has recently <b>consulted</b> on changes to the definition of Army trained strength and the resultant impact it will have on Analysis (Tri-Service) publications and a consultation response were published on 7 November 2016. Changes have been implemented into Monthly Service Personnel Statistics from the 1 October 2016 publication onwards.</p> <p>A formal consultation on Changes to MOD Armed Forces Personnel Statistics ran between 20 March to 16 April 2015 and 27 May to 18 June 2015. This was following an internal review of MOD Tri-Service publications content and sought further user views on proposed changes to publications. The consultation document and response detailing the outcome can be found here:</p> <p><a href="https://www.gov.uk/government/consultations/changes-to-mod-armed-forces-personnelstatistics">https://www.gov.uk/government/consultations/changes-to-mod-armed-forces-personnelstatistics</a></p> <p>Detailed information on previous consultations can be found via the National Archives here: <a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/policy_and_processes/consultations">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/policy_and_processes/consultations</a></p>

	<p>Users are also encouraged to provide feedback on statistics produced by Analysis (Tri-Service) and also to sign up to the mailing list for their publication of interest, to receive updates to the statistics or to be made aware of any changes: <a href="mailto:Analysis-Tri-Service@mod.gov.uk">Analysis-Tri-Service@mod.gov.uk</a></p> <p>The principal customers for the Tri-Service publications are within the People area of the Ministry of Defence. They are used to inform and measure Service personnel strategy in areas such as pay &amp; allowances and overall troop numbers, and in particular the Future Reserves 2020 Programme (FR20). This product is also used to answer parliamentary questions and Freedom of Information requests. The publications are also used to inform the monthly Defence Board Management Information.</p> <p>The principal stakeholders for Service personnel statistics are within the Chief of Defence Personnel area of the Ministry of Defence. The statistics are used to inform and measure Service personnel strategy in areas such as pay &amp; allowances and equality &amp; diversity. They are also used to answer parliamentary questions and Freedom of Information requests. The information is also used to inform the internal monitoring and regular monthly reporting to the Defence Board.</p> <p>For detail on pre-release access to Analysis (Tri-Service) publications please see the Analysis (Tri-Service) pre-release access list webpage for the most up to date list of roles receiving pre-release access. <a href="https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list">https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list</a></p> <p>People in the roles with access receive pre-release access to the publication up to 24 hours in advance of publication.</p> <p>The coverage of these statistics is close to, if not equal to, all Full-time Armed Forces personnel, Full Time Reserve Service personnel and Gurkhas. The Service Personnel Statistics publication includes statistics on the Reserve Forces, more details of which are covered in in the report on Reserve Forces information. There are no known unmet user needs.</p>
<b>6. Accuracy and Reliability</b>	<p><b><i>This section is about the differences between the estimates and the unknown true values.</i></b></p>
	<p><b>6.1 Overall Quality</b></p> <p>All personnel in the Regular Armed Forces must be recorded on JPA in order for them to receive their pay. Therefore the overall strength figures are accurate. However, more detailed breakdowns relying on the information recorded for each individual can be less accurate due to variable quality of the data entered for these different fields.</p> <p>The variation in quality is partly due to key information required for managing individuals being recorded and updated centrally, whereas other information is left to the individual to complete through a self-service tool. There is also a reasonable amount of late reporting which can adversely impact the statistics, particularly for exits and changes of individual's status from untrained to trained. Obtaining the extract on the sixth calendar day and then calculating the strength at the first of the month overcomes much of this late reporting.</p> <p>The monthly datasets are passed through a range of automatic and manual validation and editing routines in order to make the key fields as accurate as possible, often drawing upon alternative data sources. A range of detailed breakdowns are produced and these are compared with previous month's outputs and discrepancies are examined. The detailed tables are used by the single Services (Navy, Army, and Air) to manage their personnel and inform policy and strategy.</p> <p>Regular feedback ensures Analysis (Tri-Service) staff are kept abreast of any changes or potential issues with the data and statistics, which is fed into the data validation and editing process.</p> <p><b>6.2 Data Revisions</b></p> <p>Data revisions are handled in accordance with <a href="#">MOD's Official Statistics Revisions and Corrections Policy</a>.</p> <p>Due to processing errors, it has been necessary to perform numerous revisions to Regulars statistics in various editions of the Quarterly SPS.</p>

7. Timeliness and Punctuality	<b><i>This section reports on the time gap between publication and the reference period (timeliness) and the gap between planned and actual publication dates (punctuality).</i></b>						
	<b>7.1 Timeliness</b>  The quarterly extracts are taken on the sixth calendar day. The editing and production process usually takes around 2 weeks at the single Service level. It then takes a further 2-4 weeks to compile these data at a tri-Service level.  <b>7.2 Punctuality</b>  The following table provides an example of the timeline for 1 July 2022 Statistics.  <table><tr><th>Publication</th><th>Situation Date</th><th>Publication Date</th></tr><tr><td>Service Personnel Statistics</td><td>1 July 22</td><td>15 September 22</td></tr></table>  Historic and planned publication dates can be found on the <a href="#">Publication Release Dates section</a> of the gov.uk Statistics at MOD webpage and on the <a href="#">UK National Statistics Publication Hub</a> .	Publication	Situation Date	Publication Date	Service Personnel Statistics	1 July 22	15 September 22
	Publication	Situation Date	Publication Date				
Service Personnel Statistics	1 July 22	15 September 22					

8. Coherence and Comparability	<b><i>This section examines: the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar (coherence); and the degree to which data can be compared over time and domain (comparability).</i></b>
	<p>Analysis (Tri-Service) published statistics on UK Armed Forces are the definitive personnel statistics in the MOD. There are no other publicly available regular publications on the numbers of UK Armed Forces with which to ensure coherence. Within the MOD direct queries of the Joint Personnel Administration system will produce slightly different numbers due to timing and quality issues.</p> <p>The UK Armed Forces personnel statistics are not always directly comparable with other countries statistics due to definitional differences of what constitutes an Armed Force. In some countries, particularly in Europe, part of the domestic police force is included in the Armed Forces. Similarly, there are not always direct equivalents to the Royal Navy / Royal Marines, Army, and Royal Air Force in other countries.</p> <p>The total number of Service personnel are comparable across time, however the breakdown of smaller categories are generally not comparable due to structural changes in the physical and financial structures of the MOD. The introduction of JPA in 2006/07 impacted on the availability of certain statistics, as some information (divorce rates for the RAF for instance) were available under the legacy system but not on JPA. This change led to a revision of what and how much can be published – for example some categories of outflow had to be combined.</p> <p>Annual editions of UK Defence Statistics compendium dating back to 1992, plus historic Tri-Service publications dating back to 2002, are available in the National Archives: <a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/</a></p>

<b>9. Accessibility and Clarity</b>	<p><b><i>This section reports on: the ease with which users are able to access the data, the format in which the data are available, and the availability of supporting information (accessibility); and the quality and sufficiency of the metadata, illustrations and accompanying advice (clarity).</i></b></p> <p>Current publications consist of detailed Excel tables containing a historic time-series of statistics and a PDF report containing commentary, graphs and tables on trends in the statistics. The commentary in our reports identifies and analyses the key changes in the data and provides summary statistics and policy context. Graphs, tables and other data visualisation methods are used to further explain these trends.</p> <p>Previous Analysis (Tri-Service) personnel reports are published on GOV.UK and are available as PDFs or Excel value copies. Other formats may be possible for Analysis (Tri-Service) to produce on request.</p> <p>All Analysis (Tri-Service) publications that use these data can be found under the “Military” and “Combined military and civilian” sections under the “Personnel statistics” heading on the statistics by topic section of the MOD National and Official Statistics by topic webpage:  <a href="https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic">https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic</a></p> <p>They can also be accessed via the Statistics release calendar on GOV.UK:  <a href="https://www.gov.uk/government/statistics/announcements">https://www.gov.uk/government/statistics/announcements</a></p> <p>Copies of the reports are also placed in the House of Commons library.</p> <p>Data revisions are handled in accordance with the <a href="#">MOD's Official Statistics Revisions and Corrections Policy</a>.</p>
<b>10. Trade-offs between Output Quality Components</b>	<p><b><i>This section reports the extent to which different aspects of quality are balanced against each other.</i></b></p> <p>The main trade-off is between timeliness and quality. To ensure statistics are timely the editing and validation process is restricted to around two weeks and a significant amount of automatic editing is utilised. Spending more time investigating every suspect individual personnel record could marginally improve quality at a detailed trade/rank level but is unlikely to impact the aggregated statistics published in our reports.</p>

<b>11. Cost and Respondent Burden</b>	<p><b><i>This section is about the effectiveness, efficiency and economy of the statistical output.</i></b></p> <p>Personnel Statistics and Analysis has six branches dedicated to producing information relating to manpower and providing analysis and advice, the majority of time is spent on adding value through analysing, forecasting and answering ad-hoc enquiries as well as producing the National Statistics.</p> <p>There is very little respondent burden as the majority of the data is automatically obtained from administrative systems. However, this is supplemented with small amounts of data as well as input from other areas within the MOD.</p>
<b>12. Confidentiality, Transparency and Security</b>	<p><b><i>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></b></p> <p><b>12.1 Confidentiality</b></p> <p>All published outputs are counts of individuals in particular groupings. Where there are possible disclosure issues in reporting protected characteristics, outputs are rounded according to Analysis (Tri-Service) rounding policy, which prevents disclosure of information on individuals. See the rounding policy on the Analysis (Tri-Service) policies page here:  <a href="https://www.gov.uk/government/publications/defence-statistics-policies">https://www.gov.uk/government/publications/defence-statistics-policies</a></p> <p>Disclosure control is conducted on all statistical information provided by the MOD to safeguard the confidentiality of individuals.</p> <p><b>12.2 Transparency</b></p> <p>The reports provide commentary on the key features of the outputs and identify any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.</p> <p><b>12.3 Security</b></p> <p>All staff involved in the statistical production process adhere to all MOD, Civil Service and data protection regulations. The data is stored, accessed and analysed using the MOD's restricted network and IT systems, and access to raw data is password protected and approval for access is granted only by the Head of Personnel Statistics.</p>

The Analysis (Tri-Service) website can be accessed here:

<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>

**Updated: 20 April 2023**

# Background Quality Report: UK Reserve Forces Statistics

1. Contact	<p><b><i>This section provides details on the Analysis (Tri-Service) Head of Branch, the Responsible Statistician for these statistics.</i></b></p>
2. Introduction & Statistical Presentation	<p>Contact details are:            Analysis (Tri-Service)            Ministry of Defence            Floor 3 Zone M            Main Building, Whitehall            London SW1A 2HB</p> <p>E-mail: <a href="mailto:Analysis-Tri-Hd@mod.gov.uk">Analysis-Tri-Hd@mod.gov.uk</a></p> <p>Analysis (Tri-Service) publishes a large range of Armed Forces personnel statistics, mainly to inform policy and decision making within the Department. The statistics are also used to measure performance against MOD, Government and Parliament targets and to inform general debate in government, parliament and the wider public. The statistics form part of that portfolio of service personnel and report on the UK Reserve Forces, including regular reserves, volunteer reserves, sponsored reserves and the University Service Units. They are counts of personnel numbers broken down by various categories.</p> <p>This background quality report covers the principal military personnel statistics published on the Statistics at MOD website on gov.uk: <a href="https://www.gov.uk/government/collections/statistics-at-mod">Statistics at MOD - Ministry of Defence - GOV.UK</a></p> <p><b>Service Personnel Statistics</b> (published Quarterly)  <b>Diversity Statistics</b> (published biannually)</p> <p>On 29th June 2016, the MOD <a href="#">announced</a> that the Army will in future plan to use Regular and Reserve Phase 1 trained personnel in response to crises within the UK. Following this, the term 'Trained Strength' will include all Army personnel trained in the core function of their Service (i.e. those who have completed Phase 1 training). The MOD has <a href="#">consulted</a> on these changes and the resultant impact it will have on Analysis (Tri-Service) publications and a consultation response were published on 7 November 2016.</p> <p>From 1 October 2016 edition of Monthly Service Personnel Statistics onwards, Army personnel who have completed Phase 1 training (basic Service training) but not Phase 2 training (trade training), are considered Trained personnel. This change will enable the Army to meet the SDSR 15 commitment to improve support to UK resilience. The Trained Strength definition for the Royal Navy, RAF, Maritime Reserve and RAF Reserves has not changed, reflecting the requirement for their personnel to complete Phase 2 training to be able to fulfil the core function of their respective Services. Army personnel who have completed Phase 2 training will now be called 'Trade Trained'. This population aligns with the old definition of trained personnel, therefore maintaining the continuity of the statistical time series and will continue to be counted against the Workforce Requirement and SDSR target for 2020.</p>
3. Statistical Processing	<p><b>3.1 Source Data</b></p> <p>The statistics are principally derived from the Department's Joint Personnel Administration (JPA) system, which is used for the administration of all Armed Forces personnel, supplemented by information from single Services' management systems and other centrally managed databases. Prior to the introduction of JPA in 2006/07, legacy single Service administration systems were used to produce the statistics.</p>

	<p><b>3.2 Frequency of data collection</b></p> <p>Extracts are taken from JPA each month and stored on separate databases to form a time series.</p> <p><b>3.3 Data collection</b></p> <p>The extracts are taken six calendar days after the end of the month and the situation as at the first of the month is calculated. This ensures most late-reporting is captured.</p> <p><b>3.4 Data validation</b></p> <p>Data goes through a series of automatic validation checks and edits to ensure the basic quality of the data and a series of derived fields are calculated.</p> <p>The data is then made available to Analysis (Tri-Service) single Service manpower branches. They undertake a wide range of validation checks and implement specialist editing rules using their expert knowledge and experience as well as data obtained from other sources within the Department.</p> <p><b>3.5 Data compilation</b></p> <p>Once the data is confirmed as being accurate the database is queried to produce the range of tables published. These tables undergo several layers of scrutiny to ensure the outputs are accurate and consistent.</p> <p>The statistics are counts of military reserve personnel by a range of categories, including breakdowns by: Navy, Army and RAF; regular and volunteer reserves; officer and other ranks; trained and untrained. There are also counts of personnel leaving and joining certain parts of the reserve forces.</p> <p>Between 2007 and 2012, Naval Service volunteer reserve data were provided direct to Analysis (Tri-Service) by the unit responsible for administering those forces. In 2012 this database was closed and records were transferred on to JPA, however the JPA data were not considered robust enough in time for April 2012 publication and therefore the information was again sourced from the administration unit. Following work to assess the quality of the JPA data, the data processing and reporting methods were brought into line with those in the other Services (and other Defence Statistics personnel data.) As a result, Analysis (Tri-Service) has been able to retain monthly extracts for statistical purposes since October 2012 and can now report from this source.</p>
<p><b>4. Quality Management</b></p>	<p><b><i>This section will briefly describe the overarching processes in place to manage quality e.g. annual risk assessments, and offer the opportunity to outline results of recent quality assessments.</i></b></p> <p><b>4.1 Quality Assurance</b></p> <p>The MOD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are publishing alongside reports and are updated regularly.</p> <p><b>4.2 Quality Assessment</b></p> <p>At the time of the last Quality Assessment in December 2022, the Quarterly SPS received a low risk rating as the overall summary in terms of quality risk.</p>

<p><b>5. Relevance</b></p>	<p><b><i>This section is about the degree to which the statistical product meets user needs in both coverage and content.</i></b></p> <p><b>User needs</b></p> <p>Analysis (Tri-Service) frequently meet with customers within the Department to discuss data, results, interpretation and any changes to requirements. They also seek feedback from a wider range of internal and external customers. A key use of these statistics is to allow the Department and the public to assess how the Department is progressing under FR20, which is a top level Departmental programme.</p> <p>We have made our own assessment of what these statistics could be used for using the categorisation in the UKSA paper <i>The Use Made of Statistics</i>.</p> <p>We believe the statistics could be used as follows: -</p> <ul style="list-style-type: none"> <li>iii. Informing the general public's choices: <ul style="list-style-type: none"> <li>a. about the performance of government and public bodies</li> </ul> </li> <li>iv. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>b. policy monitoring</li> </ul> </li> </ul> <p>The underlying data also allow for:</p> <ul style="list-style-type: none"> <li>iii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>c. policy making</li> </ul> </li> <li>iv. Facilitating academic research.</li> </ul> <p>The Service Personnel Report should be used as the authoritative source of reserves strengths and flows statistics.</p> <p>The MOD has recently <a href="#">consulted</a> on changes to the definition of Army trained strength and the resultant impact it will have on Analysis (Tri-Service) publications and a consultation response were published on 7 November 2016. Changes have been implemented into Monthly Service Personnel Statistics from the 1 October 2016 publication onwards.</p> <p>A formal consultation on Changes to MOD Armed Forces Personnel Statistics ran between 20 March to 16 April 2015 and 27 May to 18 June 2015. This was following an internal review of MOD Tri-Service publications content and sought further user views on proposed changes to publications. The consultation document and response detailing the outcome can be found here: <a href="https://www.gov.uk/government/consultations/changes-to-mod-armed-forces-personnelstatistics">https://www.gov.uk/government/consultations/changes-to-mod-armed-forces-personnelstatistics</a></p> <p>Detailed information on previous consultations can be found via the National Archives here: <a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/policy_and_processes/consultations">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/policy_and_processes/consultations</a></p> <p>Users are also encouraged to provide feedback on statistics produced by Analysis (Tri-Service) and also to sign up to the mailing list for their publication of interest, to receive updates to the statistics or to be made aware of any changes: <a href="mailto:Analysis-Tri-Service@mod.gov.uk">Analysis-Tri-Service@mod.gov.uk</a></p> <p>The principal customers for the Tri-Service publications are within the People area of the Ministry of Defence. They are used to inform and measure Service personnel strategy in areas such as pay &amp; allowances and overall troop numbers, and in particular the Future Reserves 2020 Programme (FR20). This product is also used to answer parliamentary questions and Freedom of Information requests. The publications are also used to inform the monthly Defence Board Management Information.</p>
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From 2013, reserve strengths and FR20 population strengths and flows information were added to the Quarterly Personnel Report due to the increased attention on reserve personnel in the media and public.

In 2013 TSP7 Reserve Forces and Cadets publication was re-developed in consultation with internal users and suppliers to ensure that it reflected the correct force structures and therefore could be used to monitor the Department's progress against FR20. Information on the population most relevant to the FR20 key personnel targets was added – including the definition of that population and information on how many have completed training. In addition, a greater range of detail on reserve personnel was added, including age and ethnicity, to provide further background information on these forces to help inform policy.

From 2015 Reserves statistics are being reported on a quarterly basis in the Service Personnel Report. This increase in frequency further reflects the increased public focus on the reserve forces. In addition to this, Reserves diversity statistics previously reported in TSP 7 Reserve Forces and Cadets were moved to the Diversity Statistics publication.

Data availability is not complete for dates prior to April 2012 due to the necessary changes made to reflect modern force structures and the fact that the Department has not retained some information (i.e. Naval Service reserves data and some ex-Regular reserves data). There is no possibility of restoring the whole-time series.

Monthly extracts of strengths from JPA were retained from 1 April 2012 for the Army Reserve and 1 October 2012 for the Maritime Reserve and RAF Reserves. It is therefore not possible to report Future Reserves 2020 flows prior to this period.

<p><b>6. Accuracy and Reliability</b></p>	<p><i><b>This section is about the differences between the estimates and the unknown true values.</b></i></p> <p><b>6.1 Overall Accuracy</b></p> <p>All personnel in the Regular Armed Forces must be recorded on JPA in order for them to receive their pay, and this is also the case for the vast majority of volunteer reserves. (Although for a small number this may not be the case). There is anecdotal evidence that records can take some time to be updated, although the Department has committed resource to ensuring that JPA is brought and kept up to date in each of the three Services. The data on the overall numbers on volunteer reserves is therefore considered to be reasonably accurate.</p> <p>The Department has devoted resource at various levels to improving the quality and coverage of volunteer reserves data on JPA over the previous few years. This work has resulted in greater confidence in the statistics published in this report, and in its expansion to include information that was not published before 2013 (e.g. Trained status for volunteer reserves.)</p> <p>Monthly datasets are passed through a range of automatic and manual validation and editing routines in order to make the key fields as accurate as possible, often drawing upon alternative data sources. Analysis (Tri-Service) dedicated reserve forces analysts have worked with producers to ensure that information is recorded and processed in line with agreed rules and definitions, and that data are retained and stored appropriately for statistical purposes. Analysis (Tri-Service) monitors data and outputs and will query apparent anomalies with producers.</p> <p>There remain variations in quality which are partly due to differences in the recording of information - some key information is required for managing individuals, whereas other information is left to the individual to complete through a self-service tool. This is believed to be a particular problem for reservists, whose attendance at ongoing training is intermittent, and in many cases at locations where access to the system is difficult. This may impact the coverage of certain fields such as ethnic origin and nationality. Analysis (Tri-Service) monitors coverage in these fields and will only publish figures where coverage is above an appropriate threshold.</p> <p>There is also a reasonable amount of late reporting which can adversely impact the statistics, especially for areas such as exits and changes to trained status. Obtaining the extract on the sixth calendar day and then calculating the strength at the first of the month overcomes some of this late reporting.</p> <p>Another source of variation in data quality is the development and use of standalone systems (i.e. outside the JPA system), and manual recording of personnel data within some units particularly affecting the data between 2007 and 2012. For this reason, Naval Service Volunteer Reserve data up to and including April 2012 are considered estimates and are likely to remain so as there is no alternative data source. During 2013, considerable effort was made to use JPA as the primary source of personnel management information with the result that all data for volunteer and regular reserve personnel are now being sourced from JPA.</p> <p><b>6.2 Data Revisions</b></p> <p>Data revisions are handled in accordance with the <a href="#">MOD's Official Statistics Revisions and Corrections Policy</a>.</p> <p>Due to processing errors, it has been necessary to perform numerous revisions to Reserves' statistics in various editions of the Quarterly SPS. Specifically, those published after May 2021, and most recently the January 2022 edition.</p>
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## 7. Timeliness and Punctuality

*This section reports on the time gap between publication and the reference period (timeliness) and the gap between planned and actual publication dates (punctuality).*

### 7.1 Timeliness

The quarterly extracts are taken on the sixth calendar day. The editing and production process usually takes around 2 weeks at the single Service level. It then takes a further 2-4 weeks to compile these data at a tri-Service level.

### 7.2 Punctuality

The following table provides an example of the timeline for 1 July 2022 Statistics.

Publication	Situation Date	Publication Date
Service Personnel Statistics	1 July 22	15 September 22

Historic and planned publication dates can be found on the [Publication Release Dates section](#) of the gov.uk Statistics at MOD webpage and on the [UK National Statistics Publication Hub](#).

<b>8. Coherence and Comparability</b>	<p><b><i>This section examines: the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar (coherence); and the degree to which data can be compared over time and domain (comparability).</i></b></p> <p>The Analysis (Tri-Service) statistics on UK Reserve Forces are the definitive personnel statistics in the MOD. Volunteer reserve statistics broken down by reserve type, trained status and officer / other rank are published quarterly in the Service Personnel Report. There are no other publicly available regular publications on the numbers of UK Reserve Forces with which to ensure coherence. Within the MOD direct queries of the Joint Personnel Administration system will produce markedly different numbers due to timing and quality issues.</p> <p>The UK Reserve Forces personnel statistics are not always directly comparable with other countries' statistics due to definitional differences in what constitutes a Reserve Force.</p> <p>Annual editions of UK Defence Statistics since 1992 and historic Tri-Service publications back to 2001 are available on <a href="#">Statistics at MOD - Ministry of Defence - GOV.UK</a> by following the link to "archived statistics". The total number of Service personnel are comparable across time but the breakdowns are generally not comparable due to structural changes to the physical and financial structures of the MOD. The introduction of JPA across 2006/07 also impacted the statistics, reducing availability, accuracy and coverage due to a lack of investment in JPA for reserve personnel, as the Regular forces were prioritised. Work during 2012 and 13, as outlined above, resulted in changes to the statistics, both in data processing and definitions. Analysis (Tri-Service) has endeavoured to match historical data to the current definitions; where this has not been possible the tables are marked with a break in series.</p>
<b>9. Accessibility and Clarity</b>	<p><b><i>This section reports on: the ease with which users are able to access the data, the format in which the data are available, and the availability of supporting information (accessibility); and the quality and sufficiency of the metadata, illustrations and accompanying advice (clarity).</i></b></p> <p>The reports are published on <a href="#">Statistics at MOD - Ministry of Defence - GOV.UK</a> and are currently available in Excel spreadsheet and PDF format. They can be found by first following the "statistics by topic" link and then under the "Personnel statistics" heading. They can also be accessed via the <a href="#">UK National Statistics Publication Hub</a> or through an internet search engine such as Google.</p> <p>Service Personnel Statistics covers all the different types of reserves in the UK Reserve Forces. There is an overall commentary and graphs provided. The commentary identifies and analyses the key changes in the data and summary statistics. It discusses the quality of the underlying data and identifies specific issues and estimates their impact. Each table has a number of footnotes clarifying what is included/excluded and provides appropriate caveats. Graphs are used to aid comparison of strengths and illustrate comparisons between the Services, and to ensure trends can be easily identified.</p> <p>The Quarterly SPS provides commentary on the key features of the outputs and identifies any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.</p>

<b>10. Trade-offs between Output Quality Components</b>	<p><b><i>This section reports the extent to which different aspects of quality are balanced against each other.</i></b></p> <p>The main trade-off is between timeliness and quality. To ensure statistics are timely the editing and validation process is restricted to around three weeks. We do not have the resource to investigate further so we publish to a level that we feel is appropriate. Self-reported data are most often published as-is.</p> <p>Due to the nature of the reserve forces as outlined above, the data are unlikely to be as robust as that for their regular counterparts. For example, information on whether individuals are considered trained or not is wholly reliant on Unit Admins updating the relevant data in a correct and timely fashion. Great effort has been made by the Department to educate Unit Admin staff, however they are often volunteer reservists themselves and subject to time and access pressures. The information is published acknowledging that it may never be 100% accurate but it represents the best information available, and there has been considerable improvement since 2012.</p>
<b>11. Cost and Respondent Burden</b>	<p><b><i>This section is about the effectiveness, efficiency and economy of the statistical output.</i></b></p> <p>DS has four branches dedicated to producing information relating to personnel and providing analysis and advice. However, the majority of time is spent on adding value through analysing, forecasting and answering ad hoc queries rather than producing the National Statistics per se. Some of Analysis (Tri-Service) other branches (there are approximately 15) provide support to the manpower branches. 3x FTE statistical officers (1 of which is Army-focused) are currently dedicated to producing and compiling reserve forces information.</p> <p>There is some respondent burden as not all data are automatically obtained from administrative systems.</p>

<b>12. Confidentiality and Security</b>	<p><b><i>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></b></p> <p><b>12.1 Confidentiality – Policy and Data Treatment</b></p> <p>Disclosure control is conducted on all statistical information provided by the MOD to safeguard the confidentiality of individuals.</p> <p>All published outputs are counts of individuals in particular groupings. Where there are possible disclosure issues in reporting protected characteristics, outputs are rounded according to Analysis (Tri-Service) rounding policy, which prevents disclosure of information on individuals. See the rounding policy on the Analysis (Tri-Service) policies page here:  <a href="https://www.gov.uk/government/publications/defence-statistics-policies">https://www.gov.uk/government/publications/defence-statistics-policies</a></p> <p><b>12.2 Transparency</b></p> <p>The reports provide commentary on the key features of the outputs and identify any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.</p> <p><b>12.2 Security</b></p> <p>All staff involved in the production process have signed the Data Protection Act; all MOD, Civil Service and data protection regulations are adhered to. The data is stored, accessed and analysed using the MOD's restricted network and IT systems, and the access to raw data is password protected.</p>
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The Analysis Tri-Service website can be accessed here:

<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>

**Updated: 20 April 2023**

## Background Quality Report: MoD Sponsored Cadet Force Statistics

1. Contact	<b><i>This section provides details on the Analysis (Tri-Service) Head of Branch, the Responsible Statistician for these statistics.</i></b>
	<b>Contact details</b>  The Analysis (Tri-Service) Head of Branch is the Responsible Statistician for these statistics.  Contact details are: Analysis (Tri-Service) Ministry of Defence Floor 3 Zone M Main Building, Whitehall London SW1A 2HB  E-mail: <a href="mailto:Analysis-Tri-Hd@mod.gov.uk">Analysis-Tri-Hd@mod.gov.uk</a>
2. Introduction & Statistical Presentation	<p>The Ministry of Defence (MOD) publishes a wide range of personnel statistics. The main purpose of these statistics is; to inform policy and decision making within the Department, to measure the performance of the Ministry of Defence against Government and Parliament targets, and also to inform general debate in Government, Parliament and the wider public.</p> <p>This background quality report covers the cadet forces statistics published on the Analysis (Tri-Service) website on GOV.UK: <a href="http://gov.uk/government/organisations/ministry-of-defence/about/statistics">gov.uk/government/organisations/ministry-of-defence/about/statistics</a></p> <p>Historic reports can be found on the archived Analysis (Tri-Service) website on the National Archives site: <a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/</a></p>
3. Statistical Processing	<b>3.1 Source Data</b>  Personnel statistics are derived from legacy single Service administration systems were used to produce statistics.  Cadet data are provided to Analysis (Tri-Service) Tri Service by Reserve Forces and Cadets and sourced from the Cadet Management Information System.
	<b>3.2 Frequency of data collection</b>  Extracts are taken from Cadet Management Information annually.
	<b>3.3 Data collection</b>  The extracts are taken six calendar days after the end of April and the situation as at the first of April is calculated. This ensures most late-reporting is captured.

### **3.4 Data Validation**

The data goes through a series of automatic validation checks based on previous corrections.

The data is then made available to experts in each service where they undertake a range of checks using their expert knowledge and experience as well as data obtained from other sources within the Department.

These tables undergo several rounds of checking and scrutiny to ensure the outputs are accurate and consistent, before being published on an annual basis.

### **3.5 Data Compilation**

Once the data is confirmed as being accurate the database is queried to produce the range of tables published. These tables undergo several layers of scrutiny to ensure the outputs are accurate and consistent.

These statistics are primarily counts of strengths (numbers of personnel at the 1<sup>st</sup> of April), broken down into the following populations / characteristics of interest:

- Community Cadets or Combined Cadet Force
- Service (Royal Navy/Royal Marines, Army, and Royal Air Force)
- Cadets and Cadet Forces Adult Volunteers
- Gender
- Age

<b>4. Quality Management</b>	<b><i>This section will briefly describe the overarching processes in place to manage quality e.g. annual risk assessments, and offer the opportunity to outline results of recent quality assessments.</i></b>
	<p><b>4.1 Quality Assurance</b></p> <p>The MOD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are publishing alongside reports and are updated regularly.</p> <p><b>4.2 Quality Assessment</b></p> <p>At the time of the last Quality Assessment December 2022, the MOD Sponsored Cadet Forces publication received a low risk rating as the overall summary in terms of quality risk.</p>
<b>5. Relevance</b>	<p><b><i>This section is about the degree to which the statistical product meets user needs in both coverage and content.</i></b></p> <p><b>User Needs</b></p> <p>Analysis (Tri-Service) frequently meets with customers within the Department to discuss data, results, interpretation, and any changes to requirements. They also seek feedback from a wider range of internal and external customers.</p> <p>We have made our own assessment of what these statistics could be used for using the categorisation in the UKSA paper <i>The Use Made of Statistics</i>.</p> <p>We believe the statistics could be used as follows:-</p> <ul style="list-style-type: none"> <li>i. Informing the general public's choices: <ul style="list-style-type: none"> <li>a. about the performance of government and public bodies</li> </ul> </li> <li>ii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>b. policy monitoring</li> </ul> </li> </ul> <p>The underlying data also allow for:</p> <ul style="list-style-type: none"> <li>iii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>c. policy making</li> </ul> </li> <li>iv. Facilitating academic research.</li> </ul> <p>Detailed information on previous consultations can be found via the National Archives here: <a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/policy_and_processes/consultations">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/policy_and_processes/consultations</a></p> <p>Users are also encouraged to provide feedback on statistics produced by Analysis (Tri-Service) and also to sign up to the mailing list for their publication of interest, to receive updates to the statistics or to be made aware of any changes: <a href="mailto:Analysis-Tri-Service@mod.gov.uk">Analysis-Tri-Service@mod.gov.uk</a></p> <p>The principal stakeholders for these statistics are within the Chief of Defence Personnel area of the Ministry of Defence. They are also used to answer parliamentary questions and Freedom of Information requests.</p> <p>For detail on pre-release access to Analysis (Tri-Service) publications please see the Analysis (Tri-Service) pre-release access list webpage for the most up to date list of roles receiving pre-release access.  <a href="https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list">https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list</a></p>

	<p>People in the roles with access receive pre-release access to the publication up to 24 hours in advance of publication.</p> <p>These statistics were originally developed in close consultation with stakeholders. The Quarterly, Monthly and Annual Personnel Reports and Bulletins were reviewed by the UK Statistics Authority (UKSA) in 2013 to ensure they met the requirements of a National Statistic. This review led to the inclusion of more commentary and where possible references to relevant policy to provide greater context to the figures reported.</p> <p>There are no known unmet user needs.</p>
<b>6. Accuracy and Reliability</b>	<p><b><i>This section is about the differences between the estimates and the unknown true values.</i></b></p> <p>Regular feedback ensures Analysis (Tri-Service) staff are kept abreast of any changes or potential issues with the data and statistics, which is fed into the data validation and editing process.</p>
<b>7. Timeliness and Punctuality</b>	<p><b><i>This section reports on the time gap between publication and the reference period (timeliness) and the gap between planned and actual publication dates (punctuality).</i></b></p> <p>The annual extracts are taken on the first working day of April. The editing and production process usually takes about three weeks at the single Service level. It then takes a further four weeks to compile and publish these data at a Tri-Service level and publish as National Statistics.</p> <p>Historic and planned publication dates can be found on the UK National Statistics Publication release list here:  <a href="https://www.gov.uk/government/statistics/announcements">https://www.gov.uk/government/statistics/announcements</a></p> <p>In 2017, the report was delayed from May until July to ensure the quality of the publication.</p> <p>In 2020 and 2021, the report was delayed from May until June as a precautionary measure to mitigate the impact of COVID-19.</p> <p>Historic and planned publication dates can be found on the <a href="#">Publication Release Dates section</a> of the gov.uk Statistics at MOD webpage and on the <a href="#">UK National Statistics Publication Hub</a></p>
<b>8. Coherence and Comparability</b>	<p><b><i>This section examines: the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar (coherence); and the degree to which data can be compared over time and domain (comparability).</i></b></p> <p>Analysis (Tri-Service) published statistics on UK Armed Forces are the definitive personnel statistics in the MOD. There are no other available data sets which to ensure coherence.</p> <p>Annual editions of UK Defence Statistics compendium dating back to 1992, plus historic Tri-Service publication TSP07 dating back to 2002, are available in the National Archives:  <a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/</a></p>

<b>9. Accessibility and Clarity</b>	<p><b><i>This section reports on: the ease with which users are able to access the data, the format in which the data are available, and the availability of supporting information (accessibility); and the quality and sufficiency of the metadata, illustrations and accompanying advice (clarity).</i></b></p> <p>Current publications consist of detailed Excel tables containing a historic time-series of statistics, a PDF report containing commentary, graphs and tables on trends in the statistics and an accessible HTML version of the publication. The commentary in our reports identifies and analyses the key changes in the data and provides summary statistics and policy context. Graphs, tables and other data visualisation methods are used to further explain these trends.</p> <p>Previous Analysis (Tri-Service) personnel reports are published on GOV.UK and are available as PDFs or Excel value copies. Other formats may be possible for Analysis (Tri-Service) to produce on request.</p> <p>All Analysis (Tri-Service) publications that use these data can be found under the “Military” and “Combined military and civilian” sections under the “Personnel statistics” heading on the statistics by topic section of the MOD National and Official Statistics by topic webpage:  <a href="https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic">https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic</a></p> <p>They can also be accessed via the Statistics release calendar on GOV.UK:  <a href="https://www.gov.uk/government/statistics/announcements">https://www.gov.uk/government/statistics/announcements</a></p> <p>Copies of the reports are also placed in the House of Commons library.</p>
<b>10. Trade-offs between Output Quality Components</b>	<p><b><i>This section reports the extent to which different aspects of quality are balanced against each other.</i></b></p> <p>The main trade-off is between timeliness and quality. To ensure statistics are timely the editing and validation process is restricted to around two weeks and a significant amount of automatic editing is utilised. Spending more time investigating every suspect individual personnel record could marginally improve quality at a detailed trade/rank level but is unlikely to impact the aggregated statistics published in our reports.</p> <p>The COVID-19 pandemic resulted in the suspension of face-to-face cadet activity in 2020 and 2021, which severely disrupted engagement with Cadets and Adult Volunteers. This directly impacted the recording and processing of applications to join each respective Cadet Force. Some administrative processes are likely to have been delayed due to COVID-19.</p>
<b>11. Cost and Respondent Burden</b>	<p><b><i>This section is about the effectiveness, efficiency and economy of the statistical output.</i></b></p> <p>Analysis (Tri-Service) has four branches dedicated to producing information relating to manpower and providing analysis and advice, the majority of time is spent on adding value through analysing, forecasting and answering ad-hoc enquiries as well as producing the National Statistics.</p> <p>There is very little respondent burden as the majority of the data is automatically obtained from administrative systems. However, this is supplemented with small amounts of data as well as input from other areas within the MOD.</p>

<b>12. Confidentiality, Transparency and Security</b>	<b><i>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></b>
	<p><b>12.1 Confidentiality- Data Treatment</b></p> <p>All published outputs are counts of individuals in particular groupings. Where there are possible disclosure issues in reporting protected characteristics, outputs are rounded according to Analysis (Tri-Service) rounding policy, which prevents disclosure of information on individuals. See the rounding policy on the Analysis (Tri-Service) policies page here:  <a href="https://www.gov.uk/government/publications/defence-statistics-policies">https://www.gov.uk/government/publications/defence-statistics-policies</a></p> <p>Disclosure control is conducted on all statistical information provided by the MOD to safeguard the confidentiality of individuals.</p> <p><b>12.2 Transparency</b></p> <p>The reports provide commentary on the key features of the outputs and identify any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.</p> <p><b>12.3 Security</b></p> <p>All staff involved in the statistical production process adhere to all MOD, Civil Service and data protection regulations. The data is stored, accessed and analysed using the MOD's restricted network and IT systems, and access to raw data is password protected and approval for access is granted only by the Head of Personnel Statistics.</p>

References

Reference	Website Location
Tri-Service Personnel – UK Reserve Forces	<a href="https://www.gov.uk/government/collections/strength-of-the-ukreserve-forces-index">https://www.gov.uk/government/collections/strength-of-the-ukreserve-forces-index</a>
Tri-Service Personnel Bulletin	<a href="https://www.gov.uk/government/collections/tri-service-personnelbulletin-statistics-index">https://www.gov.uk/government/collections/tri-service-personnelbulletin-statistics-index</a>
Quarterly Personnel Report	<a href="#">UK armed forces quarterly personnel report: index - GOV.UK</a>
Cadet Forces Statistics	<a href="https://www.gov.uk/government/collections/mod-sponsored-cadet-forces-statistics-index">https://www.gov.uk/government/collections/mod-sponsored-cadet-forces-statistics-index</a>
Publication Release Dates	<a href="https://www.gov.uk/government/statistics/announcements?utf8=%E2%9C%93&amp;keywords=&amp;topics%5B%5D=&amp;organisations%5B%5D=ministry-of-defence&amp;from_date=&amp;to_date=&amp;commit=Refresh+results">https://www.gov.uk/government/statistics/announcements?utf8=%E2%9C%93&amp;keywords=&amp;topics%5B%5D=&amp;organisations%5B%5D=ministry-of-defence&amp;from_date=&amp;to_date=&amp;commit=Refresh+results</a>
UK National Statistics Publication Hub	<a href="https://www.gov.uk/government/statistics/announcements">https://www.gov.uk/government/statistics/announcements</a>

The Analysis (Tri-Service) website can be accessed here:  
<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>

Updated: 20 April 2023

## Background Quality Report: Armed Forces Application Statistics

<p><b>1. Contact</b></p>	<p><i><b>This section provides details on the Analysis (Tri-Service) Head of Branch, the Responsible Statistician for these statistics.</b></i></p>
<p><b>2. Introduction &amp; Statistical Presentation</b></p>	<p>Contact details are:</p> <p>Analysis Tri-Service Ministry of Defence Floor 3 Zone M Main Building, Whitehall London SW1A 2HB</p> <p>E-mail: <a href="mailto:Analysis-Tri-Hd@mod.gov.uk">Analysis-Tri-Hd@mod.gov.uk</a></p> <p><b>2.1 Overview</b></p> <p>Analysis Tri-Service publishes a large range of Armed Forces (AF) personnel statistics, mainly to inform policy and decision making within the Department. The statistics are also used to measure performance against MOD, Government and Parliament targets and to inform general debate in Government, Parliament and the wider public.</p> <p>This background quality report covers the Official Statistics specifically concerning the number of applications to serve in the AF received by each of the three Services. Application statistics were published quarterly until a new recruitment system, namely the Defence Recruitment System (DRS), was introduced. Application data since 1 October 2017 has not been available as an official statistic. We have verified and applied quality assurance to the received data, and data at quarterly points starting from 1 July 2019 is available in the Service Personnel Publication.</p> <p>The application is the first formal submission for scrutiny and it differs from "applicant" since an applicant may submit more than one application. Whilst application counts for each service are based on online applications submitted by an individual and accepted by Defence Recruitment System (DRS), work is ongoing to verify that application processes and definitions are consistent and we would recommend that numbers should not be aggregated to show Armed Forces totals. This will be discussed in more detail later in this section.</p>
<p><b>3. Statistical Processing</b></p>	<p><b>3.1 Source Data</b></p> <p>The Defence Recruitment System (DRS) is where recruitment data is currently held and is used to support the Armed Forces recruitment process.</p> <p><b>3.2 Frequency of Data Collection</b></p> <p>Record level data is provided on a quarterly basis to Analysis Tri-Service by the single Services' (sS) recruitment teams from DRS</p> <p><b>3.3 Data Collection</b></p> <p>Record level data provided by the sS recruitment teams are stored separately from the live database to provide a time series of historical data.</p> <p><b>3.4 Data Validation</b></p> <p>Analysis Tri-Service verifies, processes and collates the data into the format required for publication in accordance with UK Statistics Authority (UKSA) guidelines</p>

### 3.5 Data Compilation

DRS is an administrative data source since the data it holds were not primarily collected with statistical purposes in mind. The National Statistician's Office (NSO) provides guiding principles around the use of administrative data for statistical purposes<sup>1</sup>, with a particular focus on the statistician's role in assuring and communicating the quality of administrative data used to produce official statistics. The guidance aims to ensure the requirements of the Code of Practice for Official Statistics, and the expectations of users, are met. It references the requirements of Protocol 3 of the Code of Practice, which specifically addresses the use of administrative sources for statistical purposes.

NSO guidance has been adhered to in the assessment of the data, and in subsequent work with data suppliers with regard to data validation. Further details regarding the work conducted can be found in the "Accuracy and Reliability" section below. Due to the subtle differences in the recruitment application processes, sS numbers should not be aggregated to show total AF applications. The table below sets out the differences in the three Service's approach:

The statistics are counts of the number of applications to serve in the AF received by each of the three Services; providing a breakdown by Service, Regular and Volunteer Reserve Forces, and by Officer and Other Rank.

Service	Definition
RN/RM	An application is defined as an online application submitted by an individual and accepted by Defence Recruitment System (DRS).
Army	An application is an online application submitted by an individual and accepted by Defence Recruitment System (DRS). For an application to be conducted the contact needs to have successfully registered on the Army website. Registrations are recorded by the RRP.
RAF	An application is defined as an online application submitted by an individual and accepted by Defence Recruitment System (DRS).

<sup>1</sup> National Statistician's Office (2014). Using Administrative Data: Good Practice Guidance for Statisticians,

<https://gss.civilservice.gov.uk/wp-content/uploads/2012/12/Interim-Admin-Data-guidance.pdf>

UK Statistics Authority (2009). (2012) Principles to guide the Statistics Authority's assessment of quality assurance practices relating to statistics produced from administrative data <https://gss.civilservice.gov.uk/wp-content/uploads/2012/12/Admin-data-QA-principles.pdf>

<b>4. Quality Management</b>	<p><b><i>This section will briefly describe the overarching processes in place to manage quality e.g. annual risk assessments, and offer the opportunity to outline results of recent quality assessments.</i></b></p> <hr/> <p><b>4.1 Quality Assurance</b></p> <p>The MOD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are publishing alongside reports and are updated regularly.</p> <p><b>4.2 Quality Assessment</b></p> <p>At the time of the last Quality Assessment in December 2022, the Quarterly SPS received a low risk rating as the overall summary in terms of quality risk.</p>
<b>5. Relevance</b>	<p><b><i>This section is about the degree to which the statistical product meets user needs in both coverage and content.</i></b></p> <hr/> <p>Analysis Tri-Service frequently meets with customers within the Department to discuss data, results, interpretation and any changes to requirements. They also seek feedback from a wider range of internal and external customers.</p> <p>Users are also encouraged to provide feedback on Analysis Tri-Service through the annual consultation meetings.</p> <p>Due to the high-profile nature of application statistics, this information serves the need of the Department to have consistent, reliable Official Statistics on which to base its press releases and other queries.</p> <p>We have made our own assessment of what these statistics could be used for using the categorisation in the UKSA paper <i>The Use Made of Statistics</i>. We believe the statistics could be used as follows:-</p> <ul style="list-style-type: none"> <li>i. Informing the general public's choices: <ul style="list-style-type: none"> <li>a. about the performance of government and public bodies</li> </ul> </li> <li>ii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>b. policy monitoring</li> </ul> </li> </ul> <p>The underlying data also allow for:</p> <ul style="list-style-type: none"> <li>iii. Government decision making about policies, and associated decisions about related programmes and projects: <ul style="list-style-type: none"> <li>c. policy making</li> </ul> </li> <li>iv. Facilitating academic research.</li> </ul>

<b>6. Accuracy and Reliability</b>	<p><b><i>This section is about the differences between the estimates and the unknown true values.</i></b></p> <p><b>6.1 Overall Accuracy</b></p> <p>Initially, three stages of recruitment were identified during the recruitment process and data scoping phase. These were: initial “contacts” made by individuals wishing to garner information about joining the AF; formal “applications” submitted to join the AF; and “potential entrants”, whom have passed the selection criteria to join the AF and have received an offer of employment.</p> <p>Subsequently it was recognised that there is often no distinct contact step since candidates may go directly to the application stage, and applications submitted on-line cannot be linked back to a contact records. It is, therefore, not possible to identify a complete cohort of “contacts”. Also information pertaining to potential entrants is not generally collected by the sS. However, gathering applications data remained a feasible and appropriate recommendation.</p> <p>The quality of application data was assessed in terms of fitness for purpose and whether the conditions required to be produced as Official Statistics were met.</p> <p>Data are collected on DRS to manage the recruitment of the AF. All new entrants are required to formally apply and complete various stages of the recruitment process, and DRS is the live system which collates this information. The overall number of applications received is, therefore, judged to be sufficiently accurate, although in some circumstances manual input is required, and some time-lags are apparent.</p> <p>The single Service Recruiting Teams have checked and verified that the applications data collated by Analysis – Tri is consistent and accurate with their internal products.</p> <p>At the macro level, the existence and potential for data errors is currently assessed as not having a disproportionate impact on the quality of the resulting statistics. There is a potential for duplicate applications to be present in the published statistics as all applications have been counted, and multiple applications from the same applicant are accepted by the system. Applications used to test the application system have been removed as they are not true applications.</p> <p>With regard to incentive and opportunity for distorting the data supplied; since DRS is maintained for operational purposes, with the statistical use a secondary benefit; and the data is extracted directly from DRS via management information interfaces, this is considered to be minimal.</p> <p>Once the sS recruitment teams have applied their specialist knowledge to extract the data in accordance with their specific definitions of an application, Analysis Tri-Service independently processes and collates the data into the format required for publication in accordance with UKSA guidelines.</p> <p><b>6.2 Data Revisions</b></p> <p>Data revisions are handled in accordance with the <a href="#">MOD's Official Statistics Revisions and Corrections Policy</a>.</p> <p>There has been a revision to the RAF applications figures, due to a processing error in the 1 July 2021 and 1 October 2021 Quarterly Service Personnel Statistics.</p>
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<b>7. Timeliness and Punctuality</b>	<p><b><i>This section reports on the time gap between publication and the reference period (timeliness) and the gap between planned and actual publication dates (punctuality).</i></b></p> <p>The sS provide record level data to Analysis Tri-Service on a quarterly basis, while each of the sS receive their extracts on a monthly basis from DRS.</p> <p>The verification, processing and collating exercise takes Analysis Tri-Service approximately two weeks to complete. The statistics are published in the Service Personnel Statistics publication at the quarterly points. In the Service Personnel Statistics publication there is a reporting lag of 1 quarter. There is a break in the time series between 1 October 2017 and 1 July 2018 due to the change from TAFMIS to DRS and due to the need to ensure consistency of the start date for reintroduced data between the sS.</p> <p>Navy/RAF applications figures have not been updated in the 1 July 2022 and 1 October 2022 editions of the Quarterly Service Personnel Statistics. This is due to technical issues while migrating the data for Applications to a new system, the full 12-month time series is incomplete and requires extensive quality control and other validation.</p> <p>Army applications figures have not been updated in the 1 October 2022 edition but were updated in the 1 July 2022 edition of the Quarterly Service Personnel Statistics, however these figures are still marked as provisional and are subject to change. There are currently issues with supply of the underlying data and all parties are working together to resolve these issues and it is planned to publish them in a future edition.</p>
<b>8. Coherence and Comparability</b>	<p><b><i>This section examines: the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar (coherence); and the degree to which data can be compared over time and domain (comparability).</i></b></p> <p>Analysis (Tri-Service) teams are the definitive source of UK AF statistics in the MOD. There are no other publicly available regular publications on the numbers of applications to serve in the AF received by each of the three Services with which to ensure coherence. However this data may be publicly available in the responses to Parliamentary Questions and Freedom of Information Requests.</p> <p>Due to the subtle differences in the recruitment application processes, single Service numbers should not be aggregated to show total AF applications. Further details about the different definitions can be found in the “Methodology and Production” section above.</p> <p>In addition, the number of applications received does not directly relate to the intake figures Analysis Tri-Service compiles since there is a time-lag between an application being received and an individual successfully being taken onto untrained strength.</p>
<b>9. Accessibility and Clarity</b>	<p><b><i>This section reports on: the ease with which users are able to access the data, the format in which the data are available, and the availability of supporting information (accessibility); and the quality and sufficiency of the metadata, illustrations and accompanying advice (clarity).</i></b></p> <p>The commentary reports are first published on 13<sup>th</sup> August 2015 and are available in pdf/HTML format; detailed tables of time series data in Excel format can be found via the same link.</p>

<b>10. Trade-offs between Output Quality Components</b>	<p><b><i>This section reports the extent to which different aspects of quality are balanced against each other.</i></b></p> <p>Trade-offs exist between timeliness and quality, plus resource constraints in the training delivery organisations mean it is not always possible to correct known data issues.</p> <p>To ensure statistics are timely, the editing and validation process is restricted to around two weeks. Spending more time investigating every suspect individual personnel record could marginally improve quality at a detailed trade/rank level but is unlikely to impact the aggregated statistics published. Data may include duplicate applications as all valid applications based on the definitions provided are counted. Duplicate applications are defined as multiple applications from a single applicant, intentional or otherwise. Data cleansing in regard to applications submitted to test the system has been undertaken and identified applications have been removed.</p>
<b>11. Cost and Respondent Burden</b>	<p><b><i>This section is about the effectiveness, efficiency and economy of the statistical output.</i></b></p> <p>Analysis Directorate has four branches dedicated to producing information relating to personnel and providing analysis and advice, the majority of time is spent on adding value through analysing, forecasting and answering ad-hoc enquiries as well as producing the National Statistics.</p> <p>There is very little respondent burden as the majority of the data is automatically obtained from administrative systems. However, this is supplemented with small amounts of data as well as input from other areas within the MOD.</p>
<b>12. Confidentiality, Transparency and Security</b>	<p><b><i>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></b></p> <p><b>12.1 Confidentiality</b></p> <p>All published outputs are counts of individuals in particular groupings. The outputs are rounded according to Analysis Tri-Service's rounding policy which reflects the degree of accuracy of the outputs and prevents disclosure of information on individuals. See the rounding policy on the Analysis Tri-Service policies page here:  <a href="https://www.gov.uk/government/publications/defence-statistics-policies">https://www.gov.uk/government/publications/defence-statistics-policies</a></p> <p><b>12.2 Transparency</b></p> <p>The reports provide commentary on the key features of the outputs and identify any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.</p> <p><b>12.3 Security</b></p> <p>All staff involved in the statistical production process adhere to all MOD, Civil Service and data protection regulations. The data is stored, accessed and analysed using the MOD's restricted network and IT systems, and access to raw data is password protected and approval for access is granted only by the Head of Personnel Statistics.</p>

The Analysis Tri-Service website can be accessed here:

<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>

**Updated: 20 April 2023**

# UK Regular Forces and Civilian Location Statistics

<b>1. Contact</b>	<p><b><i>This section provides details on the Analysis (Tri-Service) Head of Branch, the Responsible Statistician for these statistics.</i></b></p>
<b>2. Introduction &amp; Statistical Presentation</b>	<p>Contact details are:          Analysis (Tri-Service)          Ministry of Defence          Floor 3 Zone M          Main Building, Whitehall          London SW1A 2HB</p> <p>E-mail: <a href="mailto:Analysis-Tri-Hd@mod.gov.uk">Analysis-Tri-Hd@mod.gov.uk</a></p> <p>The Ministry of Defence (MOD) publishes a wide range of Armed Forces personnel statistics. The main purpose of these statistics is to inform policy and decision making within the Department, to measure the performance of the Ministry of Defence against Government and Parliament targets, and to inform general debate in Government, Parliament and the wider public.</p> <p>This background quality report covers the Annual Location Statistics (ALS), which gives the global strength of UK Regular Forces and MOD Civilian personnel statistics by stationed location, and the annual intake by Parliamentary Constituency into the UK Regular Forces published on GOV.UK: <a href="https://gov.uk/government/organisations/ministry-of-defence/about/statistics">gov.uk/government/organisations/ministry-of-defence/about/statistics</a></p> <p>The publication we produce which contain statistics on UK Full-time Armed Forces personnel is: <a href="#">Annual Location Statistics (ALS)</a></p> <p>The ALS shows the strength of the UK Regular Forces and MOD Civilians by stationed locations as at the first day of April for each financial year. Full Time Reserve Service (FTRS) personnel, Gurkhas &amp; mobilised reservists are excluded from the data. These statistics are broken down into the following populations of interest:</p> <ul style="list-style-type: none"> <li>- Service (Naval Service, Army, and Royal Air Force) - officer and other ranks.</li> <li>- MOD Civilians – Core (Non-Industrial and Industrial), Trading Funds and the global locations of Locally Engaged Civilians (LEC) personnel.</li> </ul> <p>The ALS also shows Intake into the UK Regular Forces by Parliamentary Constituency in the last 12 month period preceding the first day of April for each financial year.</p> <p>The ALS in its current form was first published in July 2011. It shows the global strength of UK Regular Forces and MOD Civilians by stationed locations. Following a request in Defence Orals in April 2020, data on the Parliamentary Constituency of recruits (intake) is now included in these statistics, beginning with the April 2021 release. The stationed location statistics were previously published quarterly as Quarterly Location Statistics (QLS) until July 2018, when it became an annual publication. Prior to July 2011, the Tri-Service Publication 10 (TSP10) was produced showing the global strength of UK Regular Forces only. The TSP10 was first produced in July 1994 as a publication to show the strength of the UK Regular Forces by stationed locations covering only the UK. From April 2007, this was merged with TSP6 to show global strengths of the UK Regular Forces by stationed locations.</p> <p>See the summary of the <a href="#">Consultation on Reformatting the Armed Forces Statistics</a> for further details.</p> <p>An index of previous Quarterly Location Statistics (QLS) published prior to 2018 can be found on GOV.UK on this site: <a href="#">MOD civilian personnel quarterly statistics: index - GOV.UK (www.gov.uk)</a></p>

### 3. Statistical Processing

Annual editions of UK Defence Statistics compendium dating back to 1992, plus historic Tri-Service publications dating back to 2002, are available in the National Archives:  
<http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/>

#### 3.1 Source data

- a) The UK Regular Forces statistics are principally derived from the Department's Joint Personnel Administration (JPA) system, which is used for the administration of all Armed Forces personnel, supplemented by information from single Services' management systems and other centrally managed databases. Prior to the introduction of JPA in 2006/07, legacy single Service administration systems were used to produce the statistics.
- b) Data for civilians within MOD Main and Defence Equipment & Support Trading Entity are derived from the MOD's Human Resources Management System (HRMS). As of February 2022, HRMS is being replaced by the MYHR Human Resources System.
- c) Trading Funds and Executive Agency data come from the validated personnel systems of the individual trading funds and executive agencies.
- d) Royal Fleet Auxiliary data are sourced directly from their HR system 'Magellan'. The data are validated along the same lines as for MOD Main civilian personnel, but RFA data are not input onto the ATHENA database. No further validation of this data is undertaken.
- e) Locally engaged civilians (LEC) data are provided by the main budgetary area of the MOD responsible for them.
- f) Data on Intake into the UK Regular Forces by Parliamentary Constituency (Intake) is obtained from the Defence Recruiting System (DRS) database by the single Services analysis teams (Analysis Navy, Analysis Army and Analysis Air) who compile it before sending to Analysis (Tri-Service) to include in the ALS.

#### 3.2 and 3.3 Data Collection and Frequency

- a) For UK Regular Forces data, Extracts are taken from JPA each month and stored on separate databases to form a time series. The extracts are taken six calendar days after the end of the month and the situation as at the first of the month is calculated. This ensures most late-reporting is captured.
- b) Data for MOD Main and DES is sourced monthly from HRMS/MYHR system. This is provided by Defence Business Support (DBS), the organisation that owns the data. Equivalent monthly data sets from the Trading Funds and Executive Agencies are provided. These data are processed and stored on a centralised data base system and accessed by authorised users via a front-end user interface system.
- c) Royal Fleet Auxiliary data are sourced directly quarterly from their HR system 'Magellan' on a data file formatted and uploaded to a data interface tool.
- d) LEC data is sourced quarterly and held separately on a dedicated excel spreadsheet. This allows it to be combined with MOD Main TLB's and the DES data outputs as well as RFA data to produce departmental level data at required levels of detail.
- e) Intake data are obtained from DRS live database and data validation and processing is performed by the single Services analysis teams (Analysis Navy, Analysis Army and Analysis Air). They obtain, for the 12 months period before the start of the latest financial year, the postcodes recorded in the recruits' contact information at time of application. These postcodes are then used to identify the Parliamentary Constituency of the recruits at the time of application.

### 3.4 Data validation

- a) UK Regular Forces data goes through a series of automatic validation checks and edits to ensure the basic quality of the data and a series of derived fields are calculated. The data is then made available to MOD single Services analysis teams. They undertake a wide range of validation checks and implement specialist editing rules using their expert knowledge and experience as well as data obtained from other sources within the Department.
- b) MOD Civilian data validation is conducted by MOD Civilian Personnel Analysis team as part of the acceptance of the monthly extract prior to it being made available to the production team through ATHENA, a custom designed database for holding the time series of monthly civilian extracts. More detailed validation is then undertaken on the breakdowns of individual fields (including ethnicity, disability, gender, TLB, grade), and comparisons between the current and previous month's figures. The consistency of gains, losses and inter-TLB transfers is also checked. Unusual variations are identified and investigated to identify explanations/reasons for the changes. In instances where our investigations detect data issues, we act with DBS to correct the data. The validation process focuses on the areas where problems with the data have been detected in the past.
- c) DRS is an administrative data source since the data it holds were not primarily collected with statistical purposes in mind. The National Statistician's Office (NSO)<sup>3</sup> provides guiding principles around the use of administrative data for statistical purposes, with a particular focus on the statistician's role in assuring and communicating the quality of administrative data used to produce official statistics. The guidance aims to ensure the requirements of the Code of Practice for Official Statistics, and the expectations of users, are met. It references the requirements of Protocol 3 of the Code of Practice, which specifically addresses the use of administrative sources for statistical purposes.

NSO guidance has been adhered to in the assessment of the data, and in subsequent work with data suppliers about data validation. Further details regarding the work conducted can be found in the data compliance section below.

### 3.5 Data compilation

- a) Once the data is confirmed as being accurate, they are used to produce the range of tables published. These tables undergo several layers of scrutiny to ensure the outputs are accurate and consistent. The results are rounded to the nearest 10 to reflect the degree of confidence we have in the numbers and to ensure small numbers do not disclose information on individuals. However, numbers ending in "5" are rounded to the nearest 20 to prevent systematic bias of always rounding these numbers up. Very small numbers between 1 and 5 are suppressed to prevent disclosure of information on individuals.
- b) The UK Regular Forces statistics are headcounts of regular personnel, both trained and untrained, and are presented in the following breakdowns for each location: Navy, Army and RAF; officer and other ranks.
- c) The published Civilian figures are counts of numbers (strengths) of civilian personnel for a range of categories. The strength figures are reported as **\*\*Full Time Equivalent (FTE)\*\***. This is preferable to headcount for civilian personnel as it enables fair comparison with Service figures, where working part-time does not occur, and provides a better indication of the person hours available and salary costs. FTE is calculated from the contractually agreed number of hours worked per week divided by the number of hours per week which constitute full-time for the grade and location (this varies according to whether Industrial or Non-Industrial grade, and whether on the London or National pay scale).
- d) For the Intake into the UK Regular Forces by Parliamentary Constituency, the Parliamentary Constituency is identified from "contact" Postcode as recorded in the DRS for Air and Navy data, however the Army data uses the Postcode District only, not the full Postcode, as per the

information held in Army Recruiting and Initial Training Command (ARITC) management information system. This is then linked to the latest ONS geographical lookup tables. Air and Navy data are produced using full “contact” Postcodes on intake and therefore provides a completely accurate intake by Constituency. Any Constituencies with no personnel recorded, truly have had no intake over the reported period for these two Services.

However, for the Army data in the financial years 2014/15 to 2020/21, only Postcode District is available and therefore used to derive Constituency. Postcode Districts can overlap Constituencies and therefore we have assigned personnel to the Constituency which has a majority of Postcodes associated with the relevant Postcode District. Two Constituencies, namely Dudley South and Northampton North, have no Postcode Districts where the majority of Postcodes fall in the Constituency, and so have no reported intake. It should be noted that this does not mean that no personnel have been recruited from these Constituencies, rather they cannot be assigned there due to the methodology used.

For the intake into the Army in the financial year 2021/2022, Officers' Postcode data were unavailable, and so Officer data could not be broken down to Constituency level and have been included in the "Unknown" category. For Other Ranks, Parliamentary Constituency has been derived using a mix of Postcode District only for personnel whose Postcode information is partial, and the full Postcode for those with complete Postcode information. The partial Postcode information has been obtained from ARITC management information system, and the available full Postcode information has been obtained from the Recruitment and Training Pipeline Project (RTPP) information. RTPP is an ongoing project within the MOD Analysis Function aiming to streamline data on intake into the Armed Forces. Where the full Postcode is available, this has been used to assign personnel to a Constituency, otherwise, Constituency has been derived using the Postcode District only, as per the information held in ARITC management information system. Due to this, there could be instances where a Postcode District covers more than one Parliamentary Constituency. Where this occurs, personnel are assigned to the Parliamentary Constituency where the majority of a Postcode District lies.

The methodology is currently under review and is being revised to use full Postcodes for all three services for the next Annual Location Statistics, increasing the quality of the data produced.

#### 4. Quality Management

***This section will briefly describe the overarching processes in place to manage quality e.g. annual risk assessments, and offer the opportunity to outline results of recent quality assessments.***

##### **4.1 Quality Assurance**

The MOD's quality management process for Official Statistics consists of three elements: (1) Regularly monitoring and assessing quality risk via an annual assessment; (2) Providing a mechanism for reporting and reviewing revisions/corrections to Official Statistics; (3) Ensuring BQRs are published alongside reports and are updated regularly.

##### **4.2 Quality Assessment**

At the time of the last Quality Assessment in December 2022, the Annual ALS received a low risk rating as the overall summary in terms of quality risk.

5. Relevance	<b><i>This section is about the degree to which the statistical product meets user needs in both coverage and content.</i></b>
	<p>Analysis (Tri-Service) frequently meets with customers within the Department to discuss data, results, interpretation and any changes to requirements. They also seek feedback from a wider range of internal and external customers.</p> <p>There was a formal consultation of both internal and external users in April 2009 over the proposal to replace the former Tri-Service publications 10 (TSP10) with the QLS and related issues. See Consultation on <a href="#">Reformatting the Armed Forces Statistics</a> on UK Government Web Archive for details. There was also a formal consultation for internal and external users on <a href="#">Analysis (Tri-Service) Annual Manpower Publications</a> between November 2010 and March 2011. Following these consultations Analysis (Tri-Service) received no negative feedback from external bodies regarding changes to the publications.</p> <p>We have made our own assessment of what these statistics could be used for using the categorisation in the UKSA paper <i>The Use Made of Statistics</i>. We believe the statistics could be used as follows:-</p> <ul style="list-style-type: none"> <li>i. Informing the general public's choices: <ul style="list-style-type: none"> <li>e. about the performance of government and public bodies</li> </ul> </li> <li>ii. Government decision making about policies, and associated decisions about related programs and projects: <ul style="list-style-type: none"> <li>b. policy monitoring</li> </ul> </li> </ul> <p>The underlying data also allow for:</p> <ul style="list-style-type: none"> <li>iii. Government decision making about policies, and associated decisions about related programs and projects: <ul style="list-style-type: none"> <li>a. policy making</li> </ul> </li> <li>vii. Facilitating academic research.</li> </ul> <p>The Annual Location Statistics should be used as the authoritative source of the statistics on the stationed location of UK Regular Forces and MOD Civilian personnel, and the Parliamentary Constituency of Recruits into the UK Regular Forces at time of application.</p> <p>Users are also encouraged to provide feedback on statistics produced by Analysis (Tri-Service) and also to sign up to the mailing list for their publication of interest, to receive updates to the statistics or to be made aware of any changes: <a href="mailto:Analysis-Tri-Service@mod.gov.uk">Analysis-Tri-Service@mod.gov.uk</a></p> <p>The principal customers for the Tri-Service publications are within the People area of the Ministry of Defence. They are used to inform and measure Service personnel strategy in areas such as pay &amp; allowances and overall troop numbers, and in particular the Future Reserves 2020 Programme (FR20). This product is also used to answer parliamentary questions and Freedom of Information requests. The principal stakeholders for Tri-Service personnel statistics are within the Chief of Defence Personnel area of the Ministry of Defence. The statistics are used to inform and measure Service personnel strategy in areas such as pay &amp; allowances and equality &amp; diversity. They are also used to answer parliamentary questions and Freedom of Information requests. The information is also used to inform the internal monitoring and regular monthly reporting to the Defence Board.</p> <p>For detail on pre-release access to Analysis (Tri-Service) publications please see the Analysis (Tri-Service) pre-release access list webpage for the most up to date list of roles receiving pre-release access. <a href="https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list">https://www.gov.uk/government/statistics/defence-statistics-pre-release-access-list</a></p> <p>People in the roles with access receive pre-release access to the publication up to 24 hours in advance of publication.</p> <p>The coverage of these statistics is close to, if not equal to 100% of all UK Regular Armed Forces personnel and MOD Civilians. There are no known unmet user needs.</p>

<b>6. Accuracy and Reliability</b>	<p><b><i>This section is about the differences between the estimates and the unknown true values.</i></b></p>
	<p><b>6.1 Overall Quality</b></p> <p>All personnel in the Regular Armed Forces must be recorded on JPA in order for them to receive their pay. Likewise, Civilian data is sourced from Human Resource data systems where personnel must be recorded. Therefore, the overall strength figures are accurate. However, more detailed breakdowns relying on the information recorded for each individual can be less accurate due to variable quality of the data entered for these different fields.</p> <p>The variation in quality is partly due to key information required for managing individuals being recorded and updated in central systems, whereas other information is left to the individual to complete through a self-service tool.</p> <p>The monthly datasets are passed through a range of automatic and manual validation and editing routines in order to make the key fields as accurate as possible, often drawing upon alternative data sources. A range of detailed breakdowns are produced and these are compared with previous month's outputs and discrepancies are examined.</p> <p>Regular feedback ensures Analysis (Tri-Service) staff are kept abreast of any changes or potential issues with the data and statistics, which is fed into the data validation and editing process.</p> <p><b>6.2 Data Revisions</b></p> <p>Data revisions are handled in accordance with <a href="#">MOD's Official Statistics Revisions and Corrections Policy</a>.</p> <p>Due to processing errors, it has been necessary to perform some revisions to Regulars and Civilian statistics in various editions of the ALS/QLS.</p>

7. Timeliness and Punctuality

***This section reports on the time gap between publication and the reference period (timeliness) and the gap between planned and actual publication dates (punctuality).***

7.1 Timeliness

The UK Regular Forces and MOD Civilian data extracts are obtained from databases on the third and fourth week of April, and the Intake by Parliamentary Constituency data is supplied by the single Service Analysis teams on the first week of May. The editing and production process usually takes around 2 weeks. It then takes a further 2-4 weeks to compile and quality-assure the reports and accompanying tables.

7.2 Punctuality

The following table provides an example of the timeline for 1 April 2022 Statistics.

Publication	Situation Date	Publication Date
Annual Location Statistics (ALS)	1 April 22	7 July 22

Historic and planned publication dates can be found on the [Publication Release Dates section](#) of the gov.uk Statistics at MOD webpage and on the [UK National Statistics Publication Hub](#).

## 8. Coherence and Comparability

***This section examines: the degree to which data that are derived from different sources or methods, but refer to the same topic, are similar (coherence); and the degree to which data can be compared over time and domain (comparability).***

- a) Analysis (Tri-Service) published statistics on UK Armed Forces are the definitive personnel statistics in the MOD. There are no other publicly available regular publications on the numbers of UK Armed Forces with which to ensure coherence. Within the MOD direct queries of the Joint Personnel Administration system will produce slightly different numbers due to timing and quality issues.

The UK Armed Forces personnel statistics are not always directly comparable with other countries statistics due to definitional differences of what constitutes an Armed Force. In some countries, particularly in Europe, part of the domestic police force is included in the Armed Forces. Similarly, there are not always direct equivalents to the Royal Navy / Royal Marines, Army, and Royal Air Force in other countries.

- b) Structural changes have occurred during the time-series covered by MOD civilian personnel statistics. In some cases, this means that figures are not directly comparable across the whole period. To aid understanding of these changes and how they have impacted upon the figures the detail of these changes is provided here:
1. As of 1 April 2018, approximately 400 posts forming the Defence Electronics Components Agency (DECA) previously reported in Head Office & Corporate Services (HOCs) within MOD Core Civilian personnel were reported separately as an Executive Agency within Trading Funds, for improved consistency and transparency of data reporting.
  2. As of 1 April 2020 650, posts in Head Office & Corporate Services (HOCs) within MOD Core Civilian personnel covering security vetting in Defence Business Services UKSV were privatised.
- c) For the Intake into UK Regular Forces by Parliamentary Constituency (Intake) data, the Parliamentary Constituency is identified from “contact” Postcode as recorded in the DRS for Air and Navy data. Air and Navy data are produced using full “contact” Postcodes on intake and therefore provides a completely accurate intake by Constituency. Any Constituencies with no personnel recorded, truly have had no intake over the reported period for these two Services. For these two Services therefore, any Intake statistics produced from the DRS data source will be consistent with those published in the ALS for the same period.

However the Army data uses the Postcode District only, not the full Postcode, as per the information held in Army Recruiting and Initial Training Command (ARITC) management information system. Postcode Districts can overlap Constituencies and therefore we have assigned personnel to the Constituency which has a majority of Postcodes associated with the relevant Postcode District. Two Constituencies, namely Dudley South and Northampton North, have no Postcode Districts where the majority of Postcodes fall in the Constituency, and so have no reported intake. It should be noted that this does not mean that no personnel have been recruited from these Constituencies, rather they cannot be assigned there due to the methodology used.

Any Intake statistics for the Army produced using a different methodology will therefore not likely to be consistent with those published in the ALS for the same period. The methodology is currently under review and is being revised to use full Postcodes for all three services for the next Annual Location Statistics, which will increase the quality of the data produced.

Annual editions of UK Defence Statistics compendium dating back to 1992, plus historic Tri-Service publications dating back to 2002, are available in the National Archives:  
<http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/index.php/publications/>

<b>9. Accessibility and Clarity</b>	<p><b><i>This section reports on: the ease with which users are able to access the data, the format in which the data are available, and the availability of supporting information (accessibility); and the quality and sufficiency of the metadata, illustrations and accompanying advice (clarity).</i></b></p> <p>Current publications consist of detailed Excel tables containing a historic time-series of statistics and a HTML report containing commentary, graphs and tables on trends in the statistics. The Excel tables are in MS Excel Spreadsheet and Open Document Spreadsheet (ODS). The commentary in our reports identifies and analyses the key changes in the data and provides summary statistics and policy context. Graphs, tables and other data visualisation methods are used to further explain these trends.</p> <p>Previous Analysis (Tri-Service) personnel location reports are published on GOV.UK and are available as PDFs or Excel value copies. Other formats may be possible for Analysis (Tri-Service) to produce on request.</p> <p>All Analysis (Tri-Service) publications that use these data can be found under the “Combined military and civilian” sections under the “Personnel statistics” heading on the statistics by topic section of the MOD National and Official Statistics by topic webpage: <a href="https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic">https://www.gov.uk/government/statistics/mod-national-and-official-statistics-by-topic</a></p> <p>They can also be accessed via the Statistics release calendar on GOV.UK: <a href="https://www.gov.uk/government/statistics/announcements">https://www.gov.uk/government/statistics/announcements</a></p> <p>Copies of the reports are also placed in the House of Commons library.</p> <p>Data revisions are handled in accordance with the <a href="#">MOD's Official Statistics Revisions and Corrections Policy</a>.</p>
<b>10. Trade-offs between Output Quality Components</b>	<p><b><i>This section reports the extent to which different aspects of quality are balanced against each other.</i></b></p> <p>The main trade-off is between timeliness and quality. To ensure statistics are timely the editing and validation process is restricted to around two weeks and a significant amount of automatic editing is utilised. Spending more time investigating every suspect individual personnel record could marginally improve quality at a detailed location/rank level but is unlikely to impact the aggregated statistics published in our reports.</p>
<b>11. Cost and Respondent Burden</b>	<p><b><i>This section is about the effectiveness, efficiency, and economy of the statistical output.</i></b></p> <p>Personnel Statistics and Analysis has six branches dedicated to producing information relating to manpower and providing analysis and advice, the majority of time is spent on adding value through analysing, forecasting and answering ad-hoc enquiries as well as producing the National Statistics.</p> <p>There is very little respondent burden as the majority of the data is automatically obtained from administrative systems. However, this is supplemented with small amounts of data as well as input from other areas within the MOD.</p>

<b>12. Confidentiality, Transparency and Security</b>	<p><b><i>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></b></p> <p><b>12.1 Confidentiality</b></p> <p>All published outputs are counts of individuals in particular groupings. Where there are possible disclosure issues in reporting protected characteristics, outputs are rounded according to Analysis (Tri-Service) rounding policy, which prevents disclosure of information on individuals. See the rounding policy on the Analysis (Tri-Service) policies page here:  <a href="https://www.gov.uk/government/publications/defence-statistics-policies">https://www.gov.uk/government/publications/defence-statistics-policies</a></p> <p>Disclosure control is conducted on all statistical information provided by the MOD to safeguard the confidentiality of individuals.</p> <p><b>12.2 Transparency</b></p> <p>The reports provide commentary on the key features of the outputs and identify any issues or caveats to the data. This quality report provides further information on the method, production process and quality of the output.</p> <p><b>12.3 Security</b></p> <p>All staff involved in the statistical production process adhere to all MOD, Civil Service and data protection regulations. The data is stored, accessed and analysed using the MOD's restricted network and IT systems, and access to raw data is password protected and approval for access is granted only by the Head of Personnel Statistics.</p>
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The Analysis (Tri-Service) website can be accessed here:

<https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics>

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