

## Background Quality Report: UK Regular Armed Forces

<b>Introduction</b>	<p><b><i>This section provides the context for the quality report.</i></b></p> <p><b>Overview</b></p> <p>Defence Statistics (Tri Service) publishes a wide range of Armed Forces personnel statistics. The main purpose of these statistics are; 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 Armed Forces 'strengths', inflows, and outflows, reported by various categories of interest. Strength counts are reported against requirement figures for UK Regular 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 Defence Statistics 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> <ul style="list-style-type: none"><li>▪ UK Armed Forces - <a href="#">Monthly Personnel Report (MPR)</a><sup>1</sup></li><li>▪ UK Armed Forces - <a href="#">Quarterly Personnel Report (QPR)</a><sup>2</sup></li><li>▪ UK Armed Forces - <a href="#">Annual Personnel Report (APR)</a><sup>3</sup></li><li>▪ UK Regular Forces - <a href="#">Diversity Dashboard</a><sup>4</sup></li><li>▪ <a href="#">UK Defence Statistics</a><sup>5</sup> - Bulletin 2.01 (excluding reserve forces and location statistics)</li></ul> <p>The MPR and QPR were introduced in 2009 to replace 5 Tri- Service publications (TSP 1 – TSP 5). These historic reports can be found on the archived pages of the Defence Statistics (DS) website on the <a href="#">National Archives site</a></p> <p>See the summary of the <a href="#">Consultation on Reformatting the Armed Forces Statistics</a><sup>6</sup> on the National Archives website for further details.</p> <p>The APR was introduced in 2011, to replace the following Tri- Service TSP 8, TSP 9 and TSP 10 publications. The historic reports can be found on the archived Defence Statistics website on the <a href="#">National Archives site</a></p> <p>See the summary of the <a href="#">Consultation on DS Annual Manpower Publications</a><sup>7</sup> on the National Archives website for further details.</p> <p><b>Methodology and Production</b></p> <p>These statistics are primarily counts of strengths (numbers of personnel at the 1<sup>st</sup> of the month), inflows and outflows of military personnel broken down into the following populations / characteristics of interest:</p> <p>Service (Naval Service, Army, and Royal Air Force); officer and other ranks; gender; ethnic origin; training status; flow type and reason (exits, voluntary release and other reasons); rank; age.</p> <p>In addition to these categories, the QPR reports military personnel by contract type, for example Regulars, Gurkhas, Military Provost Guard Service (MPGS), Locally Engaged Personnel (LEP), Volunteer Reserve, Serving Regular Reserve, and Sponsored Reserve. More background quality information on these populations can be found in <a href="#">here</a>.</p>
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	<p>Categories relating to religion and ethnicity, included in the bi-annual diversity publication, are self-declared by the individual on the <b>Joint Personnel Administration</b> (JPA) system. Nationality is presented as reported on JPA.</p> <p>Personnel statistics are derived from the Department's Joint Personnel Administration (JPA) system, which is used for the administration of all Regular Forces. Prior to the introduction of JPA in 2006/07, legacy single Service administration systems were used to produce the statistics.</p> <p>Extracts are taken from JPA each month and stored on a separate database to form a time series. The extracts are taken six calendar days after the end of the month and the situation as at the 1<sup>st</sup> of the month is calculated; this ensures most late-reporting is captured.</p> <p>The data goes through a series of automatic validation checks based on previous corrections. As a result of these checks, edits are made to the data to ensure the basic quality of the data and a series of derived fields are also calculated. A "flows" file is then created by comparing the current month's data to the previous month's data by low-level groupings and recording any changes in strengths.</p> <p>The data is then made available to Defence Statistics' 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>Once the data is confirmed as being accurate the database is queried to produce the range of tables published. These tables undergo several rounds of checking and scrutiny to ensure the outputs are accurate and consistent. The results are generally 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. Please see our rounding policy<sup>8</sup> on the Defence Statistics policy page <a href="#">here</a>.</p> <p><b>Contact details</b>  The Head of DS Tri-Service is the responsible statistician for these statistics. Contact details are:</p> <p>Defence Statistics (Tri-Service) Tel: <b>020 7807 8896</b>  Ministry of Defence Fax: <b>020 7218 0969</b>  Floor 3 Zone K E-mail: Defstrat-stat-tri-hd@mod.uk  Main Building, Whitehall  London SW1A 2HB</p>
<p><b>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>The principal customers for tri-Service personnel statistics are within the Chief of Defence Personnel (Personnel and Training) 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 QPR is used to inform the Defence Management Board performance scorecard report.</p> <p>For detail on pre-release access to Defence Statistics (Tri Service) publications please see the <a href="#">Pre-release</a><sup>9</sup> section of the DS webpage for the most up to date pre-release access list. People in the roles with access receive pre-release access to the report up to 24 hours in advance of publication, an accompanying ministerial submission and press-release.</p>

	<p>These statistics were originally developed in close consultation with customers and the QPR, MPR, APR and Bulletin have all been recently reviewed by UK Statistics Authority (UKSA) to ensure they meet the requirements of a National Statistic. The recent review led to the inclusion of more commentary and where possible references to relevant policy to provide more context to the figures reported.</p> <p>The coverage of these statistics is close to, if not equal to, all Full-time Armed Forces personnel and includes Special Forces, Full-Time Reserve Service personnel and Gurkhas. The QPR contains statistics on the Reserve Forces, more details of which are covered in a separate report <a href="#">here</a>. There are no known unmet user needs.</p>
<b>Accuracy and Reliability</b>	<p><i><b>This section is about the differences between the estimates and the unknown true values.</b></i></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 fairly 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 to manage their personnel and inform policy and strategy. Regular feedback ensures DS 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>Timeliness and Punctuality</b>	<p><i><b>This section reports on the time gap between publication and the reference period (timeliness) and the gap between planned and actual publication dates (punctuality).</b></i></p> <p>The monthly extracts are taken on the sixth calendar day. The editing and production process usually takes under a month at the single Service level. It then takes a further week or two to compile these data at a tri-Service level and publish as National Statistics.</p> <p>Historic and planned publication dates can be found on the <a href="#">Publication Release Dates section</a><sup>10</sup> of the DS webpage and on the <a href="#">UK National Statistics Publication release list</a><sup>11</sup>.</p>

	<p>The publication dates were reviewed in 2010 following improvements in the timeliness of edited data and production processes. This resulted in the MPR and QPR publication dates being brought forward two weeks. Decreasing the lag between situation date and publication date from around eight weeks to between five and six weeks.</p> <p>There have been no delays to release dates since the introduction of the Joint Personnel Administration system in 2006-07.</p>
<b>Accessibility and Clarity</b>	<p><i><b>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).</b></i></p> <p>Tri-Service personnel reports are published on <a href="#">GOV.UK</a> and are available as pdfs or Excel value copies. Other formats may be possible for DS to produce on request. They 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 DS webpage. They can also be accessed via the former <a href="#">UK National Statistics Publication Hub</a><sup>11</sup> now on GOV.UK. Copies of the reports are also placed in the House of Commons library.</p> <p>The MPR, QPR and APR were introduced as a means of rationalising existing reports and include more detailed commentary and analysis. The commentary in each report identifies and analyses the key changes in the data and provide summary statistics. It discusses the quality of the underlying data, identifies specific issues and estimates their potential 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 against requirements, illustrate comparisons between the Services, and to facilitate identification of trends.</p>
<b>Coherence and Comparability</b>	<p><i><b>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).</b></i></p> <p>The DS statistics on UK Armed Forces are the definitive personnel statistics in the MOD. There are no other publically 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 RAF in other countries.</p>

	<p>Annual editions of UK Defence Statistics compendium dating back to 1992, plus historic Tri-Service publications dating back to 2002, are available on the statistics by topic section of the <a href="#">Defence Statistics website</a>. 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 across 2006/07 has also 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 has led to a revision of what and how much we can publish – for example some categories of outflow have had to be combined.</p>
<b>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 reports such as the QPR.</p>
<b>Assessment of User Needs and Perceptions</b>	<p><b><i>The section reports the processes for finding out about users and uses, and their views on the statistical products.</i></b></p>
	<p>DS (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 May 2009 over the proposal to replace the former Tri-Service publications 1-5 with the MPR and QPR and related issues. See <a href="#">Consultation on Reformatting the Armed Forces Statistics</a><sup>6</sup> in the reports section of the DS webpage for details. There was also a formal consultation for internal and external users on <a href="#">DS Annual Manpower Publications</a><sup>7</sup> between November 2010 and March 2011. Following these consultations DS received no negative feedback from external bodies regarding changes to the publications.</p> <p>Users are also encouraged to provide feedback on DS statistics 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.</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 programs and projects: <ul style="list-style-type: none"> <li>a. 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>iv. Facilitating academic research.</li> </ul>
<b>Performance, Cost and Respondent Burden</b>	<p><i><b>This section is about the effectiveness, efficiency and economy of the statistical output.</b></i></p> <p>DS has four branches dedicated to producing information relating to manpower and providing analysis and advice. However, the majority of time is spent on adding value through analysing, forecasting and answering ad hoc enquiries rather than producing the National Statistics. A number of other DS branches provide support to the manpower branches.</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>Confidentiality, Transparency and Security</b>	<p><i><b>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</b></i></p> <p><b>Security</b> 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> <p><b>Confidentiality</b> All published outputs are counts of individuals in particular groupings. The outputs are rounded according to Defence Statistics' rounding policy, which reflects the degree of accuracy of the outputs and prevents disclosure of information on individuals. See the rounding policy on the Defence Statistics policies page <a href="#">here</a><sup>8</sup>.</p> <p><b>Transparency</b> The MPR, QPR and APR 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>



## References

The Defence Statistics website can be accessed here:

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

	Reference	Address
1	Monthly Personnel Report	<a href="https://www.gov.uk/government/collections/uk-armed-forces-monthly-manning-statistics-index">https://www.gov.uk/government/collections/uk-armed-forces-monthly-manning-statistics-index</a>
2	Quarterly Personnel Report	<a href="https://www.gov.uk/government/collections/uk-armed-forces-quarterly-manning-report-statistics-index">https://www.gov.uk/government/collections/uk-armed-forces-quarterly-manning-report-statistics-index</a>
3	Annual Personnel Report	<a href="https://www.gov.uk/government/collections/uk-armed-forces-annual-manning-statistics-index">https://www.gov.uk/government/collections/uk-armed-forces-annual-manning-statistics-index</a>
4	Diversity Dashboard	<a href="https://www.gov.uk/government/collections/mod-diversity-dashboard-index">https://www.gov.uk/government/collections/mod-diversity-dashboard-index</a>
5	UK Defence Statistics and Bulletin 2.01	UK Defence Statistics Compendium <a href="https://www.gov.uk/government/collections/uk-defence-statistics-compendium-index">https://www.gov.uk/government/collections/uk-defence-statistics-compendium-index</a>  Bulletin 2.01 <a href="https://www.gov.uk/government/collections/tri-service-personnel-bulletin-statistics-index">https://www.gov.uk/government/collections/tri-service-personnel-bulletin-statistics-index</a>
6	Historic Consultation on Reformatting the Armed Forces Statistics  <i>[on National Archives web archive]</i>	<a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/policy_and_processes/consultations/conclusion-of-dasa-proposal-to-reformat-national-statistics.pdf">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/policy_and_processes/consultations/conclusion-of-dasa-proposal-to-reformat-national-statistics.pdf</a>
7	Historic Consultation on DS Annual Armed Forces Statistics  <i>[on National Archives web archive]</i>	<a href="http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/policy_and_processes/consultations/consultation-content-of-annual-manpower-national-statistics.pdf">http://webarchive.nationalarchives.gov.uk/20140116142443/http://www.dasa.mod.uk/policy_and_processes/consultations/consultation-content-of-annual-manpower-national-statistics.pdf</a>
8	Defence Statistics Revision, Correction and Rounding Policies	<a href="https://www.gov.uk/government/publications/defence-statistics-policies">https://www.gov.uk/government/publications/defence-statistics-policies</a>
9	Defence Statistics Pre-release List	<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>
10	Defence Statistics 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>
11	UK National Statistics Publication Release Dates	<a href="https://www.gov.uk/government/statistics/announcements">https://www.gov.uk/government/statistics/announcements</a>
12	Defence Statistics Official Statistics Consultations  <i>[on Defence Statistics homepage]</i>	<a href="https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics">https://www.gov.uk/government/organisations/ministry-of-defence/about/statistics</a>

**Updated: November 2014**