

Background Quality Report: UK Regular Armed Forces

Introduction	<p><i>This section provides the context for the quality report.</i></p> <p>Overview</p> <p>Defence Statistics (DS) publishes a large range of Armed Forces personnel statistics, the main purpose of which is to inform policy and decision making within the Department. Other uses of these statistics include measuring 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. 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 www.dasa.mod.uk:</p> <ul style="list-style-type: none">▪ UK Armed Forces - Monthly Personnel Report (MPR)¹▪ UK Armed Forces - Quarterly Personnel Report (QPR)²▪ UK Armed Forces - Annual Personnel Report (APR)³▪ UK Regular Forces - Diversity Dashboard⁴▪ UKDS⁵ - Bulletin 2.01 (excluding reserve forces and location statistics) <p>The MPR and QPR were introduced in 2009 to replace the following Tri-Service publications:</p> <ul style="list-style-type: none">▪ TSP 1 - UK Regular Forces Strengths and Changes▪ TSP 2 - UK Armed Forces Full Time Strengths and Trained Requirements▪ TSP 3 - UK Armed Forces Strengths and Requirements▪ TSP 4 - UK Armed Forces Quarterly Manning Report▪ TSP 5 - UK Regular Forces Outflow From Trained Strength To Civil Life <p>See the summary of the Consultation on Reformatting the Armed Forces Statistics⁶ for further details.</p> <p>The APR was introduced in 2011, to replace the following Tri- Service publications:</p> <ul style="list-style-type: none">▪ TSP 8 - Age Distribution of UK Regular Forces▪ TSP 9 - UK Regular Forces Rank Structure▪ TSP 19 - UK Regular Forces Intake and Outflow by Age <p>See the summary of the Consultation on DS Annual Manpower Publications⁷ on www.dasa.mod.uk for further details.</p> <p>Methodology and Production</p> <p>These statistics are primarily counts of strengths, inflows and outflows of military personnel broken down into the following populations of interest: 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. 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, Active Regular Reserve, and Sponsored Reserve. More background quality information on these populations can be found in here.</p>
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	<p>Categories relating to religion, nationality and ethnicity, included in the bi-annual diversity publication, are self declared by the individual on the Joint Personnel Administration system.</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 first of the month is calculated. This ensures most late-reporting is captured.</p> <p>The 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. 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 DS's 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 layers of 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.</p> <p>Contact details The Head of DS Tri-Service is the responsible statistician for these statistics. Contact details are:</p> <table data-bbox="491 1305 1313 1458"> <tr> <td>DS (Tri-Service)</td> <td>Tel: 020 7807 8896</td> </tr> <tr> <td>Ministry of Defence</td> <td>Fax: 020 7218 0969</td> </tr> <tr> <td>Floor 3 Zone K</td> <td>E-mail: Defstrat-stat-tri-hd@mod.uk</td> </tr> <tr> <td>Main Building, Whitehall</td> <td></td> </tr> <tr> <td>London SW1A 2HB</td> <td></td> </tr> </table>	DS (Tri-Service)	Tel: 020 7807 8896	Ministry of Defence	Fax: 020 7218 0969	Floor 3 Zone K	E-mail: Defstrat-stat-tri-hd@mod.uk	Main Building, Whitehall		London SW1A 2HB	
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<p>Relevance</p>	<p><i>This section is about the degree to which the statistical product meets user needs in both coverage and content.</i></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 & allowances, resettlement, and equality & 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 and it is the only publication with pre-release access (see the Reports Section⁸ of the DS webpage for pre-release access list), an accompanying ministerial submission, and a press-release.</p> <p>These statistics have been developed in close consultation with customers and have recently been reviewed to ensure they continue to meet all requirements of the Ministry of Defence as well as external customers. The recent review led to the reporting of additional personnel statistics including: voluntary outflow rates (necessary to inform retention policy); and</p>										

	<p>comparisons of strength against requirement (necessary to measure performance). The coverage of these statistics is close to, if not equal to 100% of all Regular 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 here. There are no known unmet user needs.</p>
<p>Accuracy and Reliability</p>	<p><i>This section is about the differences between the estimates and the unknown true values.</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 for the 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>
<p>Timeliness and Punctuality</p>	<p><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></p> <p>The monthly extracts are taken on the sixth calendar day. The editing and production process usually takes around 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 Publication Release Dates section¹⁰ of the DS webpage and on the UK National Statistics Publication Hub¹¹.</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>
<p>Accessibility and Clarity</p>	<p><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></p> <p>Tri-Service personnel reports are published on www.dasa.mod.uk and are available as web pages or pdfs. They can be found under the “National Statistics Publication” section or by searching for “personnel” on the DS webpage. They can also be accessed via the UK National Statistics Publication Hub¹¹ or through an internet search engine such as Google. 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 plus 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>
<p>Coherence and Comparability</p>	<p><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></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 Naval Service, Army, and RAF in other countries.</p>

	<p>Annual editions of UKDS dating back to 1992, plus historic Tri-Service publications dating back to 2002, are available on the Defence Statistics website. 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 suppressed.</p>
<p>Trade-offs between Output Quality Components</p>	<p><i>This section reports the extent to which different aspects of quality are balanced against each other.</i></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.</p>
<p>Assessment of User Needs and Perceptions</p>	<p><i>The section reports the processes for finding out about users and uses, and their views on the statistical products.</i></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 Consultation on Reformatting the Armed Forces Statistics⁶ in the reports section of the DS webpage for details. There was also a formal consultation for internal and external users on DS Annual Manpower Publications⁷ 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 through an automatic pop-up form on the DS website and through the annual consultation meetings. See the Minutes from the latest Defence Statistics Official Statistics Consultation meeting¹².</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"> i. Informing the general public's choices: <ul style="list-style-type: none"> e. about the performance of government and public bodies ii. Government decision making about policies, and associated decisions about related programs and projects: <ul style="list-style-type: none"> b. policy monitoring

	<p>The underlying data also allow for:</p> <ul style="list-style-type: none"> ii. Government decision making about policies, and associated decisions about related programs and projects: <ul style="list-style-type: none"> a. policy making vii. Facilitating academic research.
<p>Performance, Cost and Respondent Burden</p>	<p><i>This section is about the effectiveness, efficiency and economy of the statistical output.</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 (there are 15 in total) 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>
<p>Confidentiality, Transparency and Security</p>	<p><i>This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.</i></p> <p>Security All staff involved in the statistical 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 access to raw data is password protected.</p> <p>Confidentiality All published outputs are counts of individuals in particular groupings. The outputs are rounded according to DS's rounding policy, which reflects the degree of accuracy of the outputs and prevents disclosure of information on individuals.</p> <p>Transparency 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

	Reference	Website Location
1	Monthly Personnel Report	http://www.dasa.mod.uk/index.php/publications/personnel/military/monthly-personnel-report
2	Quarterly Personnel Report	http://www.dasa.mod.uk/index.php/publications/personnel/military/quarterly-personnel-report
3	Annual Personnel Report	http://www.dasa.mod.uk/index.php/publications/personnel/military/annual-personnel-report
4	Diversity Dashboard	http://www.dasa.mod.uk/index.php/publications/personnel/combined/diversity-dashboard
5	UKDS	http://www.dasa.mod.uk/index.php/publications/UK-defence-statistics-compendium
6	Consultation on Reforming the Armed Forces Statistics	http://www.dasa.mod.uk/policy_and_processes/consultations/conclusion-of-dasa-proposal-to-reformat-national-statistics.pdf
7	Consultation on DS Annual Armed Forces Statistics	http://www.dasa.mod.uk/policy_and_processes/consultations/consultation-content-of-annual-manpower-national-statistics.pdf
8	Reports section of DS web	http://www.dasa.mod.uk/index.php/policy_and_processes/pre-release-access-list
9	DS Revision and Correction Policy	http://www.dasa.mod.uk/policy_and_processes/policies/defence-statistics-revisions-and-corrections-policy-v1.pdf
10	Publication Release Dates	http://www.dasa.mod.uk/index.php//release-calendar/upcoming-releases
11	UK National Statistics Publication Hub	http://www.statistics.gov.uk/hub/index.html
12	Minutes from the latest DS Official Statistics Consultation	http://www.dasa.mod.uk/index.php/policy_and_processes/consultations

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