Introduction

This section provides the context for the quality report.

Overview

DASA 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 are mainly counts of strengths, intake and outflows of military personnel by different categories. Strengths are also compared to the requirement for UK Regular Armed Forces and surpluses and deficits are calculated.

This background quality report covers the principal military personnel statistics published on www.dasa.mod.uk:

- UK Armed Forces Monthly Manning Report (MMR)¹
- UK Armed Forces Quarterly Manning Report (QMR)²
- UK Armed Forces <u>Annual Manning Report (AMR)</u>³
- <u>UK Defence Statistics</u>⁴ Chapter Two (excluding civilian personnel, reserve forces and location statistics)

The MMR and QMR were introduced in 2009 to replace the following Tri-Service publications:

- 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

See the summary of the <u>Consultation on Reformatting the Armed Forces</u>
<u>Statistics</u>⁵ for further details.

The AMR is planned to be introduced in 2011, to replace the following Tri-Service publications:

- 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

DASA is consulting both internal and external users. The <u>Consultation on DASA Annual Manpower Publications</u>⁶ on <u>www.mod.uk</u> provides further details.

Methodology and Production

The statistics are mainly counts of strengths, inflows and outflows of military personnel by a range of categories, including breakdowns by: Army, Navy and RAF; officer and other ranks; males and females; ethnic origin; trained and untrained; type of flow (exits, voluntary release and other reasons); rank and age.

The 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 the legacy single Service administration systems were used to produce the statistics.

Extracts are taken from JPA each month and stored on a separate database to form a time series. The extracts are taken sixth 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.

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.

The data is then made available to DASA'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.

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.

Contact details

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We welcome feedback on this Background Quality Report or any of the statistics mentioned.

Relevance

This section is about the degree to which the statistical product meets user needs in both coverage and content.

The principal customers for the tri-Service publications are within the Deputy Chief of Defence Staff (Personnel and Training) area of the Ministry of Defence. They 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 QMR is used to inform the Defence Management Board performance scorecard report and the Manning Communications Working Group. It is the only publication with pre-release access (see the Reports Section of the DASA webpage for pre-release access list), an accompanying ministerial submission, and a press-release.

The statistics have been developed in close consultation with the customers and have recently been reviewed to ensure they continue to meet all the requirements of both internal and external customer. This includes voluntary outflow rates to inform retention policy and comparisons

of strengths against requirements to measure performance. The coverage is close to if not equal to 100% of all Regular Armed Forces personnel and includes Special Forces, Full Time Reserve Service and Gurkhas. Reserve Forces are covered in a separate report. There are no known unmet user needs.

Accuracy and Reliability

This section is about the differences between the estimates and the unknown true values.

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.

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.

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 DASA 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.

All tables published from JPA since April 2007 data have been marked as provisional due to ongoing validation of these data. The introduction of this new administrative system caused data input errors so DASA are working to released a cleansed dataset when they have removed errors. As issues with the data have been discovered the figures have been revised following DASA's revision policy⁸. For instance, the MMR has been revised three times since its introduction in June 2009 impacting 10 publications. However, revisions to strengths are typically very small and are due to processing errors which once identified have processes put in place to prevent them from re-occurring.

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).

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.

The following table provides examples of the timeliness for 2010/11. The Annual Manning Report will replace TSP 8, TSP 9 and TSP 19 and so the timeliness figures refer to these legacy reports.

Publication	Situation Date	Publication Date
UK Armed Forces - Monthly Manning Report	1 Jan 11	10 Feb 11
UK Armed Forces - Quarterly Manning Report	1 Jan 11	10 Feb 11
TSP 8 - Age Distribution of UK Regular Forces	1 Apr 10	10 Jun 10
TSP 9 - UK Regular Forces Rank Structure	1 Apr 10	10 Jun 10
TSP 19 - UK Regular Forces Intake and Outflow by Age - 2009 - 2010	1 Apr 10	10 Jun 10
UK Defence Statistics – Chapter 2	1 Apr 10	29 Sep 10

Historic and planned publication dates can be found on the <u>Publication</u> Release <u>Dates section</u>⁹ of the DASA webpage and on the <u>UK National</u> Statistics <u>Publication Hub</u>¹⁰.

The publication dates were reviewed in 2010 following improvements in the timeliness of edited data and production processes. This resulted in the MMR and QMR 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.

There have not been any delays to release dates since introduction of the Joint Personnel Administration system.

Accessibility and Clarity

This section reports on the: ease with which users are able to access the data and 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).

The reports are published on www.dasa.mod.uk and are available as webpages or pdfs. They can be found under the "National Statistics Publication" section or by searching for "manning" on the DASA webpage. They can also be accessed via the UK National Statistics Publication Hub¹⁰ or through an internet search engine such as google. Copies of the reports are also place in the House of Commons Library.

The MMR, QMR and AMR were introduced as a means of rationalising existing reports and include more commentary and analysis. The commentary in each report 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 against requirements, illustrate comparisons between the Services and to ensure trends can be easily identified

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).

The DASA statistics on UK Armed Forces are the definitive manning

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.

The UK Armed Forces manning 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 RAF, Navy and Army in other countries.

Each annual edition of UK Defence Statistics since 1992 and historic Tri-Service publications back to 2002 are available on www.dasa.mod.uk. 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, on what was available some information (divorce rates for the RAF for instance) were available under the legacy system but not on JPA. This has meant the revising what or how much we can publish – for instance some categories of outflow have been suppressed.

Trade-offs between Output Quality Components

This section reports the extent to which different aspects of quality are balanced against each other.

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.

Since the introduction of JPA, much of the Armed Forces manning statistics have been published as provisional. This trade-off has ensured that the information was made available even though there were still some unresolved potential quality issues. We will release some revised tables and the full revisions will be available on BYOT.

Assessment of User Needs and Perceptions

The section reports the processes for finding out about users and uses, and their views on the statistical products.

DASA (Quad-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.

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 MMR and QMR and related issues. See <u>Consultation on Reformatting the Armed Forces Statistics</u>⁵ in the reports section of the DASA webpage for details. There was also a formal consultation of internal and external users on <u>DASA Annual Manpower Publications</u>⁶ between November 2010 and March 2011. However, despite these consultations DASA has not received any feedback from external bodies.

Users are also encouraged to provide feedback on DASA statistics through an automatic pop-up form on the DASA website and through the

annual consultation meetings. See the Minutes from DASA's latest Official Statistics Consultation meeting 11.

Performance, Cost and Respondent Burden

This section is about the effectiveness, efficiency and economy of the statistical output.

DASA 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 adhoc rather than producing the National Statistics. Some of DASA's other branches (there are 15 in total) provide support to the manpower branches.

There is very little respondent burden as nearly all the data is automatically obtained from administrative systems. However, this is supplemented with small amounts of data and input from other areas within the MOD.

Confidentiality, Transparency and Security

This section is about the procedures and policy used to ensure sound confidentiality, security and transparent practices.

Security

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.

Confidentiality

All published outputs are counts of individuals in particular groupings. The outputs are rounded according to DASA's rounding policy, which reflects the degree of accuracy of the outputs and prevents disclosure of information on individuals.

Transparency

The MMR, QMR and AMR 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.

References

	Reference	Website Location
1	Monthly Manning Report	http://www.dasa.mod.uk/index.php?pub=MMR
2	Quarterly Manning Report	http://www.dasa.mod.uk/index.php?pub=QMR
3	Annual Manning Report	http://www.dasa.mod.uk/index.php?pub=QMR
4	UK Defence Statistics	http://www.dasa.mod.uk/index.php?pub=UKDS
5	Consultation on Reformatting the Armed Forces Statistics	http://www.dasa.mod.uk/modintranet/TSP%20Consultation/consultationFinished.html?PublishTime=09:30:00
6	Consultation on DASA Annual Armed Forces Statistics	http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/ConsultationsandCommunications/PublicConsultations/ConsultationOnDasasAnnualManpowerNationalStatisticsPublications.htm
7	Reports section of DASA web	http://www.dasa.mod.uk/applications/newWeb/www/index.php?page=66&pubType=3
8	DASA Revision and Correction Policy	http://bravo.dasa.r.mil.uk/applications/newWeb/www/index.php?page=48&pubType=3&thiscontent=3360&PublishTime=09:30:00&date=2009-10-02&disText=Single%20Report&from=listing&topDate=2009-10-02
9	Publication Release Dates	http://www.dasa.mod.uk/applications/newWeb/www/index.php?page=68
10	UK National Statistics Publication Hub	http://www.statistics.gov.uk/hub/index.html
11	Minutes from DASA's latest Official Statistics Consultation	http://www.dasa.mod.uk/applications/newWeb/www/index.php?page=48&pubType=3&thiscontent=820&PublishTime=09:30:00&date=2010-06-17&disText=27th%20May%202010&from=listing&topDate=2010-06-17