

Background Quality Report: Tri-Service Personnel (TSP) 7 – UK Reserve Forces & MOD Sponsored Cadets

Introduction	<p><i>This section provides the context for the quality report.</i></p> <p>Overview</p> <p>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 form part of that portfolio of service personnel and are concentrated on the UK Reserve Forces both regular and volunteer. They are counts of strengths only by different categories.</p> <p>This background quality report covers the principal military personnel statistics published on www.dasa.mod.uk:</p> <ul style="list-style-type: none">▪ UK Reserve Forces - TSP 7¹▪ UK Defence Statistics² – Chapter Two (reserve forces statistics) <p>Methodology and Production</p> <p>The statistics are counts of strengths, military reserve personnel by a range of categories, including breakdowns by: Army, Navy and RAF; regular and volunteer reserves; officer and other ranks; males and females.</p> <p>The statistics are partially derived from the Department’s Joint Personnel Administration (JPA) system, which is used for the administration of all Armed Forces personnel, and partially from individual units and other centrally managed databases. Prior to the introduction of JPA in 2006/07 the 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.</p> <p>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.</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 be consistent with our other publications and to ensure small numbers do not disclose information on individuals.</p> <p>Naval Service volunteer reserve data were provided direct to Quad-</p>
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	<p>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.</p> <p>Cadet data are provided to Quad Service by Deputy Chief of Defence Staff (Reserve Forces and Cadets) and sourced from the Cadet Management Information System.</p> <p>Contact details Head of DASA Quad Service, is responsible for these statistics. His contact details are:</p> <p>DASA (Quad-Service) Tel: 020 7807 8896 Ministry of Defence Fax: 020 7218 0969 Floor 3 Zone K E-mail: dasa-quad-hd@dasa.mod.uk Main Building, Whitehall Web site: www.dasa.mod.uk London SW1A 2HB</p> <p>We welcome feedback on this Background Quality Report or any of the statistics mentioned.</p>
<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 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 and overall troop numbers. In particular the TSP7 will be used and developed to support the Future Reserves 2020 Programme. This product is also used to answer parliamentary questions and Freedom of Information requests. The TSP 7 is also used to inform the Defence Management Board performance scorecard report.</p> <p>The statistics are more a reflection of what we are able to report, rather than meeting all of the customer needs. Data availability is not complete and quality is untested in several elements, but we lack the resources and knowledge to investigate a wide range of issues. This has prevented us from developing and updating these statistics as we would like. The publication remains the only externally published source of statistics on this subject so we decided to continue to publish them. There are unmet internal user needs and we are in consultation with them to rectify that where we can.</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, and this is also the case for the vast majority of volunteer reserves. (Although for a small number this is not the case). The data on the overall numbers on volunteer reserves is therefore considered to be reasonably accurate, and is published in TSP 7.</p> <p>Cadets data is sourced from both combined and single Services, and</p>

DASA is not aware of any major data quality concerns.

For regular reserves, the data is not published for the Army or the Naval Service because Tri-Service Regular Reserve data were not migrated across from legacy systems onto the Joint Personnel Administration (JPA) system. Data subsequent to its introduction have been sourced from the single Services where available (for the RAF, via JPA).

Therefore what is held on JPA has been different for each of the Services and the reliability varies. Reliability of some of the more detailed level of data (for example trained or untrained) is not felt to be as reliable, and therefore TSP 7 only contains breakdowns where data quality is felt to be at a reasonable level. However, efforts have been made to investigate and improve the detailed data quality in some aspects of the reserves – particularly the Territorial Army.

The variation in quality is partly due to differences in the recording of information - some 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 some of this late reporting. Also the introduction of the JPA system meant the loss of some historical reserves information, in particular whether a person had a reserve liability when they left.

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 2011. Whilst there have been efforts to migrate some of these data onto JPA, it is not yet considered robust enough to be the authoritative and only source for Official Statistics on Naval Service or Royal Air Force volunteer reservists.

Where information is held in JPA, 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, although there is no specific procedure which focuses on Reservist personnel, apart from the Army. In the case of the Army, a range of detailed breakdowns on volunteer reservists are produced each quarter and these are compared with previous quarter'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.

The problems affecting the quality of reservist data are acknowledged widely among policy colleagues within the Department. The Future Reserves 2020 (FR20) programme emphasised the need for good quality management information on volunteer reserves, in order for the Department to manage the workforce and properly monitor its progress towards FR20 targets. It has provided funding for DASA to dedicate two analysts for three years to working with the single Services to advise on and test the quality of reserves data. To date, DASA has produced an outline plan for improving reserves information which will be progressed as and when the analysts are in post.

	<p>1. Understanding the populations and current data processing rules. This will involve meeting with single Service experts and potentially establishing working groups to agree rules and definitions where these are not already extant.</p> <p>2. Ensuring consistent recording of information. In order to present consistent and reliable Reserves information, data should ideally be recorded on the same system using defined rules and processes. The DASA analysts will work with the Services to ensure that information is recorded and processed in line with agreed rules and definitions.</p> <p>3. Reviewing and augmenting TSP7 to ensure that it presents accurate, reliable information which meets the needs of both internal and external users. DASA will hold a consultation at this stage.</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. In addition we need to check and validate the manual feeders before we can publish as a National Statistic.</p> <p>The following table provides an example of the timeline for 1 April 2012 TSP 7.</p> <table border="1" data-bbox="512 1173 1374 1290"> <thead> <tr> <th>Publication</th> <th>Situation Date</th> <th>Publication Date</th> </tr> </thead> <tbody> <tr> <td>TSP 7 - UK Reserve Forces & Cadets</td> <td>1 Apr 12</td> <td>17 May 12</td> </tr> </tbody> </table> <p>Historic and planned publication dates can be found on the Publication Release Dates section³ of the DASA webpage and on the UK National Statistics Publication Hub⁴.</p>	Publication	Situation Date	Publication Date	TSP 7 - UK Reserve Forces & Cadets	1 Apr 12	17 May 12
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<p>Accessibility and Clarity</p>	<p><i>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).</i></p> <p>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 “reserves” on the DASA webpage. They can also be accessed via the UK National Statistics Publication Hub⁴ or through an internet search engine such as google.</p> <p>The TSP7 covers many of the different types of reserves and cadet 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</p>						

	<p>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>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 DASA statistics on UK Reserve Forces are the definitive personnel statistics in the MOD. There are no other publically available regular publications on the numbers of UK Reserve and Cadet Forces with which to ensure coherence. Within the MOD direct queries of the Joint Personnel Administration system will produce 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>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.</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 three weeks. We do not have the resource to investigate further so we publish to a level that we feel is appropriate. In many cases with reserves and cadets we are solely reliant on single service subject matter experts providing us with summary statistics.</p> <p>Since the introduction of JPA, much of the personnel 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 have release some revised tables and there will be further revisions but the entire series will be available on BYOT. We currently release statistics from JPA as final.</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>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.</p> <p>However 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"> 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 programmes 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 programmes 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>DASA 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 adhoc queries rather than producing the National Statistics per se. Some of DASA's other branches (there are approximately 15) provide support to the manpower branches.</p> <p>There is some respondent burden as not all data are automatically obtained from administrative systems.</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 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> <p>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.</p> <p>Transparency The TSP 7 provides 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	Tri-Service Personnel 7 – UK Reserve Forces	http://www.dasa.mod.uk/index.php?pub=TSP7
2	UK Defence Statistics	http://www.dasa.mod.uk/index.php?pub=UKDS
3	Publication Release Dates	http://www.dasa.mod.uk/applications/newWeb/www/index.php?page=68
4	UK National Statistics Publication Hub	http://www.statistics.gov.uk/hub/index.html

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