

Census 2001

One Number Census Quality Assurance information: Quality Assurance themes

Armed forces

Problem

Home armed forces are one of the subgroups that are difficult to enumerate. They are subject to frequent changes in location, often at short notice. Many also live in large communal accommodation blocks which can lead to problems which are common with other similar establishments such as student halls of residence. Armed forces personnel living in barracks who owned a property elsewhere were asked to fill in a form for the place they spent the most time and this will have reduced the number of people enumerated as living in bases.

The Quality Assurance strategy included a comparison of the 2001 Census count of home armed forces against both the Defence Analytical Services Agency (DASA) data and the 2000 mid-year estimate (MYE) of home armed forces. The DASA data places people where they are stationed, whereas the MYEs applies a residence matrix to the DASA data to estimate the home armed forces on a residence base.

The QA panel noted that the ONC estimates were lower than than 2000 MYEs in a number of areas containing high concentrations of Home Armed Forces. There was also some disparity between the number of Armed Forces recorded by DASA and the number captured by the Census. Conversely, in other areas there were noticeably more home armed forces than in either the 2001 MYEs or the 2001 DASA data.

The QA panel concluded that the differences could be a result of a number of causes, such as: definitional differences; error in the base to residence matrix used by the PEU; form completion errors; coding errors; and undercount in the Census.

Actions

Further work:

- identified areas with expected high concentrations of home armed forces, and examined the geographical location of the bases within them. This highlighted that some of the armed forces bases were close to area boundaries, which meant personnel could be living in the surrounding areas and travelling to the bases.
- looked at the workplace postcode of a 10% sample of armed forces personnel enumerated for selected areas where the Census counts were larger than the comparator data.
- assessed the accuracy of DASA data in relation to the definitions used to place armed forces at a particular base.
- assessed the quality of coding and form completion.
- reviewed alternative sources of information regarding the numbers of armed forces living in communal accommodation.

Results

This further work led to improvements in the information provided in the QA process, including additional charts for aggregated areas to reflect cross border flows.

The analysis of workplace postcodes did highlight members of the home armed forces that worked a significant distance from their usual residence.

There was evidence that some armed forces personnel had been coded as civilians, reflecting form completion difficulties rather than errors in the coding system. The Census Quality report will include more information on the quality of the statistics for this subgroup, but it is clear that this explains most of the large differences. The information was fed into the QA process so that the armed forces comparisons could take account of this. ONS will release more detailed analysis on Armed Forces in due course to help with the interpretation and use of Armed Forces information.

Adjustments for undercount among the armed forces were distributed between the areas with the largest differences between the comparator data and these were made to the populations of communal establishments. Following further discussions with officials at DASA, extra information was provided detailing the number of people paying to live in communal accommodation, by establishment, for each of the services. This allowed us to distribute the adjustment for an area between the communal establishments within that EA. A total of 35 adjustments to defence communal establishments were made. The total adjustment made was based on a national comparison between the ONC estimates adjusted for the completion difficulties and the DASA total of home armed forces.