

# Background Quality Report: DASA Industry Statistics

## Section 1: Introduction

### 1.1 Overview of the statistical output

The Industry section of Chapter 1 in UK Defence Statistics (UKDS) is produced as part of the transparency and accountability of the Ministry of Defence (MOD) to Parliament and the public.

There are two distinct parts to this family of statistics. The first is an analysis of MOD expenditure in the UK broken down by Industry group. These statistics use a range of financial and contracts data to estimate spend by broad Standard Industrial Classification (SIC) grouping and are presented as a time series. The second relates to payment information about Public Finance Initiative (PFI) contracts with the MOD which is presented in bands and alphabetically ordered to maintain commercial confidentiality.

#### History

The Industry statistics in UKDS used to form part of a larger group of statistics, designed to show the impact of MOD spending on the UK economy and regions. National and Regional Defence dependent Employment Estimates ceased to be produced from 2009 as they did not meet any MOD policy or decision making requirement and the Leontief matrix (derived from ONS input-output tables) required for the analysis was no longer produced by the ONS. Full details explaining the background for the cessation of these statistics were published on the DASA website and in the [2009 edition of UKDS](#).

Due to the move from cash accounting to Resource Accounting and Budgeting (RAB), there is a break in series for the industrial estimates between 2002-3 and 2003-4.

#### Strengths and Weaknesses

The strengths of these statistics include the clear commentary, including links to classifications and mappings, measures to protect confidentiality and a graphical presentation of trends over time. The use of nationally and internationally recognised classifications (SIC) also promotes comparability with other data sources.

Weaknesses are that this section of UKDS no longer paints a full picture of the impact on the MOD's spending with industry. The industrial analysis only includes spend in the UK and does not include all spend by trading funds. Despite cleansing, there remain some weaknesses in the quality of the data.

#### Future Improvements

The production of supply chain analysis and statistics would be an improvement to this family of statistics but unfortunately the data to produce this is not centrally available. For UKDS 2011 we intend to extend this family of statistics by including analysis of the MOD's top 10 suppliers and the relative importance to their turnover of MOD business.

#### Latest Publications

1. The [Industry section of UKDS 2010](#).
2. Defence Statistics Bulletins [5](#) and [5a](#) – describe the methods for estimating employment

statistics which incorporates the industrial analysis.

3. SIC grouping [mapping document](#)
4. [List of current PFI projects used in the analysis of Table 1.12](#)

## 1.2 Producer Information

These statistics are produced by the Defence Expenditure Analysis Branch within Defence Analytical Service and Advice (DASA) which is part of the Ministry of Defence (MOD). The statistician responsible for these statistics is Nick Bennett who can be contacted by emailing [DASADESA-DEA-HOB@mod.uk](mailto:DASADESA-DEA-HOB@mod.uk)

Further details about how to contact DASA can be found [here](#).

## 1.3 Summary of method and processes used to compile outputs

We are supplied with financial, accounts and contracts data from the MOD's Financial Management Information Systems (FMIS). The accounts data is compiled using international accounting standards and is audited by the National Audit Office (NAO). We use the single source of contracts data (PtP) which is used by the MOD's bill payments centre (FMSSC) for making payments. We have carried out investigations into the data quality of contracts data and cleanse the fields most relevant to our analysis.

We also use data from the following to construct the industrial group breakdown table:

- Typhoon and Tornado PTs – Value of UK workshare.
- MOD People Pay & Pensions Agency (PPPA) – Civilian T&S expenditure.
- Export sales data from UK Aerospace, Defence, Security and Space (ADS) group
- Contract expenditure by the Foreign Military Sales Unit of the British Defence Staff in the US.
- Defence Support Group Annual Accounts – [www.dsg.mod.uk](http://www.dsg.mod.uk)
- Meteorological Office Annual Accounts - [www.metoffice.gov.uk](http://www.metoffice.gov.uk)
- Defence Science and Technology Laboratory (Dstl) Annual Accounts [www.dstl.gov.uk](http://www.dstl.gov.uk)
- Atomic Weapons Establishment (AWE) Annual Accounts [www.awe.co.uk](http://www.awe.co.uk)
- QinetiQ Annual Accounts [www.qinetiq.com](http://www.qinetiq.com)

The process to construct Table 1.11 (Expenditure by industry group) is complex. Defence Statistics Bulletins [5](#) and [5a](#) describe the methods for estimating employment statistics which incorporates the industrial analysis.

Each PFI consists of a number of contracts. The PFI unit within the MOD supply a list of contract numbers for each PFI which we then run against contracts data to determine the payments on specific PFIs in the last year.

## 1.4: Other Documentation

- [DASA Pre-Release Access lists](#)
- [DASA confidentiality policy](#)
- [DASA revisions policy](#)
- [Statement of Administrative Data Sources](#)

## Section 2: Quality Dimensions

**2.1 Relevance:** The degree to which the statistical product and underlying data meet user needs for both coverage and content.

These statistics and the extended analysis undertaken from the data that support them are used to inform and support policy making both directly and through think pieces/studies. Recent examples of this are the Strategic Defence and Security Review (SDSR) and Security and Technology Green Papers. Internal users use these statistics as management information and when producing senior/ministerial briefings and speeches. There has been particular interest in MOD expenditure by region.

The data has been used by the Office for Government Commerce (now part of the Efficiency and Reform Group within the Cabinet Office) to produce an “MOD spend map”.

We receive a number of Parliamentary Questions and Freedom of Information requests regarding this data. Questions tend to ask for more detailed information on the data provided in the Industry breakdown table, with particular interest in the ‘Hotels & Restaurants’ and ‘Weapons & Ammunitions’ categories.

If you use this data in another way please [contact us](#).

### Unmet user needs

Supply chain analysis has been requested but unfortunately the data to produce this is not centrally available.

**2.2 Accuracy:** The closeness between an estimated result and the (unknown) true value, and the accuracy of the raw data.

We are supplied with financial, accounts and contracts data from the MOD’s Financial Management Information Systems (FMIS). The accounts data is subject to international accounting standards and is audited by the NAO.

### Issues with contracts data

We use the single source of contracts data (PtP) which is used by the MOD’s bill payments centre (FMSSC) for making payments. This is administrative data which is compiled from forms filled in by commercial staff and is therefore subject to responder error. We undertake cleansing on a select number of fields which are particularly relevant to our analysis but do not cleanse all fields due to time and resource constraints. The recent introduction of introduction of P2P (e-commerce) has led some contracts appearing on the system twice, sometimes with different contract values. We are working to understand and resolve this problem.

We are key stakeholders (formerly Chair) in a Commercial Data Working Group (CDWG) which has a specific work strand dedicated to improving the quality of the data input at source by MOD commercial officers.

### Creation of breakdown by industry group

The creation of this table is complex. It has been peer reviewed but some of the mappings used are based on judgement. A full discussion of the problems with attributing SIC groupings to MOD expenditure is given in Defence Statistics Bulletins [5](#) and [5a](#).

## Revisions

We follow the [DASA revisions policy](#). Where we have corrected errors we have alerted users by including r markers and notes in the commentary to the table.

**2.3 Timeliness and Punctuality:** Timeliness refers to the lapse of time between publication and the period to which the data refer. Punctuality refers to the time lag between the actual and planned dates of publication.

These tables are published in line with the UKDS publication timetable. Table 1.11 (Expenditure breakdown by industry group) is published 18 months after the end of the financial year. This delay is due to the finalising of data sources and the fact that UKDS is only published annually. Tables 1.12 and 1.12a (PFI payments) are published 6 months after the end of the financial year.

All releases of these tables have been punctual.

**2.4 Accessibility and Clarity:** Accessibility is the ease with which users are able to access the data output, also reflecting the format(s) in which the output is available and the availability of supporting information. Clarity refers to the quality and sufficiency of the metadata, illustrations and accompanying advice.

DASA publish this data through UK Defence Statistics which is freely available on the DASA website. This section of UKDS receives around 50 web hits per month. The data can be downloaded in several formats (e.g. Excel, PDF and HTML) and is accompanied by commentary to provide supporting information, along with links to relevant publications and metadata.

When deciding on the formats for publication of this data we considered the quality of data (to influence the degree of rounding), commercial sensitivities, consistency over time and user accessibility. The PFI data is presented in payment bands and ordered alphabetically both for confidentiality and for ease of comparison with last years table. The industry breakdowns in Table 1.11 (Expenditure breakdown by industry group) classify spend by industry based on the SIC which can be mapped to the EUROSTAT NACE classification and the UN systems ISIC at a high level.

We have received no feedback relating to accessibility and clarity. If you have feedback please [contact us](#).

**2.5 Coherence and Comparability:** Coherence is the degree to which data that are derived from different sources or methods, but which refer to the same phenomenon, are similar. Comparability refers to the degree to which data can be compared over time and domain.

In order for the data on PFI projects to be coherent with that on the HM Treasury website, we ensure that the same names are used. HMT publish planned payments on PFI contracts over the life of each project. However, we present the actual payments made in a given year which can differ from what was planned. As we present data in payment bands there are rarely inconsistencies in what is published.

Table 1.11 (Expenditure by Industry group) uses accounts data so the table is consistent with the MOD Resource Accounts. We also use PtP which is the single source of contracts data,

making it consistent with other contracts data released by the MOD.

We classify spend by industry based on the SIC which can be mapped to the EUROSTAT NACE classification and the UN systems ISIC at a high level. SIC [mappings](#) have allowed the classifications to be consistent over time.

### **Breaks in Series**

The break in series between 2002/03 and 2003/04 reflects the fact that for 2002/03 the contracts data was still based on Internal Account Codes (used under the old cash system), and was migrated to Resource Accounting Codes one year later than the accounting systems, on 1 April 2003.

For 2008/09, industrial groupings are based on the 2007 Standard Industrial Classification. The increase in spend during 2008/09 is not due to the change to SIC 2007 classifications but rather an increase in overall MOD expenditure on goods and services

**2.6 Trade-offs between Output Quality Components:** Output quality components are not mutually exclusive in the sense that there are relationships between the factors that contribute to them. There are cases where the factors contributing to improvements with respect to one component lead to deterioration with respect to another.

For Table 1.11 (Expenditure breakdown by industry group) we cleanse the SIC field on contracts data on a monthly basis. This improves the accuracy of the data but has a negative affect on timeliness. However, as we require a number of data sources for this work, some of which are not available in time for analysis for the current issue of UKDS, the affect of SIC cleansing on timescales is minimal.

**2.7 Assessment of User Needs and Perceptions:** Users are provided with products and services that meet their needs. The articulated and non-articulated needs, demands and expectations of external and internal users should guide the department.

Users are encouraged to provide feedback on UKDS through the feedback tool on the DASA website or through the annual consultation meetings. Users are informed of the latest changes to these statistics through the annual consultation meeting which offered the opportunity for feedback. [Minutes from the Official Statistics Consultation meeting](#) and the [DASA user feedback report](#) are available on the DASA website.

More informally, we monitor the requests for information that we receive from within the MOD and from outside, and respond accordingly.

Our current assumptions about users and uses of these statistics are contained in [Section 2.1 - Relevance](#). If you use these statistics in another way please [contact us](#).

**2.8 Performance, Cost and Respondent Burden:** Resources must be effectively used. The desired outcome must be produced cost effectively. Respondent burden should be proportional to the needs of users and not excessive for respondents.

In producing these statistics, our main data source is administrative data. We receive a bespoke data extract for the contracts data with some DASA specific fields and formats relating to SIC codes, Resource Accounts and Location codes. The negotiations to agree this requirement incurred a small overhead for DASA but the resource involved in producing the

extract by the supplier was absorbed as part of a phased pan-departmental systems requirement exercise. The majority of this data is used for a range of analysis and is used by other analysts within the MOD.

We undertake cleansing on a select number of fields which are particularly relevant to our analysis but do not cleanse all fields due to time and resource constraints.

All statistics are provided free of charge on the DASA website.

**2.9 Confidentiality, Transparency and Security:** The privacy of data providers (e.g. administrations, enterprises and others), the confidentiality of the information they provide and its use only for statistical purposes must be absolutely guaranteed. The department must produce and disseminate statistics respecting scientific independence and in an objective, professional and transparent manner in which all users are treated equitably.

In producing these statistics, we adhere to the [DASA confidentiality policy](#). To protect commercial sensitivities the industrial analysis statistics are aggregated and rounded, and the PFI data is presented in bandings with projects ordered alphabetically.

Despite our continued efforts, there is no disclosure policy for commercial data. We will continue to pursue this with our policy colleagues, especially in light of the Transparency Agenda.

We adhere to the principles and protocols laid out in the Code of Practice for Official Statistics and comply with pre-release access arrangements. The [DASA Pre-Release Access lists](#) are available on the DASA website.

We maintain good links with policy colleagues to ensure that these statistics are understood and prevent misuse. UKDS contains commentary explaining these statistics. We are currently conducting a commentary review and as part of this we will be incorporating information about the limitations of our statistics into the commentary.