## Background Quality Report: Trade Statistics

**Section 1: Introduction** 

### 1.1 Overview of the statistical output

The Trade Section of UK Defence Statistics (UKDS) Chapter 1 includes the estimated value of export orders of Defence equipment and services and payments made for services consumed by MOD establishments overseas (referred to as Balance of Payments Trade in Services or BoP).

The MOD's Balance of Payments statistics support the ONS estimate of the value of the UK's BoP which is a measure of the UK's trading account with the rest of the world and is one of the UK's key economic statistical series.

#### **History**

The statistics contained in the Trade section of UKDS Chapter 1 have been produced for over 30 years. Until 2009, this family of statistics included additional tables on Defence Import and Export deliveries but due to data quality problems and resource constraints we now publish two tables: estimates of identified export orders - Defence equipment & services; and MOD estimated Balance of Payments for Trade in Services. The quality of Defence trade statistics was overseen by the pan-government Defence Trade Statistics Working Group which was disbanded in 2009. Further details outlining the rationale for the cessation of these statistics were published on the DASA website and can be found at this link.

The ONS publish UK estimates of Government Trade-in-Services as part of the National Statistics product "The Pink Book" and on a quarterly basis as a Statistical First Release. Production of these statistics are a statutory requirement covered by <a href="EU statistical legislation">EU statistical legislation</a>. The ONS have confirmed that if DASA were to cease production of these figures, they would lack a significant element of the Government Services total and would necessarily have to produce alternative estimates for the MOD's contribution. This could have a major impact upon the quality of the National Statistics contained in "The Pink Book".

Neither of the tables we produce are badged as National Statistics due to some concerns over the quality of underlying data.

#### **Strengths and Weaknesses**

Strengths of these tables are that they are clear and include commentary and links to related publications including extensive documentation relating to methods and data employed. Balance of Payments statistics also fully comply with Pink Book definitions.

Weaknesses are that there are some quality issues with the underlying data. Additionally, the export statistics are only a snapshot of orders at the end of the year which may not truly reflect the value of exports that are actually delivered (see <a href="Accuracy">Accuracy</a> section for further details).

#### **Future Improvements**

We have recently completed a thorough review of Balance of Payments statistics (as set out in <u>Defence Statistics Bulletin No.11</u>) and are in the process of implementing improvements.

#### **Latest Publications**

- 1. The Trade section of UKDS 2010
- 2. <u>Defence Statistics Bulletin No 8</u> Challenges and issues with Defence Export statistics
- 3. <u>Defence Statistics Bulletin No.11</u> Methods & Data Sources relating to MOD Balance of Payments Statistics
- 4. <u>2004 National Statistics Quality Review</u> (NSQR) Part 3 which covers Balance of Payments & Trade Statistics
- 5. <u>Defence Statistics Bulletin No 4</u> Balance of Payments method prior to 2004 NSQR
- 6. Annual Report for Strategic Export Control
- 7. The Pink Book Detailed annual estimates of the UK balance of payments, including estimates for the current account (trade in goods and services, income and current transfers), the capital account, the financial account and the International Investment Position.
- 8. The World Defence Market published by UKTI DSO

#### 1.2 Producer Information

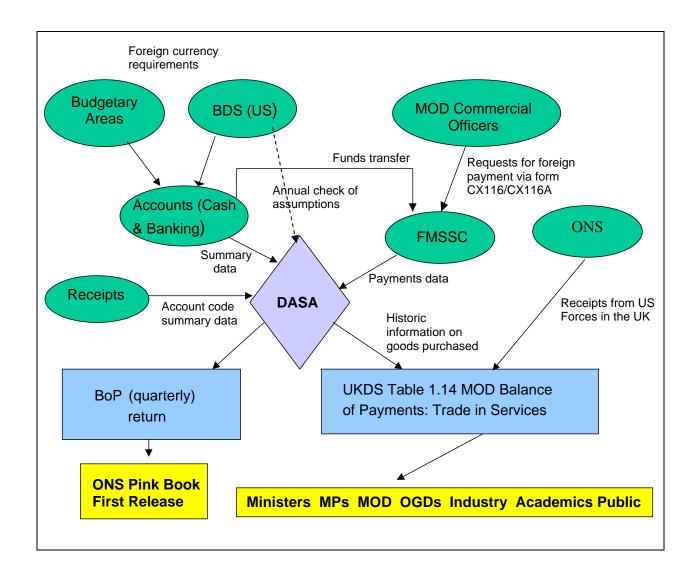
These statistics are produced by the Defence Expenditure Analysis branch within Defence Analytical Service and Advice (DASA) which is part of the Ministry of Defence (MOD). The responsible statistician for these statistics is Nick Bennett who can be contacted by emailing DASADESA-DEA-HOB@mod.uk

Further details about how to contact DASA can be found <a href="here">here</a>.

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

UK Trade and Industry (UKTI) Defence and Security Organisation provide the data on export orders which they gather through a survey of defence suppliers. Data is then aggregated and input directly into the UK Defence Statistics Table 1.13.

The following diagram shows the data flows for production of Balance of Payments statistics. Further detail about the production of these statistics can be found in Defence Statistics Bulletin Nos. 4, 8 and 11.



#### 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.

The Balance of Payments information supports the ONS estimate of the value of the UK's trading account with the rest of the world for the provision of Government services between UK residents & non-residents, and transactions in goods not freighted out of the country in which the transaction takes place. DASA's figures for MOD imports and exports of Trade-in-Services contribute a significant percentage of the Government Services total. The ONS are

required to produce UK estimates of Government Trade-in-Services as part of the National Statistics product "The Pink Book" and the Balance of Payments data has to be produced to EUROSTAT under EU regulations. The ONS have confirmed that if DASA were to cease production of these figures, the ONS would lack a significant element of the Government Services total and would necessarily have to produce alternative estimates for the MOD's contribution. This could have a major impact upon the quality of the National Statistics contained in "The Pink Book".

Export orders information is used by secretariat staff to answer Parliamentary Questions and Freedom of Information requests, and to produce briefings. We analyse the underlying supplier level data to support MOD policy, for example, input to Green Papers, studies and thinkpieces. We publish analysis on the world market share of various companies in our internal Quarterly Economic Outlook publication. We receive a small number of PQs and FOIs on the value of export orders to particular countries.

#### **Unmet user needs**

We have had requests to reinstate the production of import and export deliveries data. This would require changes to HMRC systems and would involve large resource costs.

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

There are a number of issues with the accuracy of the defence export orders statistics.

- Export orders can be subsequently cancelled, prolonged or changed after the initial order is placed and therefore will differ from actual export deliveries. Data on export deliveries is no longer available due to data quality problems and resource constraints.
- There are problems with determining dual use (equipment which could be used for civilian as well as military purposes) from single use export orders, particularly relating to aircraft.
- The data on export orders is provided by UKTI from their survey of known Defence contractors. We are unable to assess the coverage or quality of this survey.

Further discussion of data quality issues relating to exports data can be found in Defence Statistics Bulletin No. 8.

The issues surrounding data quality issues for BoP data can be found in Defence Statistics Bulletin Nos. 4 and 11. These are summarised below.

- There are problems mapping MOD administrative data to ONS definitions.
- There are time lags between the purchase and use of currency.
- It can be difficult to determine the destination of the currency from the currency unit.

#### **Revisions**

Corrections to UKDS tables are signposted online and accompanied by notes to the tables or a full Defence Statistics Bulletin. We follow the <u>DASA revisions policy</u>.

**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.

We provide Balance of Payments data to the ONS to meet their requirements and

timescales. These in turn are determined by EUROSTAT publication cycles.

The publication date for UKDS is decided by the editor and is approximately 9 months after the end of the calendar year that the data relates to.

There have been no punctuality issues with these statistics.

**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 40 web hits each 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 Defence Statistics Bulletins. Three Defence Statistics Bulletins relate to these statistics (see latest publications in section 1.1) and these are also available via the DASA website.

The level of detail for Balance of Payments is a National Accounts requirement. Export orders are presented so that the data is clear and not commercially disclosive.

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.

Balance of Payments data meets the requirements and definitions set out in the Pink Book and conform to EU Statistical legislation. They are therefore coherent with the National Accounts.

Due to improvements in the methodology used to identify receipts data there is a break in the time series between 2002 and 2003.

**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.

There are no trade-offs in the production of these statistics.

**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.

We have a Service Level Agreement (SLA) with the ONS BoP team which sets out the standards required for the Balance of Payments Quarterly returns. Meetings are held on a regular basis to review the SLA.

Users are encouraged to provide feedback on UKDS through the feedback tool on the DASA website or through the annual consultation meetings. Users were informed of the latest change to these statistics through the annual consultation meeting which offered the opportunity for feedback. We also consulted our main customers (ONS) during the review process. 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 <u>Section</u> 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.

These statistics are produced using existing data sources and administrative data to minimise the burden on data suppliers and therefore minimise the cost to the public purse of their production.

The Balance of Payments data is a bi-product of data already produced and UKTI routinely collect the data used for the export orders tables: issues relating to respondent burden are managed by them.

**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 <u>DASA confidentiality policy</u>. We provide the statistics to the ONS in summary form to prevent disclosure.

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 <u>DASA Pre-Release</u> Access lists are available on the DASA website.

Export orders are presented at sector level to prevent the disclosure of companies and equipment types. For BoP data, line level transactions data relating to services procured overseas are aggregated at country level to mitigate disclosure.

Apart from the ONS, we have little contact with users of Balance of Payment statistics. We include commentary alongside the tables so that users understand the uses and limitations of the statistics. These are further discussed in Defence Statistics Bulletins Nos. 4, 8 and 11.