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Estimated Defence Expenditure Outturn in the UK: Breakdown by Industrial Group

Methodological Improvements

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Abstract

For at least the last 20 years MOD have published estimates of defence expenditure with UK industry. Over this period there have been several reviews of the methodology.

In recent years, changes to MOD administrative systems, along with improvements in data quality, have necessitated a review of some aspects of the methodology and created the opportunity for a wider methodological review. This bulletin seeks to:

i) Describe changes made to the methodology which exploits improvements in the quality of information on MOD administrative systems, and our ability to interrogate and understand these systems.

ii) Compare estimates of the new methodology with those of the previous methodology. This is achieved through a detailed comparison of the 2010/11 estimates published originally and those developed following this review. The impact of the key changes is quantified both for the overall estimate and estimates of expenditure with different industry groups.

Alongside this bulletin, MOD has published our latest estimates of defence expenditure with UK industry in the Annual Statistical Bulletin 1.01 Trade, Industry & Contracts 2014. This includes estimates for 2010/11, 2011/12 and 2012/13 using the new methodology. It has not been possible to revise the estimates for years prior to 2010/11 using the new methodology, since the recent improvements to the data sources were not a factor earlier than this.

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1 Introduction

1.1 As part of the MOD's Finance Statisticial Bulletin 1.01 covering Trade, Industry & Contracts, estimates of the amount of money the MOD spends directly with UK industry and commerce are presented by industrial group.

1.2 On 1 August 2013, MOD published a statistical notice[1] outlining recent improvements made to the methodology for producing these estimates. These improvements formed the basis of the 2011/12 estimates. This bulletin presents a fuller description of these improvements, along with an update of further improvements made since and an assessment of the impact of these changes on the estimates. In particular it examines the differences between the 2010/11 estimate as originally published and those calculated based on the new methodology.

2 Data Sources and Definitions

2.1 Under the Resource Accounting system used by MOD to record expenditure in the departmental accounts, financial transactions are classified by Resource Account Code (RAC). This permits expenditure to be broken down into various types, and for the purpose of these estimates, two categories in particular: equipment and non-equipment. However, some discretion remains in defining these categories. In practice equipment has been used to indicate expenditure on acquisition, maintenance, repair and update of items such as plant, machinery, vehicles and fighting equipment, plus expenditure on administrative computers. Non-equipment covers items such as expenditure on property maintenance, building construction, telecommunications and fuel. The group of equipment and non-equipment RACs, together, capture expenditure on goods and services with industry, and form the basis of the estimates of expenditure with UK industry.

2.2 In 2012/13 there were some 300 RACs against which MOD expenditure was recorded, such as:

- BWG080 used to record expenditure on 'Single Use Military Equipment Assets Under Construction Capital Additions In-Year'.
- BEF080 used to record 'IT and Communications Capital Additions In Year'.
- BCF080 for 'In Year Capital Expenditure on Plant and Machinery'.
- NNB002 for 'Information Technology and Communications Hire Charges'.

2.3 Some RACs record income, payments within MOD or are solely used for accounting purposes. Such RACs are excluded from our calculations since they do not relate to expenditure with industry. These include:

- RBA001 an income RAC used to record 'Receipts from the Sale of Inventory or Finished Goods'.
- PLA001 an accounting RAC used to record 'Write-offs for Physical Raw Materials and Consumables Stock Losses'.
- LAA205 and LAA210 pay RACs used to record 'Mobilised TA Basic Pay'.

2.4 Full details on the RAC chart of accounts can be found **here**.

2.5 The estimates present expenditure by industry group based on the relevant Standard Industrial Classification (SIC) – 1992, 2003 or 2007 – guidelines maintained by the Office for National Statistics. This SIC system allows business establishments and other statistical units to be classified according to the type of economic activity in which they are

1 Statistical notice to MOD industry trade and contracts: 2013 table 1.01.07.

engaged. For a full list of the SIC codes that comprise the various table headings **click here**. More detailed information on the SIC 2007 codes can be found **here**.

2.6 RACs do not necessarily correspond to expenditure in a single industry group (or lower level SIC group), so expenditure on a given RAC may be distributed across several industry groups. The distribution of payments across RACs and SIC groups underpins the new methodology adopted to estimate expenditure with UK industry.

2.7 The majority of MOD expenditure is paid by contract and managed by Defence Business Services (DBS)[2]. The information held on these payments by DBS includes both SIC and RAC information. However, some expenditure, not directly managed by DBS, such as cash office payments and miscellaneous payments[3], included in the estimates, are held in other MOD administrative data systems. These only contain RAC information so we need to make assumptions about their SIC distribution.

2.8 The DBS contracts database also includes location of work information for each contract, which identifies where in the UK or abroad work on the contract is undertaken. This is used to determine how much is spent with UK industry rather than foreign industry.

3 Overview

3.1 The quality of the data underpinning the estimates of MOD expenditure with UK industry has improved in recent years. This has enabled Defence Economics to develop a data driven analysis for specific parts of the methodology, where previously manual intervention was required. These developments are listed below:

- Improvements to the process for identifying the UK element of contract expenditure and for dealing with missing location of work information.
- A more consistent treatment of NATO Eurofighter and Tornado Management Agency (NETMA) expenditure.
- A more thorough treatment of Trading Funds' accounts data.
- Improvements to the process for assigning equipment and non-equipment Resource Account Codes (RAC) expenditure to Standard Industrial Classification (SIC) groups.
- Improved processes for identifying expenditure with other Government Organisations.
- Changes to RAC inclusion/exclusion and categorisation.

3.2 Not all of the changes above caused a significant change to the final overall estimate – most impacted on how expenditure was spread across the industrial groupings. This review of the methodology for producing these estimates resulted in a break in the statistical series from 2010/11.

2 Defence Business Services was established on 4 July 2011 to transform the delivery of corporate services to the Department. The services delivered initially include: Civilian HR, Finance, Information Systems and some Information Services. On 1 April 2014 DBS merged with the Services Personnel & Veterans Agency and now has responsibility for managing HR processes for Military personnel including, pay and pensions.

3 Miscellaneous Payments is the payment method employed by DBS (the MOD's primary bill paying authority) for running service items such as the provision of utilities. Such items are covered by "miscellaneous" transactions where no 'MOD HQ Contract' exists. These agreements for goods or services will have been set up locally between the MOD Branch and the supplier, and are legally binding.

4 Results

4.1 **Table 1** presents the 2010/11 estimates as originally published and as revised under the new methodology for each industry group. The overall impact of the methodological improvements is to reduce our estimate of MOD expenditure with UK industry in 2010/11 by £1,070 million to £19,360 million.

Table 1: Comparison of Published and Revised Estimates for 2010/11 by Industry Group

2010/11 Estimates (£ million)	Original	Revised	Change	Percentage Change
Total	**20 430**	**19 360**	**-1 070**	**- 5%**
Agriculture, Fishing and Mining	-	-	-	-
Manufacturing, excluding those industries itemised below	2 430	1 940	- 490	- 20%
Weapons & Ammunition	1 480	1 180	- 300	- 20%
Data Processing Equipment	80	130	50	63%
Other Electrical Engineering	250	210	- 40	- 16%
Electronics	670	530	- 140	- 21%
Precision Instruments	720	600	- 120	- 17%
Motor Vehicles & Parts	410	260	- 150	- 37%
Shipbuilding & Repairing	2 900	1 880	-1 020	- 35%
Aircraft & Spacecraft	2 140	2 710	570	27%
Electricity, Gas & Water	350	440	90	26%
Construction	1 770	1 460	- 310	- 18%
Wholesale & Retail Trade; Repair of Motor Vehicles	420	760	340	81%
Hotels, Catering & Restaurants	170	260	90	53%
Transport via Railways	50	70	20	40%
Other Land Transport (incl. via pipelines)	100	100	-	-
Water, Air and Auxiliary/freight supply transportation	610	800	190	31%
Post & Courier Services	10	10	-	-
Telecommunications	220	650	430	195%
Financial Services, Business Activities, Education, Health, & Other Service Activities excluding those industries itemised below[1,2]	2 200	2 810	610	28%
Real Estate & Renting	2 180	1 310	- 870	- 40%
Computer Services	1 270	1 250	- 20	- 2%

1. Includes MOD payments to AWE Management Ltd, who manage the Atomic Weapons Establishment on behalf of the MOD under a Government-owned/contractor-operated arrangement.

2. The quality of data available for the service industries is insufficient to identify these SICs separately.

4.2 Section 5 of this report outlines the impact of the improvements on the overall estimate, whilst Section 6 looks further at some of the significant changes in estimates for particular industrial groups.

5 Methodological Improvements – Outline

5.1 **Table 2** presents the impact of the methodological improvements, outlined in Section 3, on the overall estimate of MOD expenditure with UK industry.

Table 2: Impact of Methodological Changes on Expenditure Estimate 2010/11

	Approximate Impact on 2010/11 Estimates	
	Current Prices (£ millions)[1]	Percentage Change
Identifying UK Expenditure	-1 160	- 6%
Identifying total NETMA Expenditure	270	1%
Identification of Expenditure with Other Government Departments	- 130	- 1%
Treatment of Trading Funds' Accounts Data	10	0%
Allocation of NETMA Expenditure to RACs	-	-
Assigning Equipment RAC Expenditure to SIC Groups	-	-
Assigning Non-Equipment RAC Expenditure to SIC Groups	-	-
Changes to RAC Inclusion/Exclusion and Categorisation	-	-

1. All figures rounded to nearest £10 million

5.2 **Identifying UK Expenditure**

5.2.1 In previous years, contracts have been identified as being 'UK' or 'overseas', based on the supplier's registration nationality and the proportion of work carried out overseas. This involved a number of assumptions designed to identify where the majority of the work was undertaken. Expenditure on a given contract was deemed to be entirely 'UK' based or entirely 'overseas' based.

5.2.2 Improved underlying administrative data from MOD systems has enabled expenditure on each HQ contract to be more closely aligned proportionally to UK and overseas locations. The new method allocates a proportion of expenditure using a calculation based on the location of work for prime and subcontractors. When considering the 2010/11 estimate the new methodology for identifying expenditure with UK industry **reduced the total estimate by about £1,160 million** (see **Table 2**).

5.3 **Assigning Equipment RAC Expenditure to SIC Groups**

5.3.1 There is an ongoing effort to improve the quality and coverage of SIC group information within the DBS contracts database, through a rolling cleansing exercise and education of commercial officers responsible for reporting this information. As a consequence it has been judged that automatic assignment of RACs to SIC groups now yields better estimates than the method of manual intervention previously employed.

5.3.2 This change has had **no impact on the total outturn estimate** (see **Table 2**). The general impact at industry group level has been to increase the estimate of expenditure for the 'Financial Services' industrial grouping, and decrease the estimates of expenditure for the 'Shipbuilding & Repairing', 'Aircraft & Spacecraft', 'Electronics', 'Precision Instruments' and 'Other Manufacturing' groupings.

5.4 Assigning Non-Equipment RAC Expenditure to SIC Groups

5.4.1 The improvements to the contracts data cited above have also enabled the automated apportionment of RACs to SIC groups in the non-equipment element of the estimates, rather than the large majority being manually allocated to SIC groups.

5.4.2 This change has had **no impact on the total outturn estimate** (see **Table 2**). The general impact at industry group level has been to increase the estimate of expenditure on ‘Hotels, Catering & Restaurants’, ‘Telecommunications’ and ‘Financial and Other Services’, but decrease expenditure on ‘Other Manufacturing’ and ‘Real Estate & Renting’ groupings.

5.5 NATO Eurofighter and Tornado Management Agency (NETMA)[4] Expenditure

5.5.1 A large proportion of MOD expenditure associated with NETMA activity is excluded from this analysis since there is only an element that relates to UK industry. Overall expenditure with NETMA has previously been estimated based on an ADS[5] survey. This was a legacy process which ensured estimates of expenditure with UK industry were consistent with estimates of Defence export deliveries and employment resulting from Defence exports, which were previously published alongside these expenditure estimates[6]. However, MOD no longer publishes these other estimates so greater importance is now placed on maintaining consistency with MOD accounts. Therefore, we have moved to directly using MOD expenditure with NETMA as the basis for these estimates. This has **increased the total estimate by about £270 million** (see **Table 2**)**.**

5.5.2 Furthermore, an improved understanding of our own internal data has enabled us to use this as the basis for allocating expenditure to RACs rather than a reliance on assumptions which was the case previously. This has changed our interpretation of non-NETMA expenditure allocated to some RACs, which has reduced expenditure on ‘Shipbuilding and Repair’ and ‘Weapons and Ammunition’ SIC groups, whilst increasing expenditure on ‘Aircraft and Spacecraft’. This has had **no impact on the total estimate**.

5.5.3 **Annex B** provides a detailed discussion of this second change to the treatment of NETMA expenditure, providing some examples of the impact at industry group level.

5.6 Identification of Other Government Organisations

5.6.1 These estimates aim to exclude payments made by MOD to ‘Other Government Organisations’. An improvement in the identification of such organisations has increased the number of payments removed. The effect of this change was to **reduce the total estimate by about £130 million** (see **Table 2**)**.**

4 NATO Eurofighter and Tornado Management Agency (NETMA) is the international management agencies of the Tornado and Eurofighter programmes. This NATO agency is essentially a multi-nation HQ project office for these two collaborative projects involving the UK, Germany, Italy and Spain. In the UK, Eurofighter is now called ‘Typhoon’.

5 ADS is a Trade Organisation for companies operating in the UK Aerospace, Defence, Security and Space sectors.

6 See DASA Defence Statistics Bulletin No.5.

6 Methodological Improvements – Impact by Industry Group

6.1 Decrease in Expenditure on Weapons & Ammunition

6.1.1 Reported expenditure on ‘Weapons and Ammunition’ fell by about £300 million. The main causes of this fall were:

- the knock-on effect of a change in treatment of NETMA expenditure, and
- changes in the method for identifying UK expenditure.

6.1.2 **Treatment of NETMA Expenditure**. An improved understanding of our own internal data has enabled us to use this as a basis for allocating expenditure to RACs rather than a manual allocation as was the case previously. This has changed our interpretation of non-NETMA expenditure allocated to some RACs, an element of which relates to ‘Weapons and Ammunition’. The effect of this change was to **reduce the estimate for ‘Weapons and Ammunition’**. See **ANNEX B** for further details.

6.1.3 **Identifying UK Expenditure**. In previous years, contracts have been identified as being ‘UK’ or ‘overseas’, based on the supplier’s registration nationality and the proportion of work carried out overseas. The new method allocates expenditure using a calculation based on the location of work for prime and subcontractors.

6.1.4 As part of the analysis for producing the final estimates, a proportion of UK expenditure against RAC ‘Inventory Clearing’ (DJA000) is attributed to the ‘Weapons and Ammunition’ industry group. Under the new methodology more expenditure on DJA000 is identified as being spent with foreign industry so has resulted in a fall in the ‘Weapons and Ammunition’ estimate.

6.1.5 The new method of identifying UK expenditure has also changed the attribution of equipment expenditure to SIC groups which has further reduced the ‘Weapons and Ammunition’ estimate. In particular the proportion of ‘In-Year Capital Additions to Single Use Military Equipment Assets Under Construction’ (BWG080) expenditure allocated to ‘Weapons and Ammunition’ fell from 12 percent under the old methodology to 10 percent under the new methodology. Similarly, the proportion of ‘Inventory Clearing’ (DJA000) expenditure allocated to ‘Weapons and Ammunition’ fell from 43 percent under the old methodology to 39 percent under the new methodology.

6.1.6 The combined effect of changes to the identification of UK expenditure and treatment of NETMA expenditure was to **reduce the ‘Weapons and Ammunition’ estimate by over £220 million**.

6.2 Decrease in Expenditure on Shipbuilding & Repair

6.2.1 Reported expenditure on ‘Shipbuilding and Repair’ fell by about £1,020 million. The main causes of this fall were:

- the knock-on effect of a change in treatment of NETMA expenditure, and
- the automated allocation of equipment support costs to SIC groups.

6.2.2 **Treatment of NETMA Expenditure**. An improved understanding of our own internal data has enabled us to use this as a basis for allocating expenditure to RACs rather than a manual allocation as was the case previously. This has changed our interpretation of non-NETMA expenditure allocated to some RACs, an element of which relates to ‘Shipbuilding and Repair’. The effect of this change was to **reduce the estimate for ‘Shipbuilding and Repair’ by about £850 million**. See **ANNEX B** for further details.

6.2.3 **Automated Allocation of Equipment Support Costs** to different SIC groups resulted in a fall in the ‘Shipbuilding & Repair’ industry group.

6.2.4 Under the old methodology expenditure on the RAC ‘Equipment Support Project Costs’ (PVA005) on contracts associated with SIC groups such as ‘Research and Development’, ‘Consultancy Services and Analysis’, ‘Education’, ‘Health’ and ‘Other Service and Household Activities’ was manually reassigned to ‘Shipbuilding and Repair’.

6.2.5 The rationale for this approach was that these SIC groups related to non-equipment expenditure whilst RAC PVA005 related to equipment expenditure. However, a contract level analysis has cast doubt on this assumption, so the manual reallocation of RAC expenditure to SIC groups has been rejected. Consequently the percentage of expenditure against RAC PVA005 allocated to ‘Shipbuilding and Repair’ has reduced from 25 percent to 4 percent. This has **decreased the estimate of expenditure on ‘Shipbuilding and Repair’ by about £200 million**.

6.3 Increase in Expenditure on Aircraft & Spacecraft

6.3.1 Reported expenditure on ‘Aircraft and Spacecraft’ increased by about £570 million. The main cause of this rise was the change in treatment of NETMA expenditure.

6.3.2 **Treatment of NETMA expenditure**. An improved understanding of our own internal data has enabled us to use this as a basis for allocating expenditure to RACs rather than a manual allocation as was the case previously. This has changed our interpretation of non-NETMA expenditure allocated to some RACs, an element of which relates to ‘Aircraft and Spacecraft’. The effect of this change was to **increase the estimate for ‘Aircraft and Spacecraft’ by £650 million.** See **ANNEX B** for further details.

6.4 Decrease in Expenditure on Construction

6.4.1 Reported expenditure on ‘Construction’ fell by about £310 million. The main cause of this fall was the change in treatment of expenditure on non-equipment RACs.

6.4.2 **Treatment of Expenditure on Non-Equipment RACs**. Under the old methodology expenditure on some RACs was manually reassigned to specific SIC categories. Under the new methodology expenditure on RACs is automatically apportioned to SIC groups based on the contracts data.

6.4.3 Previously all expenditure on RAC ‘Works’ (NCA003) was attributed to ‘Construction’. Under the new methodology only 66 percent is allocated to ‘Construction’, with 14 percent now allocated to ‘Real Estate & Renting’ and 14 percent allocated to ‘Consultancy Services and Analysis’ (which includes some architectural and engineering activities). This has **decreased the estimate for ‘Construction’ by about £200 million.**

6.4.4 Similarly, the allocation of expenditure on RAC 'Estates Core Service Charge' (NCA004) to 'Construction' has decreased from 100 percent to 68 percent, which has **lowered the 'Construction' estimate by about £190 million**.

6.5 Increase in Expenditure on Wholesale & Retail Trade

6.5.1 Reported expenditure on 'Wholesale and Retail Trade' increased by about £340m. The main causes of this rise were changes in:

- the treatment of expenditure on non-equipment RACs.
- the categorisation of RACs from 'equipment' to 'non-equipment'.

6.5.2 **Treatment of Expenditure on Food Purchase**. Under the old methodology expenditure on the RAC 'Food Purchase' (PAA002) was manually assigned to 'Manufacture of Food and Drink'. Under the new methodology 95 percent of expenditure against PAA002 is assigned to 'Wholesale and Retail Trade'. This has **increased 'Wholesale and Retail Trade' by about £200 million**. Considering that the principal contract covering this expenditure is for the provision, rather than manufacture of food, the reassessment of the expenditure to 'Wholesale and Retail Trade' is sensible.

6.5.3 **Change in Classification of RACs from Equipment to Non-Equipment**. A change in the classification of RACs has reduced the level of foreign expenditure removed from some RACs, which has increased the 'Wholesale and Retail Trade' estimate. It is worth noting, the actual change in methodology for removing foreign payments from equipment RACs, discussed in Section 5, has <u>not</u> had a significant impact on the 'Wholesale and Retail Trade' estimate.

6.5.4 Under the old methodology RACs 'RMC Oils and Lubricants' (DFG100), 'RMC Marine Fuel' (DFG110) and 'RMC Aviation Fuel' (DFG120) were classified as equipment RACs. Foreign expenditure of around £70 million was removed from these RAC's based on the 'Location of Work' information found in the contracts data, before expenditure was allocated to SIC groups.

6.5.5 For non-equipment RACs, foreign expenditure is removed after it has been allocated to SIC groups. The level of foreign expenditure removed is based on the proportion of personnel serving overseas and on assumptions about the nature of the SIC group.

6.5.6 Under the new methodology RACs 'RMC Oils and Lubricants' (DFG100), 'RMC Marine Fuel' (DFG110) and 'RMC Aviation Fuel' (DFG120) were reclassified as non-equipment RACs so foreign expenditure on these RACs was removed as per 6.5.5.

6.5.7 Very little expenditure on RACs 'RMC Oils and Lubricants' (DFG100), 'RMC Marine Fuel' (DFG110) and 'RMC Aviation Fuel' (DFG120) was allocated to the specific SIC groups assumed to contain expenditure abroad, so less than £5 million of foreign expenditure was removed. This compares to £70 million removed under the old methodology.

6.5.8 Additionally, under the new methodology the proportion of expenditure on the RACs 'RMC Marine Fuel' (DFG110) and 'RMC Aviation Fuel' (DFG120) assigned to 'Wholesale and Retail trade' increased from 70 percent to 78 percent and 96 percent to 97 percent respectively.

6.5.9 The change in proportion of expenditure assigned to DFG110 and DFG120, combined with the change in classification of these RACs and DFG100 from equipment to non-equipment, **increased the estimate for ‘Wholesale and Retail Trade’ by £70 million**.

6.6 Increase in Expenditure on Hotels, Catering & Restaurants

6.6.1 Reported expenditure on ‘Hotels, Catering and Restaurants’ increased by about £90 million. The main cause of this rise was a change in the treatment of expenditure on non-equipment RACs.

6.6.2 **Treatment of Expenditure on Non-Equipment RACs**. Under the old methodology none of the expenditure on RAC ‘Estate and FMS Accommodation Stores’ (NCA010) was assigned to ‘Hotels, Restaurants and Catering’. Rather it was manually assigned to ’Real Estate and Renting’.

6.6.3 A contract level analysis has cast doubt on this assumption, since much of this expenditure is with Aramark, Sodexo and Compass Services, who are contracted to run catering services on Military bases. Consequently the manual reallocation of RAC expenditure to SIC groups has been replaced by the allocation of expenditure to SIC groups driven by the SIC information appearing in the contracts data. Consequently the percentage of expenditure against RAC NCA010 allocated to ‘Hotels, Restaurants and Catering’ has increased from 0 percent to 33 percent.

6.6.4 This has **increased the estimate for ‘Hotels, Catering and Restaurants’ by over £90 million**.

6.7 Increase in Expenditure on Telecommunications

6.7.1 Reported expenditure on ‘Telecommunications’ increased by about £430 million. The main cause of this rise was a change in the treatment of expenditure on non-equipment RACs.

6.7.2 **Treatment of Expenditure on Non-Equipment RACs.** Under the old methodology RAC ‘IT and Comms PFI Service Charge’ (NND001) was manually assigned to ‘Real Estate and Renting’. Under the new methodology 98 percent of ‘IT and Comms PFI Service Charge’ expenditure is assigned to ‘Telecommunications’ based on the SIC distribution of the contracts data. This has **increased expenditure on ‘Telecommunications’ by about £520 million**.

6.8 Increase in Expenditure on Financial & Other Services

6.8.1 Reported expenditure on ‘Financial and Other Services’ increased by about £610 million. The main cause of this rise was a change in the treatment of expenditure on equipment and non-equipment RACs.

6.8.2 **Change in Treatment of Expenditure on Equipment and Non-Equipment RACs**. Under the old methodology some RACs were manually assigned to SIC groups, whilst under the new methodology a distribution is used for all but a very few RACs.

6.8.3 Previously no expenditure on RAC ‘Intangible Single Use Military Equipment Assets Accrual Element’ (AAR060) was assigned to ‘Financial and Other Services’. Rather 62 percent was assigned to ‘Shipbuilding and Repair’ (SIC group 27) and 37 percent was allocated to ‘Electronics’ (SIC group 24).

6.8.4 However, ‘Financial and Other Services’ includes technical testing and analysis; it is reasonable to assume that intangible assets such as intellectual property and know-how are included in this category. Consequently the manual reallocation of RAC expenditure to SIC groups has been superseded in the new methodology.

6.8.5 Instead the allocation of expenditure to SIC groups is driven by the SIC information in the contracts data. Under the new methodology 92 percent of expenditure on AAR060 is allocated to ‘Financial and Other Services’. The effect of this change was to **increase ‘Financial and Other Services’ by about £100 million**.

6.8.6 Similarly an increase in the allocation of expenditure on ‘Equipment Support-Projects’ (PVA005) (0 percent to 17 percent), ‘Equipment Support Other’ (PVA007) (0 percent to 8 percent) and ‘Estates Core Services Charge‘ (NCA004) (0 percent to 15 percent) have resulted in **increases to expenditure on ‘Financial and Other Services’ of around £170 million, £160 million and £90 million respectively**.

6.9 Decrease in Expenditure on Real Estate & Renting

6.9.1 Reported expenditure on ‘Real Estate & Renting’ fell by about £870 million. The main cause of this fall was the change in treatment of expenditure against non-equipment RACs.

6.9.2 Under the old methodology some RACs were manually assigned to SIC groups, whilst under the new methodology a distribution is used for all but a few RACs.

6.9.3 None of the expenditure on ‘IT+Comms PFI Service Charge’ is now allocated to ‘Real Estate & Renting’, rather it is mostly allocated to ‘Telecommunications’. This has **reduced the ‘Real Estate & Renting’ total by about £530 million**.

6.9.4 Similarly a reduction in the allocation of expenditure on ‘Est + FMS Accom Stores’ (100 percent to 38 percent) **has reduced the ‘Real Estate & Renting’ total by about £180 million** and a reduction in the allocation of expenditure on ‘Property Non-Dwelling PFI Service Charge’ (100 percent to 20 percent) has **reduced the ‘Real Estate & Renting’ total by a further £150 million**.

7 Conclusions

7.1 The improvement in the quality of SIC information contained within the contracts data has enabled a greater level of confidence in our estimate and less reliance on assumptions. This has also had the benefit of streamlining the end-to-end process and reducing the risk of errors. Nevertheless, there is a need for ongoing engagement with data owners and those entering the data to ensure that it continues to be fit for purpose. Not withstanding these improvements there remains an inherent level of variability within some parts of the process and for this reason the figures presented remain estimates.

8 Next steps

8.1 Due to the extent of the methodological changes made to these estimates, no meaningful comparison can be made between the estimates based on the old methodology and those based on the new methodology. For this reason a new table containing the series of estimates based on the new methodology has been included as Table 1.01.08b in the latest publication of the Annual Statistical Series 1 Finance Bulletin 1.01 Trade Industry and Contracts for the first time (see **Annex A**).

ANNEX A

Table A1: Estimated Defence Expenditure Outturn in the UK: Breakdown by Industry Group

VAT exclusive at Current Prices (£ million)

SIC(07) Section		2010/11 [1]	2011/12 [2]	2012/13
Total		**19 360 r**	**19 650 r**	**19 390**
A, B	Agriculture, Fishing and Mining	-	-	-
C	Manufacturing, excluding those industries itemised below	1 940 r	1 860 r	1 680
	Weapons & Ammunition	1 180 r	1 240 r	1 260
	Data Processing Equipment	130 r	150 r	160
	Other Electrical Engineering	210 r	190 r	170
	Electronics	530 r	350 r,3	250
	Precision Instruments	600 r	670 r	530
	Motor Vehicles & Parts	260 r	230	160
	Shipbuilding & Repairing	1 880 r	1 900 r	2 120
	Aircraft & Spacecraft	2 710 r	2 430 r	2 460
D, E	Electricity, Gas & Water	440 r	430	440
F	Construction	1 460 r	1 340 r	1 330
G	Wholesale and Retail Trade; Repair of Motor Vehicles	760 r	770 r	890
H, I, J	Hotels, Catering & Restaurants	260 r	280	270
	Transport via Railways	70 r	100	90
	Other Land Transport (incl. via pipelines)	100	100	110
	Water, Air and Auxiliary/freight supply transportation	800 r	820	860
	Post & Courier Services	10	10	-
	Telecommunications	650 r	660 r	670
K, L, M, N, O, P, Q, R, S, T	Financial Services, Business Activities, Education, Health, & Other Service Activities excluding those industries itemised below[4,5]	2 810 r	3 470 r,6	3 400
	Real Estate & Renting	1 310 r	1 390 r	1 200
	Computer Services	1 250 r	1 260 r	1 320

1. Revisions for 2010/11 are the result of the methodological improvements discussed in this bulletin (Defence Statistics Bulletin 13).
2. Revisions for 2011/12 are partly the result of the methodological improvements, but also reflect the identification and removal of expenditure with other Government departments.
3. The reduction in expenditure in 2011/12 is largely driven by a fall in expenditure on a Type 45 Destroyer contract.
4. Includes MOD payments to AWE Management Ltd, who manage the Atomic Weapons Establishment on behalf of the MOD under a Government-owned/contractor-operated arrangement.
5. The quality of data available for the service industries is insufficient to identify these SICs separately.
6. The increase in expenditure in 2011/12 is driven by project termination costs for the Harrier and Nimrod aircraft, and for the Defence Training Review, an increase in expenditure on contracts for business services and a rise in estimated non-contract expenditure.

ANNEX B - Treatment of NETMA[1] Expenditure

Background

Each year MOD pays the NATO Eurofighter and Tornado Management Agency (NETMA) around £1.5 billion to manage the Eurofighter (Typhoon) and Tornado programmes[7]. Part of the process of producing the industrial estimates involves identifying and excluding NETMA payments made by MOD to foreign suppliers. This is achieved by identifying and excluding all payments, by RAC, made to NETMA. Then, once expenditure by RAC has been attributed to SIC groups, adding back in the UK element of NETMA payments against the relevant SIC groups (principally 'Aircraft and Spacecraft').

Issue

Under the old methodology a large proportion (over 95 percent) of all NETMA payments were made against RACs solely used for accounting purposes and did not specify the activity/task to which the payment related. Such payments were manually reassigned to 'activity specific' RACs, based on the expenditure of the project teams responsible for Typhoon and Tornado. However, a sizable proportion of expenditure by these project teams does not relate to payments to NETMA.

Solution

We identified a new data source which specifically identifies how much, by RAC, is paid to NETMA by the Typhoon and Tornado project teams. This new data source reflects the final accounts so the expenditure has been redistributed from the non-activity specific RACs to appropriate RACs. Therefore, no manual redistribution of expenditure between RACs is required. This should improve the estimates consistency from year-to-year.

Impact

These changes have an impact across several industry groups; causing a fall in the 'Weapons and Ammunition' and 'Shipbuilding and Repair' industry groups, and an increase in 'Aircraft and Spacecraft' estimates. This is because the change in our understanding of what expenditure relates to NETMA also affects our understanding of what the remaining expenditure relates to.

Impact Explained

As part of the process for assigning RAC expenditure to SIC Groups, the majority of expenditure allocated against the RAC 'In-Year Capital Additions to Single Use Military Equipment Assets Under Construction' (BWG080) is distributed between 'Weapons and Ammunition' (SIC group 20), 'Shipbuilding and Repair' (SIC group 27) and 'Aircraft and Spacecraft' (SIC group 29) industry groups. Expenditure with NETMA is removed before this allocation of expenditure by SIC group occurs.

Under the new method, a much larger proportion of BWG080 expenditure is identified as payments to NETMA and removed (for 2010/11 £1,360 million is removed under the new method, compared with £35 million under the old method). Consequently, a much smaller amount remained to be distributed between the different SIC groups. This reduced expenditure on the 'Weapons and Ammunition', 'Shipbuilding and Repair' and 'Aircraft and Spacecraft' industry group estimates (see figures 1a and 1b overleaf).

7 NATO Eurofighter and Tornado Management Agency (NETMA) is the international management agencies of the Tornado and Eurofighter programmes. This NATO agency is essentially a multi-nation HQ project office for these two collaborative projects involving the UK, Germany, Italy and Spain. In the UK, Eurofighter is now called 'Typhoon'.

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Figure 1a: Allocation of RAC BWG080 Expenditure Under Old Method

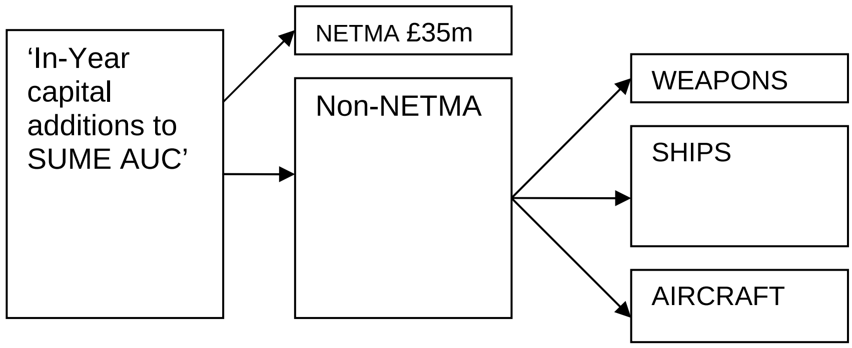
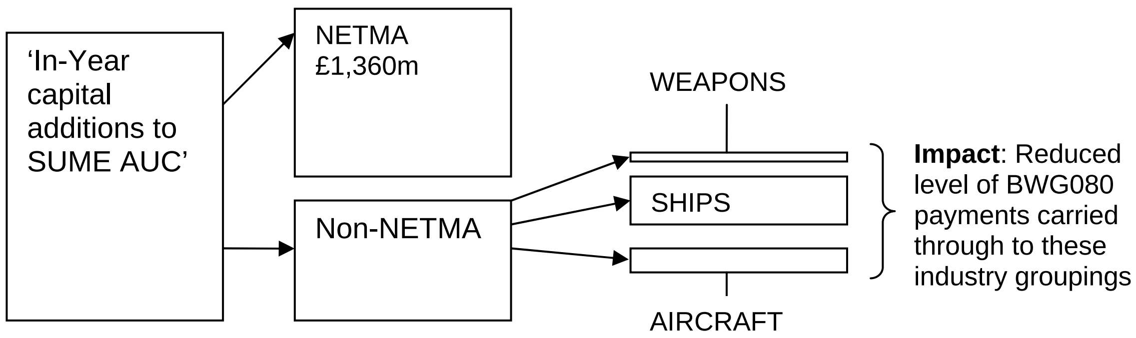
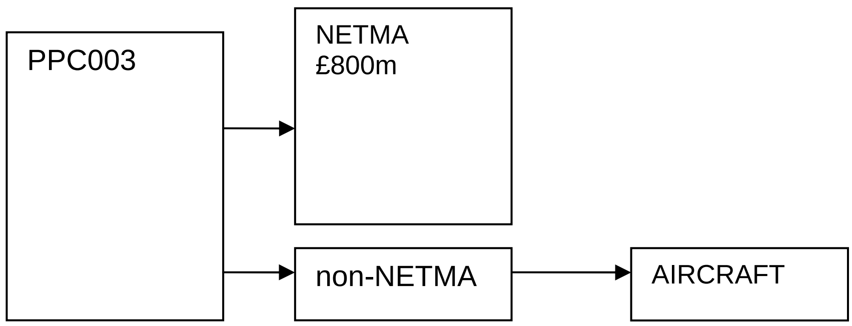


Figure 1b : Allocation of RAC BWG080 Expenditure Under New Method



The industry group 'Aircraft and Spacecraft' is also affected by a change in the treatment of the RAC 'Defence Equipment Contractor Logistics Support/Integrated Operational Support Service Charge' (PPC003). For 2010/11, under the new method no expenditure against PPC003 is attributed to NETMA activity. This compares with around £800 million of PPC003 expenditure being associated with NETMA activity under the old method. Consequently, a much higher proportion of expenditure on PPC003 is attributed to 'non-NETMA' 'Aircraft and Spacecraft' activity in the new estimates. This increased the 'Aircraft and Spacecraft' estimate by £650 million (see figures 2a and 2b below).

Figure 2a: Allocation of RAC PPC003 Expenditure Under Old Method



ANNEX B - Treatment of NETMA[1] Expenditure

Figure 2b: Allocation of RAC PPC003 Expenditure Under New Method