

# **Defence Statistics 1997**

**Research Paper 97/135**

**8 December 1997**



The main aim of this paper, which updates research paper 96/91, is to bring together the more commonly used statistics relating to defence expenditure and manpower and to explain some of the problems involved in using such statistics, particularly when making international comparisons.

Readers will also wish to consult Library Research Paper 97/134 *Defence Employment 1995-96* which sets out some statistics on defence employment and manpower.

**Bryn Morgan**  
**Social and General Statistics Section**

**House of Commons Library**

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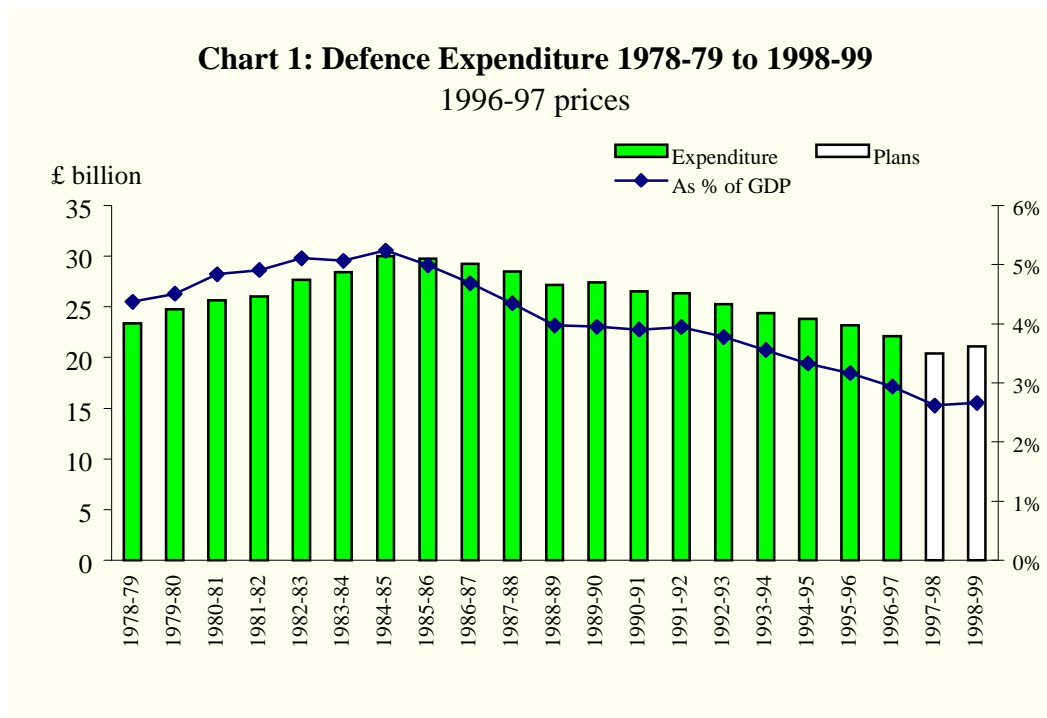
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# I Defence Expenditure

## A. UK Defence Expenditure

The principal measure of defence expenditure in the United Kingdom is the Defence Budget, which covers all expenditure on the Ministry of Defence's programme, and is met from three votes within the Supply Estimates (Class I, Votes 1 to 3). These votes are individually cash limited, but together they form the block defence cash limit and are managed as a block budget. Expenditure incurred against Class I, Vote 4 on pensions for retired members of the Armed Forces falls outside the Defence Budget and is not cash limited.

The Defence Budget for the years 1979/80 to 1996/97 is shown in Table 1 and Chart 1, together with MoD planned defence expenditure to the financial year 1998/99. The figures are given at both outturn prices and constant 1996/97 prices (revalued using the adjusted GDP deflator). The figures at 1996/97 prices should be regarded more as a guide to what that expenditure could have purchased in other sectors of the economy (i.e. the opportunity cost), rather than as a guide to the volume of defence services/equipment purchased. The table also shows the Defence Budget as a percentage of Gross Domestic Product and of public expenditure.



There are a number of points to note when looking at trends in defence expenditure over the period shown:

- Figures for 1990/91 and 1991/92 are net of other countries' contributions to the costs of the Gulf War of £498 million and £1,525 million respectively.
- Figures prior to 1992/93 include expenditure for the security and intelligence services.

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- For 1992/93 to 1994/95 the Defence Budget includes the net present value of extra costs associated with early payment to Armed Forces personnel of both pension lump sums and annual pensions, which are non-voted, in addition to expenditure voted in Supply Estimates. The amounts are £54 million, £105 million and £84 million respectively.
- Figures for 1996/97 and 1997/98 are net of the element of receipts from the sale of married quarters that have been or will be appropriated onto Defence Votes. These amounts are £304 million and £700 million respectively. The amount for 1996/97 is lower than the total receipts of £945 million included within the control total by function.
- In 1996/97 £244 million was drawn down from the reserve to cover the additional costs of operations in the former Yugoslavia.
- The outturn expenditure for 1996/97 and plans for 1997/98 shown in Table 1 and Chart 1 are adjusted for the overspend in 1996/97 and subsequent cash limit reduction for 1997/98. Expenditure against cash limit in 1996/97 was £22,350 million, an overspend of £246 million. The main reasons for this were early delivery and payment for equipment due in 1997/98 and faster billing procedures. Also, extra costs resulting from operations in Bosnia were £45 million above the amount drawn down from the reserve to meet anticipated costs.<sup>1</sup> When an overspend on cash limit occurs it is normal procedure for the subsequent year's cash limit to be reduced, although not necessarily by the same amount. On 5 November it was announced that the cash limit for 1997/98 would be reduced by £164.6 million<sup>2</sup>.

Table 2 looks at the defence budget according to the New Management Strategy which was introduced on 1 April 1991. This comprises a system of management planning centred on the Departmental Plan which established targets for managers throughout the Department and the armed forces, and a system of budgets which provide managers with a cash allocation with some flexibility in the way in which they use it.

Table 3 looks at the Defence Budget broken down by principal heading. The expenditure total shown in this table differs from that in Table 1 as it shows expenditure at outturn prices. Also, other countries' contributions to the cost of the Gulf War are excluded from this table. Although the percentage of total expenditure spent on personnel, equipment and other items has varied from year to year, no consistent trend is displayed.

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<sup>1</sup> *Ministry of Defence Performance Report 1996/97*, Cm 3781

<sup>2</sup> *HC Deb 5 November 1997 c252w*. The announced reduction of £168 million was offset by £3.444 million to reflect the transfer of PES provision from the Foreign and Commonwealth Office to MoD to meet the costs of the Department's annual subscription to the World Service

Table 1

**Defence Budget: 1979/80 to 1998/99**

		£ billion	£ billion at 1996/97 prices (a)	As per cent of GDP	As per cent of GGE(X) (b)
1979-80	<i>outturn</i>	9.4	24.8	4.5%	10.8%
1980-81	<i>outturn</i>	11.5	25.6	4.8%	11.0%
1981-82	<i>outturn</i>	12.8	26.0	4.9%	11.0%
1982-83	<i>outturn</i>	14.6	27.7	5.1%	11.4%
1983-84	<i>outturn</i>	15.7	28.4	5.1%	11.5%
1984-85	<i>outturn</i>	17.4	30.0	5.2%	11.8%
1985-86	<i>outturn</i>	18.2	29.8	5.0%	11.7%
1986-87	<i>outturn</i>	18.4	29.2	4.7%	11.3%
1987-88	<i>outturn</i>	18.9	28.5	4.3%	10.9%
1988-89	<i>outturn</i>	19.2	27.2	4.0%	10.6%
1989-90	<i>outturn</i>	20.8	27.4	4.0%	10.5%
(c) 1990-91	<i>outturn</i>	21.7	26.5	3.9%	10.0%
(c) 1991-92	<i>outturn</i>	22.9	26.3	3.9%	9.6%
1992-93	<i>outturn</i>	22.9	25.3	3.8%	8.7%
1993-94	<i>outturn</i>	22.8	24.4	3.6%	8.2%
1994-95	<i>outturn</i>	22.6	23.8	3.3%	7.8%
1995-96	<i>estimates</i>	22.6	23.2	3.2%	7.5%
(d) 1996-97	<i>estimates</i>	22.0	22.0	2.9%	7.2%
(d) 1997-98	<i>plans</i>	21.0	20.4	2.6%	6.7%
1998-99	<i>plans</i>	22.3	21.1	2.7%	6.8%

Notes: (a) Adjusted using the adjusted GDP deflator as at 2 July 1997

(b) General government expenditure excluding privatisation proceeds and expenditure out of proceeds of the National Lottery and net of receipts of interest and dividends from public corporations and the private sector.

(c) Figures for 1990/91 and 1991/92 are net of other countries contributions to the cost of the Gulf War of £498m and £1,525m respectively.

(d) Figures for 1996/97 and 1997/98 are net of the element of receipts from the sale of married quarters that have been or will be appropriated onto Defence Votes, £304m and £700m respectively. Expenditure including these sums is shown below:

1996-97	22.3	22.3	3.0%	7.2%
1997-98	21.7	21.1	2.7%	6.9%

(e) Figures for 1996/97 and 1997/98 are adjusted for the overspend in 1996/97 and subsequent cash limit reduction in 1997/98

Sources: *Defence Statistics 1997 (DASA) Table 1.2*

*Ministry of Defence: The Government's Expenditure Plans: 1997/98 to 1999/2000, Cm 3602*

*Public Expenditure: Statistical Analyses 1997-98, Cm 3601*

*Financial Statement and Budget Report July 1997, HC 1997/98 95*

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Table 2

<b>The Defence Budget by budgetary area: 1994-95 to 1997-98</b>					£ million
Vote		1994-95	1995-96	1996-97	1997-98
Section		<i>outturn</i>	<i>outturn</i>	<i>estimated outturn</i>	<i>planned</i>
	<b>Navy Operational Areas</b>	<b>1,127</b>	<b>1,155</b>	<b>1,148</b>	<b>1,130</b>
1A	Commander-in-Chief Fleet	1,127	1,155	1,148	1,130
	<b>Army Operational Areas</b>	<b>3,891</b>	<b>3,515</b>	<b>3,463</b>	<b>3,436</b>
1B	GOC (Northern Ireland)	511	475	514	508
1C	Commander-in-Chief, Land Command	3,380	3,040	2,949	2,928
	<b>Air Force Operational Areas</b>	<b>1,832</b>	<b>1,759</b>	<b>1,724</b>	<b>1,722</b>
1D	Strike Command	1,832	1,759	1,724	1,722
	<b>Service Personnel</b>	<b>2,512</b>	<b>2,496</b>	<b>2,532</b>	<b>2,110</b>
1E	2nd Sea Lord/Commander-in-Chief, Naval Home Command	684	678	629	493
1F	Adjutant General (Personnel & Training Command)	1,020	1,049	1,082	1,045
1G	RAF Personnel & Training Command	808	769	821	572
	<b>Logistics, Support and Maintenance</b>	<b>4,622</b>	<b>4,662</b>	<b>4,729</b>	<b>4,807</b>
2A	Chief of Fleet Support	2,086	2,080	2,048	2,091
2B	Quartermaster General	885	989	1,097	1,046
2C	RAF Logistics Command	1,651	1,593	1,584	1,670
	<b>MoD Headquarters &amp; Centrally Managed Expenditure</b>	<b>2,254</b>	<b>2,093</b>	<b>2,412</b>	<b>2,450</b>
1H	2nd Permanent Under Secretary of State	938	741	706	685
1I	Vice Chief of Defence Staff (Headquarters)	1,316	1,352	1,706	1,765
	<b>Procurement Executive</b>	<b>998</b>	<b>783</b>	<b>768</b>	<b>736</b>
3A	Chief of Defence Procurement	949	797	770	736
3B	Miscellaneous Procurement Services	49	-14	-2	0
	<b>Major Equipment Budget</b>	<b>4,622</b>	<b>4,553</b>	<b>4,777</b>	<b>5,000</b>
3C	Director General Surface Ships	448	393	344	335
3D	Director General Submarines	389	408	449	429
3E	Chief of Strategic Systems Executive	633	373	368	258
3F	Director General Land Systems	858	758	890	741
3G	Director General Air Systems 1	760	803	725	830
3H	Director General Air Systems 2	610	780	874	1,378
3I	Director General Weapons and Electronic Systems	546	676	700	642
3J	Director General Command Information Systems	378	362	427	387
3K	<b>Major Research Budget</b>	<b>535</b>	<b>484</b>	<b>514</b>	<b>463</b>
	<b>MoD owned trading funds</b>				
3L	Defence Evaluation and Research Agency	87	17	16	-26
1K	Meteorological Office	0	0	27	-9
	<b>Other</b>				
1J	Receipts from sale of married quarters	0	0	-304	-700
3M	Replacement Royal Yacht	0	0	0	1
	<b>Total Defence Budget</b>	<b>22,562</b>	<b>21,517</b>	<b>21,805</b>	<b>21,122</b>
4A	Retired pay, pensions and other payments to Service personnel and their dependants	887	828	1,101	1,073

Sources: Ministry of Defence, *The Government's Expenditure Plans: 1997/98 to 1999/2000*, Cm 3602

Table 3

**Principal Headings of the Defence Budget: 1979/80 to 1997/98**

£ billion

		Total Expenditure as per cent of total												
		Expenditure on personnel					Expenditure on equipment					Other expenditure		
Expenditure (outturn/estimates prices) (a)		Total	<i>of the Armed Forces</i>	<i>of the retired Armed Forces</i>	<i>of civilian staff</i>	Total	<i>Sea</i>	<i>Land</i>	<i>Air</i>	<i>Other</i>	Total	<i>Works, buildings and land</i>	<i>Misc. stores etc</i>	
1979-80	<i>outturn</i>	9.2	42.6%	22.9%	5.0%	14.8%	39.7%	12.1%	8.1%	15.5%	4.0%	17.7%	6.5%	11.2%
1984-85	<i>outturn</i>	17.1	34.9%	18.9%	4.8%	11.2%	45.8%	13.0%	9.6%	20.3%	2.9%	19.3%	7.4%	11.9%
1985-86	<i>outturn</i>	17.9	35.6%	19.6%	5.0%	11.0%	45.7%	13.9%	10.5%	18.4%	2.8%	18.8%	7.9%	10.9%
1986-87	<i>outturn</i>	18.2	37.9%	20.9%	5.4%	11.7%	43.4%	13.7%	9.7%	17.0%	3.0%	18.6%	8.2%	10.4%
1987-88	<i>outturn</i>	18.9	38.2%	21.4%	5.7%	11.1%	43.9%	14.8%	9.0%	17.1%	2.9%	17.8%	7.7%	10.2%
1988-89	<i>outturn</i>	19.1	39.7%	22.5%	5.6%	11.6%	42.1%	13.8%	8.1%	16.2%	4.0%	18.2%	7.4%	10.8%
1989-90	<i>outturn</i>	20.8	39.0%	21.8%	5.8%	11.4%	41.1%	13.9%	8.4%	14.9%	3.9%	19.9%	9.2%	10.7%
1990-91	<i>outturn</i>	22.3	39.5%	21.6%	6.3%	11.6%	39.6%	13.3%	8.6%	14.3%	3.4%	20.9%	9.3%	11.6%
1991-92	<i>outturn</i>	24.6	40.5%	22.4%	6.6%	11.5%	39.7%	12.8%	8.8%	14.5%	3.6%	19.8%	8.5%	11.3%
1992-93	<i>outturn</i>	23.8	44.2%	23.7%	8.2%	12.3%	36.7%	12.2%	7.8%	13.3%	3.4%	19.1%	7.5%	11.6%
1993-94	<i>outturn</i>	23.4	42.0%	29.5%	(c)	12.5%	39.3%	11.0%	7.7%	13.9%	6.7%	18.7%	8.9%	9.8%
1994-95	<i>outturn</i>	22.5	41.3%	28.8%	(c)	12.5%	39.2%	10.9%	7.3%	14.1%	6.9%	19.5%	10.7%	8.8%
1995-96	<i>outturn</i>	22.5	39.6%	28.6%	(c)	11.0%	39.7%	9.8%	7.3%	15.6%	7.0%	20.7%	9.6%	11.1%
1996-97	<i>estimates</i>	21.4	39.8%	28.9%	(c)	10.9%	39.4%	9.3%	7.4%	16.1%	6.6%	20.8%	8.7%	12.1%
1997-98	<i>estimates</i>	21.1	39.2%	28.4%	(c)	10.8%	42.5%	9.5%	7.2%	19.3%	6.5%	18.3%	5.7%	12.6%

Notes: (a) Figures for 1990/91 and 1991/92 exclude overseas contributions to the cost of the Gulf War.

Sources: UK Defence Statistics 1997 and earlier editions, Table 1.2



### B International comparisons

There are problems when making international comparisons of military expenditure. One of the most important of these is the suitability of the exchange rates used when expenditures in national currencies are converted to a common basis. The use of current exchange rates can lead to substantial distortions when comparing defence expenditures. This is because the official exchange rates of currencies are often not an accurate reflection of the internal purchasing power of the respective currencies - rates of exchange may be fixed by administrative decree, or in the case of a floating rate, by forces reflecting many factors, such as the movement of capital or expectations about the future. Also, the national definitions of military spending may vary.

These problems mean, then, that international comparisons of defence expenditure tend to be crude measures which should be treated with a substantial amount of caution. Differences of a fraction of a percentage point should not be used as a basis for argument.

Furthermore, the basis of payment through which the military sector acquires resources can also differ between countries. If, for example, conscription takes place in a country, the total cost of the armed forces in that country is likely to be lower than in a country with a similar size of force which is fully professional<sup>3</sup>.

Tables 4 and 5 show international comparisons of Defence Expenditure based on the NATO definition of defence expenditure. This includes all spending on military forces, military aid to another nations, military pensions, host government expenses for NATO tenant forces, NATO infrastructure and civilian staff costs; but excludes spending on paramilitary forces. In view of the differences between this and national definitions, the figures may diverge considerably from those which are quoted by national authorities or given in national budgets, although for the UK the difference is minor<sup>4</sup>.

Table 4 shows expenditure as a percentage of Gross Domestic Product, while Table 5 shows expenditure in terms of US dollars per capita.

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<sup>3</sup> although the professional force may well be more effective i.e. the size of professional force necessary to perform a specific defence role may be smaller than that required with conscripts

<sup>4</sup> Less than 0.1% of the defence budget in 1996/97, the main adjustment being the subtraction of expenditure on the Meteorological Office and the addition of a small amount of expenditure on support services outside the defence budget (mainly provided by the National Audit Office).

Table 4

**Defence Expenditure as % of GDP (a)**

Country	Average 1975-79	Average 1980-1984	Average 1985-1989	1988	1989	1990	1994	1995	(b) 1996
NATO countries									
Belgium	3.2	3.3	2.9	2.7	2.5	2.4	1.7	1.7	1.6
Denmark	2.4	2.4	2.1	2.1	2.1	2.0	1.9	1.8	1.8
France	3.8	4.1	3.8	3.8	3.7	3.6	3.3	3.1	3.0
Germany (c) (d)	3.4	3.4	3.0	2.9	2.8	2.8	1.8	1.7	1.7
Greece	5.6	5.5	5.2	6.3	5.7	5.8	4.4	4.4	4.6
Italy	2.0	2.1	2.3	2.3	2.3	2.1	2.0	1.8	2.0
Luxembourg	0.9	1.1	0.9	1.3	1.1	1.1	0.9	0.8	0.8
Netherlands	3.1	3.1	2.9	3.0	2.8	2.6	2.1	2.0	2.0
Norway	3.1	2.9	3.2	3.2	3.3	3.2	2.8	2.4	2.5
Portugal	3.4	3.0	2.8	3.2	3.2	3.1	2.5	2.6	2.7
Spain	..	2.4	2.2	2.1	2.1	1.8	1.5	1.5	1.5
Turkey	4.4	4.0	3.3	2.8	3.1	3.5	1.1	4.0	4.4
United Kingdom	4.9	5.2	4.5	4.2	4.1	4.1	3.4	3.0	2.9
<b>NATO Europe</b>	..	<b>3.6</b>	<b>3.3</b>	<b>3.2</b>	<b>3.1</b>	<b>3.0</b>	<b>2.4</b>	<b>2.3</b>	<b>2.3</b>
Canada	1.9	2.1	2.1	2.1	2.0	2.0	1.8	1.6	1.5
United States	5.0	5.8	6.3	6.1	5.8	5.6	4.3	4.0	3.7
<b>NATO Total</b>	..	<b>4.6</b>	<b>4.7</b>	<b>4.5</b>	<b>4.4</b>	<b>4.1</b>	<b>3.3</b>	<b>3.0</b>	<b>2.9</b>

Notes: (a) NATO definition of defence expenditure as a proportion of gross domestic product (based on current prices). Figures are for financial year with most months in fiscal year i.e 1996 is 1996/97 for UK.

(b) 1996 figures are estimates.

(c) These percentages have been calculated without taking into account the expenditure for Berlin.

(d) Figures refer to West Germany up to and including 1990 and to united Germany thereafter.

Sources: NATO press release M-DPC-2(96)168 - 'Financial & Economic Data Relating to NATO Defence' Table 3

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Table 5

### NATO Defence Expenditures Per Capita In US \$ (1990 prices & exchange rates) (a)

Country	1975	1980	1985	1990	1994	1995	(b) 1996
Belgium	405	483	478	466	352	342	339
Denmark	450	493	498	515	488	481	474
France	588	695	740	751	709	672	658
Germany (c)	606	644	671	669	385	375	369
Greece	358	345	440	383	367	371	395
Italy	332	344	392	412	399	360	356
Luxembourg	137	184	203	255	279	271	264
Netherlands	442	457	494	496	424	407	411
Norway	564	631	758	800	803	726	777
Portugal	199	156	147	190	177	187	201
Spain	..	226	245	232	201	207	202
Turkey	65	73	71	94	96	95	96
United Kingdom	690	697	771	690	564	511	502
<b>NATO Europe</b>	..	<b>464</b>	<b>494</b>	<b>485</b>	<b>399</b>	<b>377</b>	<b>372</b>
Canada	300	327	414	415	359	332	302
United States	987	987	1,261	1,225	971	910	861
<b>NATO Total</b>	..	<b>652</b>	<b>779</b>	<b>761</b>	<b>610</b>	<b>574</b>	<b>552</b>

Notes: (a) 1996 population data used have been calculated by applying the average annual growth between 1990 and 1995 to 1995 figures.

(b) 1996 figures are estimates.  
and to united Germany thereafter.

Sources: NATO press release M-DPC-2(96)168 - 'Financial & Economic Data Relating to NATO Defence' Table 3

## II Defence Manpower

### A. Armed Forces Manpower

There have been large-scale reductions in the size of UK regular and reserve force since 1990. These follow from the restructuring set out in *Britain's Defence for the 90s* and the *Defence Costs Study*. Table 6 below shows the number of redundancies by service from 1990/91 to 1996/97 while Table 7 and Table provide a simple analysis of the strength of UK regular and reserve forces since 1980.

Table 6

**Redundancies in the Armed Forces: 1990/91 to 1996/97**

	Royal Navy	Army	RAF	Total
1990/91	0	0	0	0
1991/92	0	0	0	0
1992/93	390	3,325	233	3,948
1993/94	1,253	6,369	1,292	8,914
1994/95	2,388	6,890	1,648	10,926
1995/96	536	179	2,842	3,557
1996/97	1,836	193	5,249	7,278
Total	6,403	16,956	11,264	34,623

Sources: HC Deb 4 June 1997 c183w

Tables 7 and 8 provide a simple analysis of the strength of UK regular and reserve forces since 1980. Between 1 April 1990 and 1 August 1995, the number of UK regular forces has fallen by 25% to 229,300. Between 1 April 1990 and 1 April 1995 the number of regular reserves has risen by 4% whilst the number of volunteer reserves and auxiliary forces has fallen by 29%.

At 1 April 1997, the strength of the UK cadet forces was 132,700. This is around 3,400 below the strength in April 1990.

Table 7

**UK Regular Armed Forces Manpower (a) (b)**

	1 April 1980	1 April 1990	1 April 1994	1 April 1995	1 April 1996	1 April 1997	1 August 1997	% Change 1990-97
<b>Royal Navy/Royal Marines</b>	<b>71,900</b>	<b>63,200</b>	<b>55,700</b>	<b>50,900</b>	<b>48,300</b>	<b>45,100</b>	<b>44,700</b>	<b>-29%</b>
Officers	10,100	10,100	9,100	8,800	8,400	8,000	7,800	-23%
Other ranks	61,800	53,000	46,600	42,100	40,000	37,200	36,900	-30%
<b>Army</b>	<b>159,000</b>	<b>152,800</b>	<b>123,000</b>	<b>111,700</b>	<b>108,800</b>	<b>108,800</b>	<b>108,800</b>	<b>-29%</b>
Officers	17,100	17,400	14,900	14,000	13,800	13,700	13,600	-22%
Other ranks	142,000	135,400	108,100	97,800	95,100	95,100	95,200	-30%
<b>Royal Air Force</b>	<b>89,600</b>	<b>89,700</b>	<b>75,700</b>	<b>70,800</b>	<b>64,700</b>	<b>56,900</b>	<b>56,400</b>	<b>-37%</b>
Officers	14,800	15,200	13,400	12,800	12,000	11,100	11,000	-28%
Other ranks	74,800	74,400	62,200	57,900	52,800	45,800	45,500	-39%
<b>Total Officers</b>	<b>42,000</b>	<b>42,900</b>	<b>37,500</b>	<b>35,600</b>	<b>34,000</b>	<b>32,700</b>	<b>32,400</b>	<b>-24%</b>
<b>Total Other Ranks</b>	<b>278,600</b>	<b>262,900</b>	<b>217,000</b>	<b>197,800</b>	<b>187,700</b>	<b>178,200</b>	<b>177,500</b>	<b>-32%</b>
<b>Total Regular Forces</b>	<b>320,600</b>	<b>305,700</b>	<b>254,500</b>	<b>233,300</b>	<b>221,900</b>	<b>210,800</b>	<b>209,900</b>	<b>-31%</b>

Notes: (a) Excludes locally entered personnel and Gurkhas.

(b) Figures may not sum to totals shown due to rounding.

Sources: *Defence Statistics 1997 (DASA) Table 2.8*

*MoD Statistical Bulletin TSP1 (September 1997)*

Table 8

**UK Reserves & Auxiliary Forces**

	1 April 1980	1 April 1990	1 April 1993	1 April 1994	1 April 1995	1 April 1996	1 April 1997	% Change 1990-97
<b>Regular Reserves</b>	<b>192,600</b>	<b>252,000</b>	<b>261,700</b>	<b>259,600</b>	<b>262,900</b>	<b>263,800</b>	<b>263,500</b>	<b>5%</b>
<b>Volunteer Reserves &amp; Auxiliary Forces</b>	<b>77,000</b>	<b>90,600</b>	<b>76,100</b>	<b>71,100</b>	<b>64,700</b>	<b>63,400</b>	<b>62,200</b>	<b>-31%</b>
Split by:								
<b>Royal Navy/Royal Marines</b>	<b>35,000</b>	<b>35,400</b>	<b>31,100</b>	<b>25,100</b>	<b>25,800</b>	<b>26,200</b>	<b>26,600</b>	<b>-25%</b>
Regular Reserves	29,200	28,400	25,500	20,700	22,100	22,700	23,100	-19%
Volunteer Reserves & Auxiliary Forces (a)	5,800	7,000	5,600	4,400	3,700	3,500	3,500	-50%
<b>Army</b>	<b>203,800</b>	<b>265,400</b>	<b>258,800</b>	<b>257,500</b>	<b>255,000</b>	<b>254,700</b>	<b>247,700</b>	<b>-7%</b>
Regular Reserves	133,100	183,500	190,100	192,500	195,300	196,000	190,100	4%
Territorial Army (b)	63,300	72,500	68,500	65,000	59,700	57,300	57,600	-21%
Ulster Defence Regiment (c)	7,400	6,200	*	*	*	*	*	*
Home Service Force (d)	*	3,200	200	*	*	*	*	*
<b>Royal Air Force</b>	<b>30,800</b>	<b>42,000</b>	<b>47,800</b>	<b>48,100</b>	<b>46,800</b>	<b>46,400</b>	<b>46,600</b>	<b>11%</b>
Regular Reserves	30,300	40,200	46,100	46,400	45,500	45,200	45,300	13%
Volunteer Reserves & Auxiliary Forces	500	1,800	1,700	1,800	1,300	1,200	1,400	-22%

Notes: (a) The Royal Naval Auxiliary Service are not included in this table. They were disbanded on 31 March 1994.

(b) The figures for the TA include Non-Regular Permanent Staff of which there were around 1,400 at 1 April 1997

(c) On 1 July 1993 the UDR merged with the Royal Irish Rangers and are now counted as regular forces.

(d) By 1 April 1994 the Home Service Force had become fully amalgamated with the Group A of the TA.

Source: *Defence Statistics 1997 (DASA) Table 2.13*

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### B. Civilian Manpower

The MoD also committed itself to reducing civilian manpower by around 20% by the mid-1990s<sup>5</sup>. This reduction was planned to be greatest amongst locally employed civilians in Germany and amongst HQ staff. Figures are given in Table 9 and show that by 1 April 1997, the total of UK and locally engaged civilian personnel had fallen by 47,400 or 28% since 1 April 1990.

**Table 9 - Civilian Manpower**

	1 April 1980	1 April 1990	1 April 1995	1 April 1996	1 April 1997
	levels	levels	levels	levels	levels
UK Personnel	239,800	141,400	116,100	109,900	109,200
Locally Engaged	36,400	30,900	17,100	16,900	15,700

*Source: Defence Statistics 1997 (DASA) Table 2.16*

### C. International Comparisons

The numbers of military personnel in each NATO country are set out shown in table 8. Once again, this method of international comparison is very crude. Different organisations quote varying figures for the size of the armed forces for certain countries, depending on what definition is used. For example, figures could include or exclude paramilitary forces. The NATO figures given in Table 9 include paramilitary forces.

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<sup>5</sup> Government Expenditure Plans 1992/93 to 1994/95 (Cm 1901): Departmental Report by the MoD para 42.

Table 10

<b>NATO Armed Forces Personnel</b>									Thousands
Country	1975	1980	1985	1990	1992	1994	1995 (a)	1996	% change 1990-96
Belgium (b)	103	108	107	106	79	53	47	45	-58%
Denmark	34	33	29	31	28	28	27	28	-10%
France	585	575	563	550	522	506	504	501	-9%
Germany (c)	491	490	495	545	442	362	352	337	-38%
Greece	185	186	201	201	208	206	213	212	5%
Italy	459	474	504	493	471	436	435	431	-13%
Luxembourg	1	1	1	1	1	1	1	1	0%
Netherlands	107	107	103	104	90	77	67	64	-38%
Norway	38	40	36	51	36	33	38	38	-25%
Portugal	104	88	102	87	80	122	78	75	-14%
Spain	..	356	314	263	198	213	210	203	-23%
Turkey	584	717	814	769	704	811	805	803	4%
United Kingdom	348	330	334	308	293	257	233	227	-26%
NATO Europe	..	3,504	3,603	3,510	3,154	3,103	3,010	2,964	-16%
Canada	78	82	83	87	82	75	70	65	-25%
United States	2,146	2,050	2,244	2,181	1,919	1,715	1,620	1,585	-27%
<b>NATO Total</b>	<b>..</b>	<b>5,636</b>	<b>5,930</b>	<b>5,778</b>	<b>5,154</b>	<b>4,893</b>	<b>4,700</b>	<b>4,614</b>	<b>-20%</b>

Notes: (a) 1996 figures are estimates.

(b) Decrease from 1992 military strength reflects the decision by the Belgian government to demilitarise the Gendarmerie.

(c) Refers to West Germany up to and including 1990 and to united Germany from 1991.

Source: NATO press release M-DPC-2(96)168 - 'Financial & Economic Data Relating to NATO Defence' Table 3



### **III Formation of the armed forces**

Table 11 gives information on the formation of the armed forces in terms of numbers of aircraft, ships and army units over the last 20 years.

Table 11

**Formation of the armed forces**

		1975	1980	1985	1990	1992	1993	1994	1995	1996	1997
<b>Front-line units</b>											
<b>Royal Navy</b>											
Submarines	Vessels	32	32	33	33	23	23	23	16	15	15
Trident/Polaris	Vessels	4	4	4	4	4	4	4	4	3	3
Fleet	Vessels	28	28	29	29	19	19	17	12	12	12
Carriers	Vessels	3	3	4	3	3	3	3	3	3	3
Assault ships	Vessels	2	2	2	2	2	2	2	2	2	3
Cruisers	Vessels	2	1	0	0	0	0	0	0	0	0
Destroyers	Vessels	10	13	15	14	12	12	12	12	12	12
Frigates	Vessels	60	53	41	35	32	28	25	23	24	23
Mine counter measure vessels	Vessels	43	36	45	41	34	35	18	18	18	19
Patrol ships and craft	Vessels	14	22	32	34	25	25	34	32	32	34
Fixed wing aircraft	Squadrons	3	2	3	3	3	3	3	3	3	3
Helicopters	Squadrons	13	14	18	17	17	17	17	15	15	15
<b>Royal marines</b>	Commandos	4	4	3	3	3	3	3	3	3	3
<b>Regular army</b>											
Combat arms											
Armour	Regiments	19	19	19	19	19	14	12	11	11	11
Infantry	Battalions	55	26	26	55	55	48	45	41	41	40
Special Forces	Regiments	1	1	1	1	1	1	1	1	1	1
Aviation	Regiments	..	6	4	4	5	6	6	5	5	5
Combat support											
Artillery	Regiments	26	22	22	22	21	18	16	16	16	16
Engineers	Regiments	13	10	13	13	13	13	12	10	10	10
Signals	Regiments	17	13	14	13	14	13	14	12	12	11
<b>Home Service Forces</b>											
Infantry	Battalions	13	14	11	11	9	8	8	8	7	7
<b>Territorial Army</b>											
Combat arms											
Armour	Regiments	3	4	5	5	5	5	5	5	5	6
Infantry	Battalions	38	38	35	41	41	36	36	36	36	33
Special Forces	Regiments	2	2	2	2	2	2	2	2	2	2
Aviation	Regiments	..	..	..	..	..	..	..	1	1	1
Combat support											
Artillery	Regiments	5	6	6	7	7	6	6	6	6	6
Engineers	Regiments	7	7	7	8	8	9	9	9	9	9
Signals	Regiments	11	11	11	11	11	11	11	11	11	11

Sources: Defence Statistics 1997(DASA) Table 3.1

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Table 11 (continued)

## Formation of the armed forces

		1975	1980	1985	1990	1992	1993	1994	1995	1996	1997
<b>Royal Air Force</b>											
Strike/attack	Squadrons	13	15	11	11	9	8	6	6	6	6
Offensive support	Squadrons	6	5	5	5	5	5	5	5	5	5
Reconnaissance	Squadrons	5	5	3	3	5	5	5	5	5	5
Maritime patrol	Squadrons	5	4	4	4	4	3	3	3	3	3
Air defence	Squadrons	9	9	9	9	9	7	6	6	6	6
Airborne Early Warning	Squadrons	1	1	1	1	1	1	1	1	2	2
Air transport, tankers and helicopters	Squadrons	17	11	14	15	16	16	15	14	14	13
Search and Rescue	Squadrons	2	2	2	2	2	2	2	2	2	2
<b>RAF regiments</b>											
Surface to air missiles	Squadrons	6	8	8	7	6	5	5	5	6	6
Ground defence	Squadrons	5	5	5	6	5	5	5	5	5	5
<b>Royal Auxiliary Air Force</b>											
Ground defence	Squadrons	..	3	6	6	6	6	5	5	5	5
<b>Support units</b>											
<b>Royal Navy and Royal Fleet Auxiliary Service</b>											
Support ships	Vessels	8	9	10	8	5	2	1	1	1	1
Survey ships	Vessels	13	13	9	8	6	6	6	6	6	6
Ice patrol ships	Vessels	1	1	1	1	1	1	1	1	1	1
Tankers	Vessels	..	15	14	13	11	10	9	9	9	9
Fleet replenishment ships	Vessels	..	4	4	4	4	5	5	5	5	5
Aviation training ship	Vessels	..	..	0	0	0	1	1	1	1	1
Landing ships	Vessels	..	6	7	5	5	5	5	5	5	5
Forward repair ships	Vessels	..	0	1	1	1	1	1	1	1	1
<b>Royal Marines</b>											
Logistic unit	Regiments	1	1	1	1	1	1	1	1	1	1
<b>Regular Army</b>											
<b>Combat service support</b>											
Equipment support	Battalions	..	..	..	..	..	..	5	5	5	5
Logistics	Regiments	23	17	23	27	26	25	26	26	26	24
Field ambulances/field hospitals	Number	11	8	14	16	16	16	13	13	12	12
<b>Territorial Army</b>											
<b>Combat service support</b>											
Equipment support	Battalions	..	..	..	..	..	..	4	4	5	5
Logistics	Regiments	13	8	12	12	12	12	11	11	11	..
Field ambulances/field hospitals	Number	15	13	18	17	17	17	17	17	18	18

Sources: Defence Statistics 1997(DASA) Table 3.1

## IV Armed Forces Salaries

Military salaries for ranks in the armed services are quite complex as they often relate to bands, scales and classes according to employment classification, length of service, nature of specialisation etc. For example, there are nine pay rates for Majors in the Army on the main Officer pay scale according to the length of service in that rank.

The tables shown here look at illustrative military salaries for officers and servicemen, based on Army ranks. Table 12 shows compares indices based on average military salaries for different ranks with the Average Earnings Index. The table shows that salaries of senior officers have risen faster than those of other ranks (by 68% between 1988/89 compared with 63% for ranks up to corporal). The table also shows the average annual percentage change in salaries for different periods. For average earnings in 1997/98, a forecast increase of 4.6% has been used<sup>6</sup>

Table 13 looks at average military salaries for different ranks for various years since 1980/81. It also shows real terms changes calculated by converting the cash salaries to constant 1997/98 prices using the Retail Prices Index. The change in the RPI for 1997/98 has been calculated using the latest forecast given in the Pre-Budget Report<sup>7</sup>.

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<sup>6</sup> *Forecasts for the UK Economy*, HM Treasury, November 1997

<sup>7</sup> *Pre-Budget Report*, HM Treasury, November 1997

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Table 12

### Military Salary Index: 1988-89=100

	All Ranks (a)	Senior Officers (Major General and above)	Officers (Up to Brigadier)	Other ranks (Sergeant and above)	Other ranks (Up to Corporal)	Average earnings (whole economy)
1978-79	37	33	33	35	39	37
1979-80	49	42	44	48	52	44
1980-81	57	51	52	56	59	52
1981-82	63	55	59	62	65	58
1982-83	66	63	64	66	68	63
1983-84	71	67	69	71	72	68
1984-85	75	73	73	74	76	73
1985-86	82	80	81	82	83	79
1986-87	87	90	86	86	88	85
1987-88	94	95	93	93	94	92
1988-89	100	100	100	100	100	100
1989-90	107	109	107	107	107	109
1990-91	115	117	115	114	115	120
1991-92	131	131	131	130	131	129
1992-93	139	138	139	138	139	135
1993-94	141	142	141	140	141	140
1994-95	145	150	145	144	145	146
1995-96	150	157	151	150	149	150
1996-97	157	164	157	156	156	157
1997-98	163	168	164	163	163	164
Average annual % change						
1978-79 to 1997-98	8.2%	8.9%	8.8%	8.4%	7.8%	8.1%
1988-89 to 1997-98	5.6%	5.9%	5.7%	5.6%	5.6%	5.7%
1992-93 to 1997-98	3.3%	4.0%	3.3%	3.4%	3.2%	3.9%

Notes: (a) Indices cover adult male UK regular forces and are based on the average rate of basic pay through the year.

Sources: *Defence Statistics 1997 (DASA) Table 2.15 and earlier editions*  
*ONS Database*

Table 13

**Illustrative Rates of Military Salary (in terms of Army ranks) (a)**

									<i>Average annual change in real terms (b)</i>				
		1980/81	1985/86	1990/91	1994/95	1995/96	1996/97	1997/98	80/81 -85/86	85/86 -90/91	90/91 -97/98	96/97 -97/98	80/81 -97/98
General		£30,999	£51,558	£76,489	£95,050	£97,429	£100,579	£103,510	3.6%	2.0%	1.4%	0.2%	2.2%
Brigadier		£18,250	£29,401	£41,682	£55,271	£57,737	£59,872	£62,351	3.0%	1.1%	2.9%	1.4%	2.4%
Colonel	after 4 years in the rank	£16,151	£25,711	£36,598	£47,427	£49,494	£51,402	£53,511	2.7%	1.1%	2.5%	1.3%	2.2%
Lieutenant Colonel	after 4 years in the rank	£13,750	£22,170	£31,750	£40,728	£42,504	£44,225	£46,040	3.0%	1.3%	2.4%	1.3%	2.2%
Major	after 4 years in the rank	£11,001	£16,976	£24,109	£30,284	£31,483	£32,823	£34,138	2.1%	1.1%	2.1%	1.2%	1.8%
Captain	after 3 years in the rank	£8,501	£13,202	£18,819	£23,598	£24,405	£25,441	£26,468	2.2%	1.2%	2.0%	1.3%	1.8%
Lieutenant	after 2 years in the rank	£6,650	£10,209	£14,395	£18,036	£18,578	£19,443	£20,222	2.0%	0.9%	2.0%	1.2%	1.7%
Second Lieutenant		£5,201	£7,490	£10,389	£12,960	£13,352	£13,976	£14,534	0.7%	0.6%	1.9%	1.2%	1.2%
Warrant Officer I	band 6, scale C, after 18 years	£8,983	£13,505	£18,888	£24,133	£25,122	£26,119	£27,153	1.6%	0.8%	2.3%	1.2%	1.6%
Warrant Officer II	band 6, scale C, after 18 years	£8,593	£12,786	£17,935	£22,909	£23,844	£24,789	£25,769	1.4%	0.8%	2.3%	1.2%	1.6%
Staff Sergeant	band 5, scale C, after 18 years	£7,669	£11,169	£15,620	£19,588	£20,386	£21,190	£22,026	0.9%	0.8%	2.0%	1.2%	1.3%
Sergeant	band 5, scale C, after 12 years	£7,173	£10,417	£14,616	£18,344	£19,087	£19,847	£20,631	0.9%	0.8%	2.0%	1.2%	1.3%
Corporal	class 1, band 2, scale C	£6,482	£9,289	£13,066	£16,367	£16,876	£17,587	£18,296	0.6%	0.9%	1.9%	1.2%	1.2%
Lance Corporal	class 1, band 1, scale C	£5,344	£6,953	£9,614	£12,066	£12,440	£13,010	£13,533	-1.3%	0.6%	2.0%	1.2%	0.6%
Private	class 2, band 1, scale C	£4,453	£6,081	£8,249	£10,439	£10,746	£11,237	£11,685	-0.4%	0.2%	2.1%	1.2%	0.8%

Notes: (a) In the illustrative rates for officers, the mid-point of the incremental scales has been used. For servicemen, the pay bandings have been selected which contain the largest number at each rank. Within each rank servicemen are divided for the purposes of pay into classes, bands and scales according to their employment classification, the nature of their specialisation and the period of commitment to serve. All forms of additional pay, eg flying pay, diving pay etc are excluded since they are not paid to the majority of Service personnel. In each year the rates are calculated using a weighted average of the salaries in that year.

(b) Conversions to constant prices are made using the retail prices index. For 1997/98 a forecast increase of 2.75% has been used.

Sources: *Defence Statistics 1997 (DASA)*  
*ONS Database*

### V Trident

The most recent official estimate<sup>8</sup> for the total cost of acquiring the UK Trident system is £12,570 million at 1996/97 prices and at an exchange rate of £1 = \$1.52. This is the estimated total cost of *acquiring* Trident only, and so excludes any estimates of running costs over its operational life. The previous estimate, at 1995/96 prices assuming £1 = \$1.55, was £12,153 million. These figures are on the so-called “non-hybrid” basis where all costs are brought up to a common price base and exchange rate. To look at the amount of money left to spend we must use the “hybrid” basis where past expenditure is included at the prices and exchange rates actually incurred, with future expenditure expressed at today’s prices. Expenditure on Trident acquisition on this basis to the end of September 1996 has been around £8.5 billion, leaving around £1.4 billion to spend. At the end of September 1996, £550 million of Trident expenditure was committed but unspent, while £863 million remained uncommitted<sup>9</sup>.

Greenpeace<sup>10</sup> claimed in 1992 that the true total cost of the Trident programme was much higher than this. In addition to the (then) £10,518 million officially quoted for the cost of acquiring Trident by the MoD, they include a figure of £11,492 million for their estimate of identifiable lifetime running costs and post-lifetime decommissioning costs, and £11,075 million for what they describe as “items essential to the continuation of the Trident programme that are excluded on the grounds that they may be used for other purposes at a future date”. These additional costs refer to Trident’s estimated share of items such as the Atomic Weapons Establishment (Aldermaston), the Faslane works and the development of the PWR2 nuclear propulsion plant. The total estimate made by Greenpeace was around £33.1 billion in 1991-92 prices

On the subject of the anticipated annual running costs of Trident, the Ministry of Defence has said<sup>11</sup> that the average annual running costs of the Trident nuclear force are expected to be about £200 million per annum (less than 1% of the defence budget). This estimate encompasses manpower and related costs, refits of the submarines, stores and transport costs, a share of the running costs of shore facilities, an element of the costs of the Atomic Weapons Establishment, in-service support of the submarines and their weapon systems and decommissioning and disposal costs. If one assumes a lifetime of 30 years for Trident, this would imply total running costs of some £6.0 billion at 1997/98 prices. The Government has said recently that they are “looking at the basis upon which cost estimates have been calculated in the light of operating experience and as part of the wider Strategic Defence Review”<sup>12</sup>.

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<sup>8</sup> Dep 3/4906 “Report on Trident by the Ministry of Defence”, March 1997

<sup>9</sup> *HC Deb 3 February 1997 c484w*

<sup>10</sup> Greenpeace (1992) - “*The Rising Cost of Trident*”

<sup>11</sup> Defence Select Committee, *Progress of the Trident Programme*, HC 297 1993-94 para. 5; More recently *HC Deb 24 June 1997 c423-4w*

<sup>12</sup> *HC Deb 4 December 1997 c336w*

## Appendix A

### Tri-Service and Civilian Information published by DASA

Number	Title	Frequency
TSP1	UK Regular Forces strengths and changes	Monthly
TSP2	Trained requirements and strengths of service personnel	Quarterly
TSP4	UK Regular Forces quarterly press release	Quarterly
TSP5	UK Regular Forces premature voluntary release	Quarterly
TSP6	Global deployment of service personnel	Six-monthly
TSP7	Reserve and Cadet Forces	Yearly
TSP8	Age distribution of UK Regular Forces	Yearly
TSP9	Rank structure of UK Regular Forces	Quarterly
TSP10	UK Regular Forces deployment in UK by local authority area	Yearly
TSP11	Male UK Regular Forces marital status and family statistics	Yearly
TSP13	UK Regular Forces servicemen age on entry	Yearly
TSP15	UK Service Personnel on loan to other countries	Quarterly
TSP16	UK Regular Forces disciplinary convictions	Yearly
TSP18	UK Servicemen wastage during first six months of training	Yearly
TSP19	UK Regular Forces intake and outflow by age	Yearly
TSP20	Male Regular Forces outflow by rank	Yearly
TSP22	UK Regular Forces comparative statistics	Yearly
TSP24	Strength of uniformed medical staff	Yearly
SCPS1	UK service and civilian personnel by sector and TLB	Monthly
CPS1	Permanent UK-based civilian personnel by grade equivalent, type and area of work	Quarterly
CPS2	Regional analysis of resignations for admin and science group staff	Quarterly
	UK Defence Statistics	Annual



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