



BRIEFING PAPER

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The cost of the UK's strategic nuclear deterrent

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1. Background

Since the acquisition of the UK's first strategic nuclear deterrent in the 1950s, the cost of procuring and maintaining it, and which Government department should finance it, has always been a matter of debate.

Ascertaining historical costs for the nuclear deterrent is difficult and complex, as this information is not easily available from public sources. Many records no longer exist, while others were classified. In the past successive Governments have often not discussed costs on the grounds of operational security.

Information has also been presented in many different forms (i.e. current prices, constant prices, as a percentage of the defence budget) therefore making it difficult to provide an annual cost that is calculated in a consistent manner.¹ A cost set out in the early 1960s, for example, could not be directly compared to costs set out in the 1980s or the present day unless they were updated to take inflation into account.

Related Library briefing papers

- CBP8010, [Replacing the UK's nuclear deterrent: Progress of the Dreadnought class](#)
- CBP8941, [Replacing the UK's nuclear deterrent: the long-awaited warhead decision](#)
- CBP7353, [Replacing the UK's 'Trident' nuclear deterrent](#), July 2016

Further library briefings papers on nuclear weapons, including the UK's position on nuclear disarmament, can be found in the World Affairs section of the [House of Commons Library website](#).

¹ Current prices reflect the value of money at the time costs or benefits are realised, so changes over time shown in current prices include the effect of inflation. Constant prices adjust for the effect of inflation and show costs or benefits in money that has the same value over time (i.e. the value of money is held constant for a given base year). Further information is available in the House of Commons Library Statistical Literacy Guide [How to adjust for inflation](#).

2. Historical costs

2.1 V-Bomber Force

The UK's strategic nuclear deterrent was initially provided by the RAF's V-force. George Ward, the Secretary of State for Air, said in 1957:

It has been said that we are devoting too much of our defence expenditure to the deterrent, but I can assure the Committee that we are neither starving our forces in other spheres to produce a British deterrent nor are we devoting the greater part of our research and development effort to it. In fact, of the whole of the defence budget, the V-bomber force will this year absorb only about one-tenth.²

In March 1958 the Government of the time went on to state:

In our present Defence Budget we are spending about one-tenth of our money on the nuclear deterrent—our strategic bomber force, its nuclear bombs and the research and development that go with them, including work on ballistic missiles. We plan over the next five years to spend roughly the same amount as this year. We are also spending roughly another 10 per cent. on the defence by conventional forces of our deterrent bases at home. This figure includes the fighter force, the control and warning system, our defensive guided missiles, and the research and development related to them all. The total of these adds up only to about one-fifth of our Defence Budget.

Harold Watkinson, then Minister of Defence, reiterated the 10 per cent figure in 1960:

In the defence debate on 20th July, I explained to the House the Government's plans for an independent British contribution to the nuclear deterrent of the West, based in the main on the V-bomber element of Bomber Command. This force is of the highest quality and has a formidable supply of nuclear weapons available to it. The cost of the strategic nuclear deterrent is expected to run at about 10% of the defence budget.³

The nuclear role of the V-force was withdrawn in 1969.

2.2 Polaris

In 1962 the UK purchased the submarine-based Polaris system from the United States, under the *Polaris Sales Agreement*. In 1968 Polaris entered service and became the UK's main nuclear force.

In March 1981 the MOD put the cost of the Polaris procurement at £330 million, over a period of nine years (1963-1972). This was roughly equivalent to £2 billion in 1980 prices, when the Trident programme began (see below). This figure did not, however, include the Chevaline modification to Polaris,⁴ which was estimated at a further £1 billion.⁵

Discussing how Polaris would be paid for, the Civil Lord of the Admiralty, John Hay, stated on 2 March 1964:

It has always been the Government's view that the Polaris submarine programme Polaris being the carrier of the nuclear deterrent, should be taken on the defence budget as a whole; that is to say, it should not fall entirely on the Navy. For that reason, the defence budget includes a Polaris element. The extra money that we receive for Polaris is made up partly from additional cash from the Treasury and partly from a contribution from each of the Services.⁶

² [HC Deb 09 May 1957 vol 569 cc1186](#)

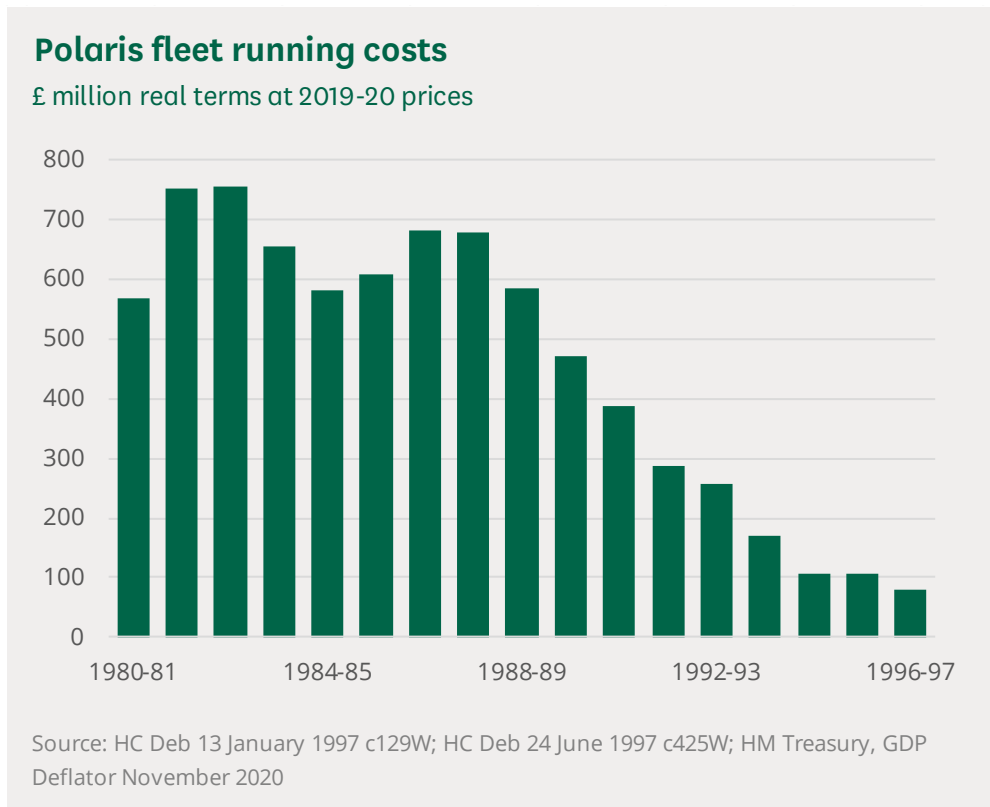
³ HC Deb 26 October 1960 vol 627 [c273W](#)

⁴ HL Deb 24 March 1981, c1155WA

⁵ HC Deb 1 March 1983, c113W

⁶ HC Deb 2 March 1964, c920

In terms of running costs, in 1993⁷ and again in 1997⁸ the MOD, responding to tabled questions, cited disproportionate costs as a reason for not disclosing the full costs of maintaining the Polaris fleet from 1968 onwards. However, in that latter answer it did set out expenditure on Polaris for the years 1980/81 to 1996/97 (in cash prices). The chart below shows the stated expenditure in real terms at 2019-20 prices:



When asked about the running costs of the Chevaline modification in 1990, the MOD stated “It would not be in the national interest to reveal such information”.⁹

The Polaris fleet began to leave service in 1994.

⁷ HC Deb 17 May 1993, c79W

⁸ HC Deb 24 June 1997 c425W

⁹ HC Deb 20 March 1990, c524W

3. Cost of procuring and operating Trident

In July 1980 the Government decided to replace the Polaris nuclear deterrent system with Trident, under the terms of the [Polaris sales agreement](#) 1963, as amended for Trident ([Treaty Series 086/1980](#)) and ([Treaty Series 008/1983](#)).

3.1 Acquisition costs

The then Defence Secretary, Francis Pym, made a statement to the House on the replacement of the UK's Polaris strategic nuclear deterrent system with Trident. In that statement he confirmed that the capital cost of procuring Trident would be taken out of the existing defence budget, in line with convention. He commented:

We estimate the capital cost of a four-boat force, at today's prices, as up to £5 billion, spread over 15 years. We expect rather over half of the expenditure to fall in the 1980s. We intend to accommodate this within the defence budget in the normal way, alongside our other major force improvements [...]

Of course there will be an effect on other weapons systems, but that is true of any weapons system. For instance, even the Tornado system—more expensive than the Polaris successor system that I have just announced—has its effect on other weapons systems. They all interact. But the provision of the strategic deterrent has always been part of normal defence budgeting. It is a weapons system, like any other weapons system – ships, tanks, or whatever it may be. Within the defence budget this can and will be accommodated in the same way as Polaris was accommodated 10 to 20 years ago...

Overall this expensive weapons system will take between 3 per cent and 4 per cent over the 15-year period, but at its peak years it will be about 5 per cent of the whole defence budget and 8 per cent of the equipment part of the budget.¹⁰

Total acquisition expenditure on the Trident programme was £12.52 billion, which equates to approximately £18.7 billion in 2019-20 prices.

Annual in-service costs are currently estimated at 6 per cent of the defence budget. This equates to approximately £2.3 billion for 2019-20, based on current defence expenditure.

Further questions about the cost were raised during the debate on procuring Trident in March 1981. Then Defence Secretary, John Nott, reiterated in that debate:

The strategic deterrent has been an integral part of the British defence budget under all Governments up to now. Trident is not an addition to that budget.¹¹

In 1982 and following on from a decision to procure the Trident II D5 missile instead of the Trident I C4 variant, the capital costs of procuring and maintaining Trident were £7.5 billion (1981 prices).¹²

By the time of the 1998 Strategic Defence Review (SDR) the majority of costs associated with procuring Trident had been spent. The SDR subsequently put total acquisition expenditure on the Trident programme at £12.52 billion.¹³ However, it should be noted that this did not represent a doubling of costs on the Trident programme. Once inflation over the period 1980-1998 is accounted for, according to the [Treasury's GDP deflator](#) £5 billion in 1980 was worth approximately £12 billion in 1998.

£12.52 billion equates to approximately £18.7 billion in 2019-20 prices.¹⁴

¹⁰ HC Deb 15 July 1980, c1236- 1251

¹¹ [HC Deb 03 March 1981 vol 1000 cc216](#)

¹² HC Deb 11 March 1982, c976

¹³ Ministry of Defence, *The Strategic Defence Review Supporting Essays*, July 1998

¹⁴ HM Treasury, [GDP Deflator, December 2019](#)

The programme was delivered well within budget, a point that the Defence Select Committee made in its final report on the Trident acquisition programme in 1994, and was acknowledged by the Government in its response to that report:

The Government welcomes the Committee's recognition that the trident programme continues to make good progress, with total estimated costs falling again this year and the submarine programme as a whole remaining well within budget (paragraph 2).¹⁵

3.2 Annual maintenance and running costs

After Trident became operational in 1994, annual expenditure for capital and running costs, including the costs for the Atomic Weapons Establishment, ranged between 3 per cent and 4.5 per cent of the annual defence budget.¹⁶

In 2005-06 those in-service costs rose to approximately 5 per cent – 6 per cent of the defence budget. According to the MOD that increase in maintenance costs was due primarily to the programme of additional investment in sustaining key skills and facilities at the Atomic Weapons Establishment, as announced by the Defence Secretary in July 2005.¹⁷

In-service costs for the nuclear deterrent currently equate to 6 per cent of the defence budget. Based on current expenditure, as set out in the MoD's [Defence Departmental Resources](#) publication, those costs between 2010-11 and 2019-20 are estimated to have been:

Trident Operational Costs Estimated Trident operational costs assuming 6% of defence budget, £ billion, 2019-20 prices		
	Defence	Trident
2010-11	46.5	2.8
2011-12	43.1	2.6
2012-13	39.0	2.3
2013-14	38.6	2.3
2014-15	37.9	2.3
2015-16	38.4	2.3
2016-17	37.6	2.3
2017-18	38.4	2.3
2018-19	39.0	2.3
2019-20	39.8	2.4

Source: MoD, Defence Departmental Resources 2020, Table 1; HM Treasury, GDP Deflator November 2020

¹⁵ Defence Committee, *Government replies to the sixth, seventh and eighth reports*

¹⁶ HC Deb 3 July 2006 c713w

¹⁷ The Nuclear Warhead Capability Sustainment Programme.

Under the Polaris Sales Agreement, as amended, the UK pays the US Department of Defense an annual contribution towards the overall cost of the Strategic Weapons Facility at Kings Bay. This contribution, which includes maintenance work, is based on the UK's share of the overall Trident II D5 missile inventory and historically has equated to £12 million per annum.¹⁸

4. Cost of the Dreadnought programme

4.1 Overall acquisition costs

The 2015 SDSR confirmed that the costs of design and manufacture of a class of four submarines will be £31 billion, an increase of £6 billion on estimates set down in the programme's Initial Gate report in 2011 (at outturn prices). This cost estimate includes all costs associated with acquisition including feasibility studies, design, assessment, demonstration and manufacture (including the US-UK Common Missile Compartment project).¹⁹ It also accounts for expected defence inflation over the life of the programme²⁰ and investment in new facilities at BAE Systems in Barrow, which in 2013 the MOD suggested would be "limited to the modification of existing infrastructure to accommodate the differences between the Vanguard and Successor designs".²¹

The estimated cost of the design and manufacture of a class of four SSBN is £31 billion, including inflation over the life of the programme.

A £10 billion contingency has also been set aside.

A contingency of £10 billion has also been set aside. This contingency represents approximately 35 per cent of the submarine cost to completion and according to the MOD "is a prudent estimate based on past experience of large, complex projects, such as the 2012 Olympics".²² However there is no guarantee whether all of this money will be spent. If it were then it would provide an upper end acquisition estimate of £41 billion. Spread over the 35- year life of the programme, this represents 0.2 per cent of Government spending.

The MOD has stated that "the revised cost and schedule reflect the greater understanding we now have about the detailed design of the submarines and their manufacture".²³

The years of peak expenditure are expected to be principally 2018 through to the mid/late 2030s, as the programme moves into full production.

¹⁸ PQ 227194, *Trident Missiles*, 19 March 2015

¹⁹ HC Deb 4 June 2009, c627W

²⁰ Defence inflation is often one of the largest sources of additional costs on a procurement programme.

²¹ The Department is building new facilities at Barrow which will allow a modular build approach for the Dreadnought submarines, which are larger than the Astute or Vanguard class. The Primary build facility programme has a current forecast cost of £240 million and is expected to be completed in 2022. The NAO also examines this programme in [Managing infrastructure projects on nuclear-regulated sites](#)

²² PQ24652, *Trident Submarines: Finance*, 2 February 2016

²³ HM Government, *National Security Strategy and Strategic Defence and Security Review 2015*, Cm9161, November 2015, p.34

Investment in HM Naval Base Clyde,²⁴ the Trident II D5 Service-life Extension programme,²⁵ infrastructure projects related to the Atomic Weapons Establishment (AWE),²⁶ and work on the options for replacing the nuclear warhead,²⁷ are not part of the Dreadnought programme spend (see below).

What has been spent so far?

In its [2019 Update to Parliament](#) the MOD confirmed that the programme remained within budget and that £7 billion had been spent so far on the concept, assessment and early delivery phases of the project, to date.

Over the last two years the MOD has made several announcements of money being brought forward into the earlier years of the programme in order to drive out cost and risk and keep the project on track.²⁸ This re-profiling included access to £600 million from the Dreadnought contingency fund in the 2018/19 financial year.²⁹ Access to the fund has also been granted for 2019/20 and 2020/21.

On the issue of re-profiling, in February 2018 the then Secretary of State commented:

What is important to emphasise is that we are not talking about the whole cost of Dreadnought changing. What we are talking about is that it is important to get the profile correct for when the money flows into the system and when it is needed. At the moment it is not as we would wish it to be.³⁰

A more detailed breakdown of what has been spent so far on the Dreadnought programme, is available in Library briefing paper CBP-8010, [Replacing the UK's nuclear deterrent: progress of the Dreadnought class](#).

4.2 In-service costs

Once the new nuclear deterrent submarine comes into service the annual in-service costs, including the costs of the Atomic Weapons Establishment and the Nuclear Warhead Sustainment Capability Programme, basing, decommissioning and disposals, are expected to continue at approximately 6 per cent of the defence budget.³¹

Calculating overall in-service costs for the Dreadnought class is, however, fraught with difficulty. Dreadnought is due to enter service in the early 2030s and will have a lifespan of *at least* 30 years. Therefore, in order to make any sort of calculation of overall in-service costs one must make a number of predictions or assumptions with regard to the following:

- When the Dreadnought class will enter service.

²⁴ The announcement on 31 August 2015 of £500 million of investment for HM Naval Base Clyde, over a ten-year period, is part of the MOD's ongoing programme of work to establish a submarine centre of excellence at HM Naval Base Clyde once the entire Royal Navy submarine fleet is based there from 2020. In February 2017 a further £1.3 billion was announced for upgrades at HM Naval Base Clyde, including the waterfront, engineering support, accommodation and physical security. PQ112914 of 21 November 2017 confirmed the separate funding arrangements.

²⁵ PQ121632, *Trident*, 16 January 2018

²⁶ The projects being undertaken through the Nuclear Warhead Capability Sustainment Programme (NWCSP) at AWE are covered within the annual in-service costs of the deterrent. The MENZA project is examined by the NAO in its report, [Managing infrastructure projects on nuclear-regulated sites](#), HC19, Session 2019-20

²⁷ It is unclear at present whether the Replacement Warhead programme will be part of NWCSP spending, or whether it will be funded as a separate programme. This is examined in greater detail in Library briefing, CBP8941, [Replacing the UK's nuclear deterrent: the long-awaited warhead decision](#)

²⁸ This is discussed extensively in the Secretary of State's evidence to the Defence Committee on 21 February 2018

²⁹ HC Deb 28 March 2018, c756

³⁰ Defence Committee, [Oral evidence: departmental priorities](#), HC814, 21 February 2018. Q.78

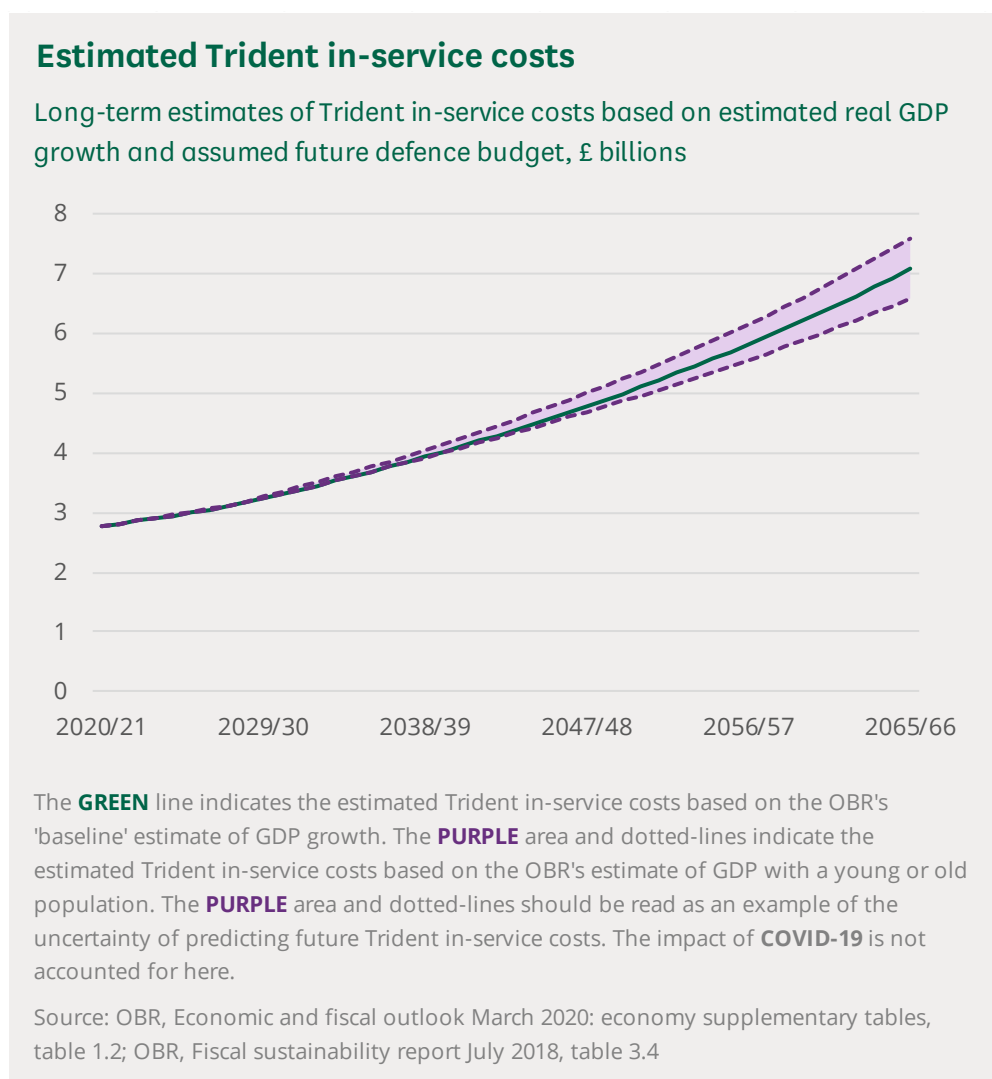
³¹ HL328, *Trident submarines*, 6 June 2016

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- How long it will remain in service.
- What will constitute in-service costs, and will they remain at 6 per cent of the defence budget?³²
- The state of the British economy and projected levels of defence spending over the next 50-60 years. Will the defence budget continue to meet the NATO target of 2 per cent of GDP over this period?

Depending upon the methodology one uses it is possible to end up with significantly different figures for overall in-service costs. For example:

- 1 If one uses real-term GDP growth forecasts,³³ assumes defence spending will continue at 2 per cent of GDP and that in-service costs of Dreadnought will remain at 6 per cent of the defence budget, then spending until 2065/66 would be as follows:



If one assumes that Dreadnought will enter service in 2031 and have a 30-year lifespan (to 2061), then in-service costs based on this methodology would subsequently total approximately £141 billion.

³² Prior to 2005 in-service costs for the Trident nuclear deterrent ranged between 3 per cent and 4.5 per cent of the defence budget each year.

³³ It should be noted that GDP growth is likely to be significantly different from these estimates as a result of COVID-19. These estimates are based on the most recent publication of long-term growth published in 2018.

- 2 Alternatively, under the current CSR settlement, as adjusted in the 2018 Autumn statement and 2019 Spending Round, the defence budget in 2020/21 will be £41.3 billion.³⁴ 6 per cent of that budget will be £2.4 billion.

If one assumes that the defence budget will remain relatively static to 2061 and assumes that the in-service costs will continue to represent 6 per cent of that budget, then total in-service costs for the Dreadnought class between 2031 and 2061 could be estimated at approximately £72 billion.

Alternative cost estimates

The need to make predictions and assumptions is the reason why so many cost estimates for the deterrent exist, and why it is difficult to ascertain which may be the most accurate.³⁵

For example, an April 2019 study by the [Nuclear Information Service](#) suggested that the MOD's cost analysis for the replacement programme is vastly under-estimated and that the total cost of the UK's nuclear weapons programme, to 2070, is in the region of £172 billion. A similar assessment by the [Campaign for Nuclear Disarmament](#) suggests that the real cost will be more in the region of £205 billion.

However, both of these estimates consider in-service costs over the 30-year life of the deterrent, and the cost of additional factors such as infrastructure investment, the Trident service life extension programme, and warhead replacement and decommissioning, among other things.

4.3 Additional costs

Outside of the Dreadnought programme, there are a number of preparatory and enabling costs associated with extending the existing deterrent and developing future systems:

- Trident II D5 Service Life Extension Programme (SLEP) – the UK is participating in this US-led programme, which will extend the life of the Trident missile to the early 2060s. The total cost of the Trident II D5 Service-life Extension programme is estimated to be approximately £350 million.³⁶
- Extension of the Vanguard class – the 2010 decision to keep the Vanguard class in service for a further four years to 2028 was expected to incur additional costs of approximately £1.2 - £1.4 billion.³⁷ However, savings achieved from the Submarine Enterprise Performance Programme (SEPP) were also expected to be used to offset that additional expenditure.³⁸ In November 2015 the MOD confirmed that the marginal costs of a further extension to the life of the Vanguard class, into the early 2030s, “would be contained within the existing running cost of the deterrent”.³⁹ Any further extension to the life of the Vanguard class beyond current assumptions would be costly.⁴⁰
- A number of infrastructure projects are currently underway that underpin the nuclear enterprise. The MENSA programme at the Atomic Weapons Establishment (AWE), which is funded through the Nuclear Warhead Capability Sustainment Programme (NWCSP), is a £1.8 billion project to build new facilities for the assembly

³⁴ HM Treasury, [Spending Round 2019](#)

³⁵ Details of several alternative cost estimates from the time of the Main Gate decision and vote in 2016 are set out in Library briefing paper CBP7353, [Replacing the UK's 'Trident' Nuclear Deterrent](#)

³⁶ PQ121632, *Trident*, 16 January 2018

³⁷ HC Deb 8 November 2010, c5

³⁸ SDSR Briefing Pack: Trident V4M: Q&A, 2010

³⁹ PQ17622, *Trident submarines*, 30 November 2015

⁴⁰ If the Dreadnought programme incurs delays for example.

and disassembly of nuclear warheads.⁴¹ A further £474 million is being invested in new facilities at Rolls Royce in Raynesway in order to build the latest nuclear reactor core designs.⁴²

- In February 2020 the Government confirmed that a replacement warhead programme was underway. Options for replacing the warhead have been studied since 2006 as part of the NWCSP. It is unclear whether the replacement programme will form part of the NWCSP, or whether it will be independently funded. The cost of any potential replacement programme has not been identified by the MOD. In answer to a Parliamentary Question on potential costs in March 2020, the MOD said it was “withholding specific information about cost and in-service dates for the purposes of safeguarding national security”.⁴³

4.4 Who will pay for it?

In line with convention, the Dreadnought programme will be funded from the MOD’s core equipment budget.

This was reiterated by the MOD in answer to a Parliamentary Question on 14 November 2017, amidst calls for spending on the Dreadnought programme to be taken out of the MOD budget as part of the Department’s Modernising Defence Programme:

Lord West of Spithead: To ask Her Majesty’s Government whether, in their current review of defence options, they will review whether or not the Vanguard class submarine replacement programme should be dealt with outside the defence budget.

Earl Howe: The Dreadnought programme is rightly funded as part of the Ministry of Defence’s budget. We remain on track to deliver this programme within the £31 billion budget, with the first in the Dreadnought class entering service in the 2030s.⁴⁴

The then Defence Secretary, Gavin Williamson, clarified his Department’s responsibility for funding the deterrent in a Written Statement on 7 December 2017 (see below).⁴⁵

The longstanding debate over budgetary responsibility

In 2007 a disagreement erupted between the MOD and the Treasury over the funding of the capital costs of the replacement (Successor) programme. The MOD suggested that the capital costs of procuring the nuclear deterrent had, in the past, been borne by the Treasury, a position which the Treasury refuted. The argument centred round an increase to the defence budget which was announced as part of the 2007 Comprehensive Spending Review. The CSR outlined that:

The 2007 Comprehensive Spending Review builds on this investment and grows planned defence expenditure by a further 1.5% a year over the CSR07 period, rising to a total budget of £36.9 billion by 2010-11 - demonstrating the Government’s strong commitment to defence at a time of acute operational intensity.

The settlement allows the MOD to [...] make provision for the maintenance of the nuclear deterrent. As set out at the time of the Trident White Paper, provision for this will not be at the expense of the conventional capability our Armed Forces need. Investment in conventional capability will continue to grow over this period, as it has done since 2000.

⁴¹ The NWCSP is funded as part of the in-service costs of the nuclear deterrent.

⁴² The Core Production Capability programme. Both the CPC project and MENSA are examined in the NAO’s latest report, [Managing infrastructure projects on nuclear-regulated sites](#), HC19, Session 2019-20

⁴³ PQ24309, Nuclear weapons: USA, 11 March 2020. The replacement warhead programme is examined in greater detail in Library briefing CBP8941, [Replacing the UK’s nuclear deterrent: the long-awaited warhead decision](#)

⁴⁴ PQ HL2751, *Procurement: Trident submarines*, 14 November 2017

⁴⁵ HCWS328, 7 December 2017

Some commentators considered this to effectively be a commitment to fund the capital costs of the replacement programme outside the core defence budget. However, when questioned on this issue by the Defence Select Committee in November 2007, the then Permanent Secretary to the MOD, Sir Bill Jeffrey, confirmed that while additional funding had been provided to the MOD, spending on the Trident replacement would then take place within the defence budget:

Q37 Mr Jenkin: Are you able to specify a budget line for Trident replacement over the next three years and can you tell us how much is going to be spent?

Mr Jeffrey: As the White Paper said it is provided separately within the defence budget. The figures in the existing baseline, as I recall, are of the order of £200 million, £300 million, £400 million in the three years of the spending review period.

Mr Woolley: It is about a billion over the course of the CSR period.

Q38 Mr Jenkin: Does that actually come of the 1.5% overall increase?

Mr Jeffrey: It does, yes

He went on to clarify:

Q42 Mr Hamilton: The minister said, when the nuclear deterrent was agreed upon in the House of Commons, that it would not affect the defence budget in any way. You have just said that it will affect the defence budget; did I understand that correctly?

Mr Jeffrey: What I said was that the undertaking in the White Paper about the cost being provided additionally and not impacting on conventional capability has been met, but obviously once the money has been provided it takes its place within the defence budget. I do not think I am saying anything different from what was said in the White Paper or from what the minister said.

Liam Fox, then Defence Secretary, raised this issue again during an interview on the Andrew Marr Show on 18 July 2010, ahead of the anticipated Strategic Defence and Security Review (which was published in November 2010):

There's always been an understanding that the budget for the nuclear deterrent came from outside the defence budget, the core defence budget. Running costs for the deterrent have always come from inside the defence budget, although the capital costs were outside.⁴⁶

In a *Daily Telegraph* blog in July 2010, former Political Secretary to Tony Blair, John McTernan, argued:

Apparently the idea that the Ministry of Defence pays for Trident – a defence capability – has come as a shock to some in the MOD... except they did [know that]. It's no breach of the Official Secrets Act to reveal that during my brief time in MOD it was clear what the implications of the Comprehensive Spending review actually were. There was no special budget to pay for the upgrading of Trident.⁴⁷

The then Chancellor, George Osborne, consistently argued that the full costs of replacing Trident must come from the defence budget. At the end of July 2010, he unequivocally stated that "Trident costs, I have made it absolutely clear, are part of the defence budget. All budgets have pressure. I don't think there's anything particularly unique about the Ministry of Defence".⁴⁸ An article in *The Guardian* also quoted one official as commenting that "the costs of Trident have always come out of the MOD budget. We know what Liam is up to. But does he expect that the Department of Culture will pay for Trident?"⁴⁹

⁴⁶ http://news.bbc.co.uk/1/hi/programmes/andrew_marr_show/8832224.stm

⁴⁷ "[Are Ministry of Defence sources having a laugh about Trident?](#)", *Daily Telegraph Blog*, 17 July 2010

⁴⁸ "Cabinet clash on Trident", *The Financial Times*, 30 July 2010

⁴⁹ "George Osborne: Trident costs will be met by defence budget", *The Guardian*, 30 July 2010

A number of commentators, including the former Secretary of State for Defence, Bob Ainsworth, countered this debate, at the time, by pointing out that who pays for the capital costs of Trident is “to some degree...academic because it all comes from the same pot at the end of the day”.⁵⁰ The then Minister for the Armed Forces, Nick Harvey, also agreed with this point, acknowledging that “where precisely it is accounted is neither here nor there; it is a completely semantic and academic point”.⁵¹

Recent discussion

Over the last few years the question of budgetary responsibility has resurfaced after a number of MPs made the suggestion that the Dreadnought programme should be removed from the defence budget as part of the MOD’s Modernising Defence Programme. On 27 November 2017 Sir Hugo Swire MP raised this point during oral Defence Questions:

In his ongoing and delicate discussions with the Treasury, will he remain aware, first, that there are those of us on this side of the House who believe that the defence budget has been pared back about as far as it can be, and secondly, that when it comes to Trident renewal many of us on this side of the House do not believe it should be part of the defence budget? Indeed, it distorts the defence budget, and if that is part of his argument, he will have considerably more support than perhaps he knows.⁵²

In response the then Defence Secretary, Gavin Williamson, replied:

Everything that my right hon. Friend has raised will be part of the review. He has raised the important question of nuclear capability being part of the defence budget. It has traditionally not sat as part of the defence budget; that changed only post-2010. It is vital to look at all options as part of the national security and capability review, and I look forward to speaking to him and seeking his advice and thoughts on the issues that he has raised.⁵³

However, the Ministry of Defence issued a correction on 7 December 2017 in a written statement:

I wish to inform the House that an error has been identified in the answer I gave to the hon. Member for East Devon (Sir Hugo Swire) in Defence Oral Questions on 27 November 2017, Official Report, column 21, on the subject of funding defence nuclear capabilities.

To clarify, the UK’s nuclear deterrent has always been funded from the Defence budget.⁵⁴

On 11 December 2017 a Treasury Minister confirmed “The Government has no plans to transfer the costs of upgrading or replacing the UK’s nuclear deterrent from the Ministry of Defence to another Government accounting department at this time”.⁵⁵

A discussion of the funding arrangements in 2007 and how they compare to current funding of the programme was also discussed by the Secretary of State in an [evidence session with the Defence Committee](#) on 23 February 2018.⁵⁶

2018 Budget allocation and the 2019 Spending Round

The allocation of additional funding for the MOD in the Autumn 2018 budget statement (£1 billion) and the 2019 Spending Round (£1.5 billion for capabilities up to 2021), in part

⁵⁰ HC Deb 16 September 2010, c1047

⁵¹ Ibid, c1055

⁵² HC Deb 27 November 2017, c21

⁵³ [HC Deb 27 November 2017 c21](#)

⁵⁴ [HCWS328](#), 7 November 2017

⁵⁵ PQ116056, *Trident*, 11 December 2017

⁵⁶ Questions 59 to 75.

to fund the Dreadnought programme, has once again opened up the argument about which Department should be funding the nuclear deterrent. In a similar vein to the disagreements which arose in 2007 and 2010, this allocation of additional funds has been viewed by many as an indication of the Treasury's role, and responsibility, in part-funding the capital costs of the programme. In a Lords debate on the 2018 Autumn budget Lord West commented:

If the two tranches of money from the Treasury into the Dreadnought programme are an indicator that there is an acceptance that the capital cost of the new deterrent submarines should be funded outside the defence budget, I welcome it. That will make a dramatic difference to the MoD programme. This of course was the plan until changed by George Osborne in 2010. Can the Minister tell us whether it is now the plan again? I hope that it is.⁵⁷

However, while the extra funding has been given to the MOD it has been made clear that, as before, once within the MOD budget it is up to the Department to determine how much is invested in the Dreadnought programme. Thereby indicating the MOD's budgetary responsibility for the nuclear deterrent. In November 2018 HM Treasury stated:

The £1bn additional funding for MoD will be used to invest in a number of key priority capabilities, one of which is Dreadnought. It is for MoD to decide how much of the additional funding is for Dreadnought, which they will do as part of their normal budgeting process.⁵⁸

Following the 2019 Spending Round, the MOD reiterated this point:

This additional funding will enable our world-class Armed Forces to begin to modernise and meet the intensifying threats and risks we now face, including prioritising investment in key capabilities such as shipbuilding, offensive cyber and the nuclear deterrent. We will decide on the allocation of this funding as part of our normal financial planning and budgeting process.⁵⁹

In March 2020 the Chairman of the Defence Select Committee, Tobias Ellwood, once again raised this issue in an evidence session of the Public Accounts Committee, expressing his support for taking deterrent funding out of the defence budget.⁶⁰ In response to questioning Sir Stephen Lovegrove, Permanent Secretary at the MOD, commented:

I think there is a very good argument for applying some form of ring fence around the biggest elements of nuclear. When the cost profiles move, which they inevitably do, they do have the ability, just because of their sheer scale, to impact the rest of Defence quite a lot.

The best example, again, is to look across to America. In America, the nuclear component of the DOD's budget is about 6% or 7%. When we are at the height of the recapitalisation that I talked about earlier, the nuclear component of the Ministry of Defence's budget is going to be up at around 18% or 19%. It is a very, very big swing factor, and that is an active subject of conversation with the Treasury.⁶¹

4.5 Comparison to other Government spending

Assuming the entirety of the £10 billion contingency fund is spent, at a cost of potentially £41 billion, the Dreadnought programme is one of the most expensive Government

⁵⁷ HL Deb 13 November 2018, c1819

⁵⁸ PQ188745, *Defence: Finance*, 12 November 2018

⁵⁹ PQ290758, *Armed Forces: Finance*, 1 October 2019

⁶⁰ Public Accounts Committee, Oral evidence, Defence Nuclear Infrastructure, HC86, 11 March 2020, Q.107

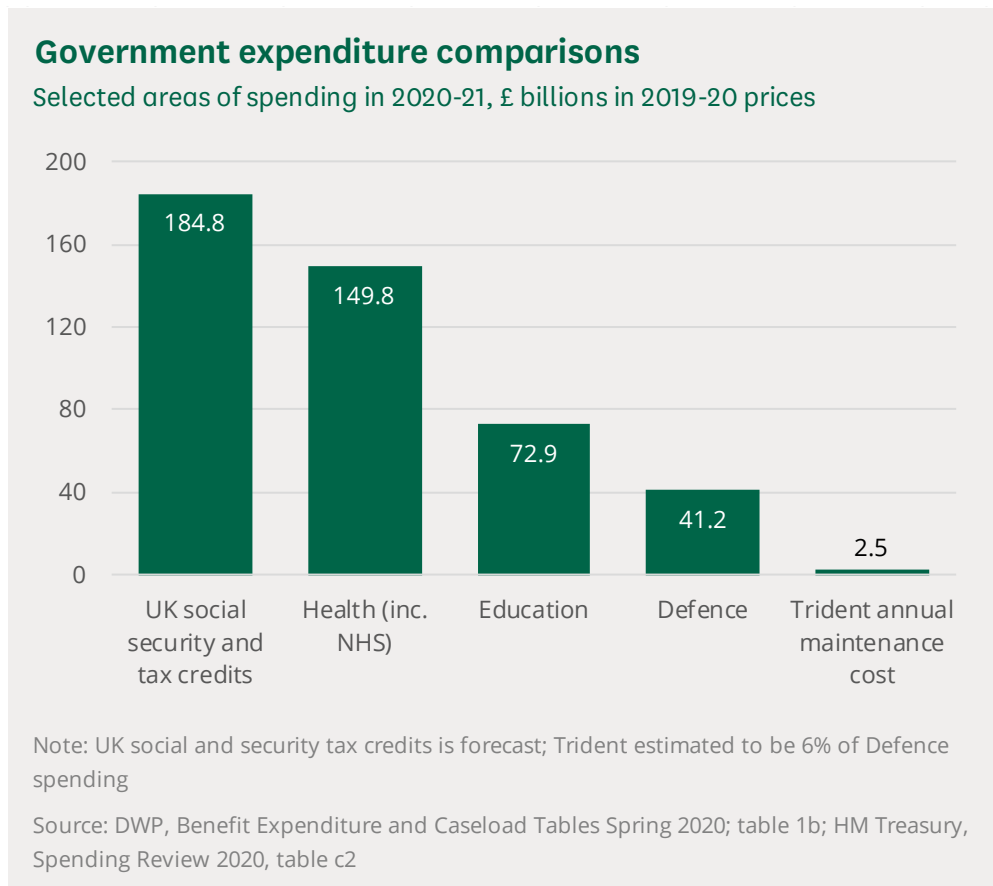
⁶¹ *Ibid*, Q.108

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projects going forward. It is a project that has around twice the budget of Crossrail, and three times the budget of the London Olympics.⁶²

With respect to departmental spending, the running costs of the nuclear deterrent (presently around £2.5 billion per year) is often compared to the benefits bill, or NHS spending.

In 2020-21, for example, the estimated cost of maintaining the nuclear deterrent would be around 1% of total planned Government expenditure on UK social security and tax credits expenditure in that year.



The £2.5 billion spent on maintaining the nuclear deterrent per year is roughly equivalent to £50 million per week.

Alternatively, £2.5 billion a year is roughly equivalent to what is spent on Income Support, Statutory Maternity Pay, Carer's Allowance, or Winter Fuel Payments (each of which are around £2 – £3 billion per year).⁶³

According to the Treasury's 2020 Spending Review, the planned spend on the costs of providing health care (including the NHS) in 2020/21 was £149.8 billion. This equates to around £2.9 billion per week.

⁶² Michael Fallon [speech](#) to a reception of the Keep Our Future Afloat Campaign, House of Commons, 21 October 2015.

⁶³ DWP, Benefit Expenditure and Caseload tables 2020, Table 1b.

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