# He wants better equipment, pay and conditions...

...and he can have them if Parliament on 14 March defers the decision to build the next generation of nuclear submarines. Direct savings from such a decision amount to at least £5bn.

Projections for the MoD's next 10-year plan (2011-21) reveal a serious, multi-billion pound gap between available funding and anticipated programme costs. Large conventional naval, air and land acquisitions are planned at the same time as a major investment in Trident replacement. "....Su Something has to give.

starvation wages turn out of their arim barracks and load their gear on to the chartered Antonovs [Russian transport aircraft] which will take them to war in Afghanistan. Once there, despite the fact that we will have sent almost every decent helicopter we have left, they will be short of helicopter lift. If things go wrong badly enough - if we need to get them out in a hurry - we can only hope and pray that the Russian charter boys, or the Yanks, or please God somebody, will step in to supplement the RAF's five - yes, five - longrange transports." - Lewis Page, retired naval officer, **RUSI** Defence Systems, Summer 2006, Vol9. No.1

d Our troops in Afghanistan and Iraq are already ted facing shortages in essential equipment: the l, air Defence Committee said in August 2006 that they needed more helicopters and betterprotected patrol vehicles to shield "....soldiers on the main of the processing of the proces

And poor pay and conditions are seriously affecting recruitment and retention.

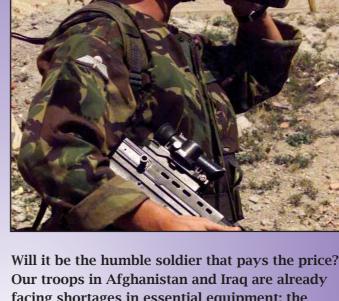
have sent have left, if things go get them d pray that tanks, or in to ve - longccer, forces need to be provided with the equipment which they require, on time, and at best value for the taxpayer.

Support our troops: Oppose premature Trident replacement



Don't Rush: Premature replacement of Trident could be costly

Trident Briefing Number 3, March 2007, British American Security Information Council



VATO/AFSO

## Summary

There are substantial costs associated with a premature final decision to replace Trident. The rational decision must surely be to defer any decision, even if Parliament were to give the go ahead for design teams now to work up concept studies.

# With costs still uncertain, concepts undeveloped, and contracts yet to be negotiated years from now, a final decision ought to be made at 'Main Gate' around 2014.

The White Paper estimates the capital acquisition costs for a follow-on of between  $\pounds 15$ bn and  $\pounds 20$ bn. It could yet be a great deal more. With annual running costs of some  $\pounds 2$ bn, MoD's own figures imply a total cumulative

cost during its construction and over its 25-30 year lifespan of between £65bn and £80bn – the equivalent of around £3,000 per UK household. The annual total defence procurement budget is currently of the order of £6bn per annum.

# Direct savings from deferring the next generation of nuclear submarine amount to at least £5bn to £8bn.

BASIC's first Trident briefing paper set out a number of advantages to deferring the project by 10-20 years, not least in presenting an opportunity to kick-start

disarmament negotiations from a position of diplomatic

'strength' and in allowing for a properly informed debate. It would also keep valuable options open, and would lead to savings of between £5bn and £8bn, simply from the opportunity to invest the resources elsewhere in the short term.

## The danger that early replacement will lead to a submarine deploying redundant D5 missiles is real.

There are additional real dangers that the new system could be prematurely redundant when the Americans develop a new replacement missile for the D5. A deferral of at least 5 years that enabled submarine replacements to deploy the new US missile could save almost the full £15bn to £20bn procurement cost of the proposed Trident follow-on, if the new missile were not D5-compatible.

# A deferral would move Trident out of a highly contested period for MoD procurement, and allow Parliament to consider the issue within the context of the Comprehensive Spending Review.

Assurances that the operational effectiveness of the armed forces will not be affected by investment in the new Trident system cannot be taken at face value. Future plans for MoD procurement already outstrip the budget by a large margin.

## **Trident cost calculations** Procurement (£15bn to £20bn)

The original elements of the Trident system cost £15bn in today's prices. The White Paper estimates the procurement costs of a replacement for Vanguard-class at £11-14 billion; £2-3 billion for the possible future refurbishment or replacement of the warhead; and £2-3 billion for infrastructure (not including Aldermaston) over the life of the submarines; making a total of between £15bn and £20bn. While some believe this is a small price to pay for an insurance against future nuclear threats and blackmail against the UK, this view is not shared by a substantial proportion of the public. Opinion poll data suggests that costs could play an important part in shifting many away from support for replacement.



"A quarter of the army earns less than 25,000 a year.... Some 40% of soldiers live in unsatisfactory quarters, more than a few in slums" - Max Hastings, January 2007.



MORI poll dated 24 October 2005: When presented with the costs, 54% of the public opposed replacement, compared to 33% in favour.



<image>

"...if the soldier is prepared to die for Queen and country, he or she expects decent pay, the best available equipment, the best medical care in the event of injury and decent housing and support for the family back home. All of these expectations have been disappointed over the past three years"

> - Guardian Leader, January 2007.

costs that have not been made public. It is difficult at this stage to predict running costs for any follow-on to Vanguard, though the White Paper courageously assumes the current level of spend will be sufficient to maintain a continuous-at-sea deterrent.

It is difficult at this early stage to

their voracity. Common defence procurement practice would be to work up the project, leaving final decisions until 'Main Gate', when costs and capabilities are clearer.

verify these figures, or comment on

This is one key reason why it would be prudent to defer a final decision to go ahead with the procurement until more concrete figures can be agreed upon and contractors committed to discipline of contracts.

**Running costs over period (to 2050): 5-6% defence budget** The White Paper estimates the running costs for the strategic nuclear arsenal at between five to six per cent of the defence budget. This means an annual spend not far short of £2bn. This is a significant increase on previous estimates, put down to recent detailed studies of associated

#### **The Cost of Premature Decisions** Deferring construction by 10 years: at least £5bn

Oral evidence to the Defence Committee given on 23 January by BASIC and by Richard Garwin, long-time member of the US President's Science Advisory Committee, strongly suggests that the life-expectancy of the existing systems could be at least ten years more than currently officially estimated; and that replacements could take around seven years rather than the 17 allowed for in the White Paper, if updated Vanguard-class replicas were constructed.

If in 1922 someone had had the foresight to predict the start of World War II 17 years' later, and the importance of the air force in the coming conflict, there may have been significant investment in aircraft production, and Britain may have fielded an impressive number of biplanes. Would these have made all the difference in the Battle of Britain? And would the premature commitment to manufacture have crowded out investment in research and hampered the development of radar, or indeed the Spitfire? The Treasury generally discounts investment decisions made in the future, for reasons of uncertainty, individual choice, and rising consumption levels. It is appropriate to use the Green Book's discount rate (of 3.5%) as a proxy to represent the opportunity cost of capital spent today rather than in future years. £15bn spent in ten years' time has a real value today of £10.6bn, and spent in twenty years, £7.5bn. £20bn in ten years' is worth £14.2bn today, and spent in twenty years is worth £10.1bn. In addition, ten extra years for the current Trident system would mean that the followon system would also go on ten years' longer, representing an additional (though smaller) benefit to deferral.

Savings are therefore achievable on the official procurement figures of at least £5bn for ten years, or £8bn over twenty years, simply for the opportunity costs of investment and the additional years of deployment.



These benefits are probably smaller than the valuable benefits accrued from maintaining open options in defence procurement. Options have significant and tradable value in the commercial world; there is a welldeveloped market to exploit such value. They are even more valuable in the defence world, where equipment price and technology is highly volatile and unpredictable, and where the security environment, as admitted in the White Paper, is notoriously difficult to predict. These options are important both in terms of whether to field a nuclear or alternative deterrent, and if so, what variety of deterrent to deploy. Maintaining maximum flexibility of response makes military sense.

It goes without saying that these are substantial savings, and significantly dwarf any possible costs accrued from retaining the small teams with indispensable and unique skills indefinitely, and restarting a nuclear submarine production line after mothballing.

#### **Keeping construction in-step with the Americans**

The White Paper implies the commissioning of the first Vanguard follow-on replacement in 2024, carrying Trident D5 missiles. The Americans plan to scrap the D5 in 2042, and to commission the first submarine in a new follow-on class in 2029. Neither we nor the Americans, know yet what variety of missile and warhead they will field. It will be determined by the development of their own nuclear posture and the march of technology over the next twenty years, not by a vague promise made in an exchange of letters with a previous British Prime Minister in December 2006. The Government's confidence that new US ballistic missiles will be compatible with D5 is heroic. The last submarine to be launched could have as few as 13-14 years of operations before its missiles were obsolete. If this could be avoided by extending the life of the current system into the 2030s, this could represent a saving equal to the cost of the replacement proposed within the White Paper, namely £15bn to £20bn, in full.

### Who pays?

While open in its estimation of the cost, the White Paper is opaque as to where the money is to come from. The Comprehensive Spending Review is due in the summer. The assurances made in the White Paper (and repeated by the Prime Minister and Defence Secretary) that "the investment required to maintain our deterrent will not come at the expense of the conventional capabilities our armed forces need," are misleading.

The interdepartmental negotiations within CSR 2007 over the initial costs for Trident follow-on have yet to happen. These will set the tone for bigger future decisions over the source of finance. Public finances are under particular pressure, so it is highly unlikely that the Treasury will stump up the full additional costs. *Parliament should consider Trident follow-on within the broader framework of future spend on alternative priorities.* 

UK armed forces need the kit if they are to operate at the level recent governments have demanded. Yet, according to reports in the trade press, there already exists a £11.6bn black hole in the projected procurement budget for the years 2011-2021 without Trident follow-on. *MPs should be under no illusions - the armed forces will suffer, unless the cost of follow-on is deferred beyond the period of the procurement squeeze.* 

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## "Britain Faces Long-Term Military Procurement Crunch

Britain's long-term defense equipment program faces a multibillion-dollar shortfall... Projections for the Defense Ministry's next 10-year plan, from 2011-2021, reveal a serious gap between available funding and anticipated program costs... the program excess is estimated to be 11.6 billion pounds"

- Aviation Week & Space Technology magazine, 16 July 2006

## "Frankly shaming"

- General Sir Mike Jackson, former head of the army, describing the state of some housing for military personnel, Dimbley lecture, December 2006.



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#### The Trident briefings series:

- No.1 UK Trident replacement: too important to rush into (December 2006)
- No.2 The non-proliferation benefits of delay (March 2006)
- No.3 **The cost benefits of delay** (March 2006)
- No.4 A cheaper insurance premium - virtual deterrence? (March 2006)

