The future of United Kingdom nuclear weapons: shaping the debate

MICHAEL QUINLAN

History

After the Second World War the United States swiftly terminated cooperation with the United Kingdom in the development of nuclear weapons. The United Kingdom decided to acquire its own capability, and for over a decade its actions to that end received little or no external aid. Its strategic force, operational from 1956, rested for several years on aircraft—the Royal Air Force's V-bombers—and weapons entirely of UK origin. In 1958, however, after UK weapon tests over several years had demonstrated independent competence, the United States concluded an agreement for close technical interchange about weapons. (The agreement has been regularly renewed since then, most recently to reach to 2014, and in the later years of the Cold War all UK explosive nuclear tests were conducted at the US site in Nevada.) In 1960 the United Kingdom cancelled its only ballistic-missile programme, the fixed-emplacement Blue Streak, mainly on grounds of vulnerability to pre-emptive strike, and turned to acquiring strategic delivery vehicles from the United States: at first the Skybolt air-launched ballistic missile, and when that project was cancelled in 1962 the Polaris submarine-launched ballistic missile (SLBM). (At that time this support to the United Kingdom was by no means uniformly approved within the US administration, but since the 1970s there has been little trace of any opposed strand of opinion.) Sixteen Polaris missiles—in the triple-warhead A3 version adopted when its availability became clear—were carried in each of four nuclear-powered submarines (SSBNs) designed and built in the United Kingdom, following some initial US help with the propulsion reactor. The Royal Navy took over the strategic nuclear role from the Royal Air Force in 1969.

The Polaris force remained in service for a quarter of a century, during the last decade of which the front end of the A3 missiles owned by the United Kingdom had undergone the extensive and complex Chevaline modification, forfeiting one of the three warheads, to maintain evident capability to defeat Soviet anti-ballistic missile defences of Moscow and the surrounding area. Chevaline was designed and made in Britain, though with some US technical and industrial cooperation.

International Affairs **82**, 4 (2006) 627–637

The Polaris force, like all other UK-owned nuclear forces, was formally committed to NATO (as its successor force continues to be), but NATO commanders have had neither the authority nor the physical means to impose their views upon the UK government in the use or withholding of UK capability.

Current capability

In 1980 the new Conservative government, following groundwork done quietly under its Labour predecessor, decided to replace the Polaris force eventually by a similar force of four SSBNs, each with 16 launch tubes for the US Trident SLBM carrying multiple independently targetable re-entry vehicles (MIRVs)—initially envisaged as the C4 version of the missile, but with a switch to D5 in 1982, to maintain logistic commonality, when it became clear that the US administration would proceed with that version. Missiles are periodically serviced at King's Bay on the US Atlantic coast as part of a common US/UK stock, but the UK share is fully owned, not leased. The submarines and warheads have continued to be designed and made in Britain, though there has been close dialogue over warhead design between US laboratories and the Atomic Weapons Establishment (AWE) centred at Aldermaston in Berkshire and owned by government but operated now by contractors. Some non-nuclear components of the warheads are bought from the United States, without breaching the provisions of the 1968 Nuclear Non-Proliferation Treaty (NPT).

The capital cost of the Trident force—which, like its Polaris predecessor, was brought in substantially on time and within budget—was around £15 billion at today's prices, and the annual running cost is given as around £700 million. The latter figure does not include the continuing costs of AWE; if these are added, the latest published total cost, for 2004/5, amounts to just under 4 per cent of the defence budget, itself 2.5 per cent of UK gross domestic product, so that the current cost of the capability is around £1 in £1,000 of GDP.

The United Kingdom stated from the outset that it would not exploit the full 12-RV capacity of D5. Successive governments have announced reductions in the total holding of operational warheads and in the number carried in each boat. The 1998 Strategic Defence Review said that the operationally available stockpile would be less than 200, with a maximum of 48 per boat.

For many years the United Kingdom had other nuclear-weapon forces of its own (in addition to some equipped with US-owned weapons under 'dual-key' arrangements) for delivery from aircraft and surface ships, but all these were phased out by the end of the 1990s. The declared intention since the mid-1990s has been to exploit the versatility and accuracy of the Trident system to provide 'sub-strategic' deterrent or war-termination options short of extensive multiple strikes. Details of this concept have not been disclosed, but it is widely conjectured and not officially denied that some missiles may carry only one live warhead, and that that one warhead may have an explosive yield—perhaps through the use of only the 'primary' detonation—well below that of the normal warhead (itself not

disclosed, but generally assumed to be between 80 and 100 kilotons, about half that of a Polaris warhead).

The force is stationed in western Scotland at the Clyde Submarine Base, comprising a submarine port at Faslane and a missile-and-warhead depot at Coulport. Periodic long refits of the SSBNs are carried out at the Devonport dockyard in south-west England. There is always one SSBN somewhere at sea, but readiness has been greatly reduced from the Cold War posture whereby at least one boat was always on patrol in launch position at 15 minutes' notice to fire. Normal notice time is now measured in days, and missiles are not held ready-programmed for delivery to specific targets. As with the comparable forces of other nuclear-weapon countries, these relaxed arrangements are for the most part not externally verifiable, and they could clearly be re-tightened in time of crisis.

The need for new decisions

In the post-Cold War environment there is no reason to regard any aspect of the current force as at risk of becoming inadequate in terms of operational performance against powerful adversaries. Any need for fresh investment decisions relates essentially to dependable physical lifespan. The government has indicated that initial decisions about the long-term future of the capability are likely to be required within the assumed duration of the present parliament, which could extend to 2010. It has published little detail about the decision timetable, but has implied in evidence to parliament that the lead-time for new submarines would be the prime driver.

The warheads undergo a regular cycle of maintenance and refurbishment at AWE, including periodic replacement of any components with a particularly limited life, and the government judges that the current warhead design can be maintained at least into the 2020s.[1] In July 2005 it announced an extensive programme of facilities renewal and staff recruitment for AWE, with an annual extra investment cost of £350 million over three years, to guarantee continued ability to maintain warhead safety and reliability without explosive testing. (Such testing would be contrary to the terms of the Comprehensive Test Ban Treaty, to the aims of which, though it is not in force because of US and other refusals to ratify, the United Kingdom has affirmed continuing strong allegiance.) This programme will have the additional effect of underpinning capability to provide a new warhead if the government so decides. It is conjectured that a replacement design might be considered that would exploit technological advance to enhance safety and reliability even beyond present high standards, still without need for explosive testing. There is, however, no indication that developing a wider range of possible yields than that held at present, to provide 'non-strategic' options of a diversity comparable to that possessed by the United States, might be contemplated.

[1] Ministry of Defence memorandum to House of Commons Defence Committee, 20 Jan. 2006, 'UK strategic nuclear deterrent', Annex B, para. 2a.

The Trident D5 missiles have a design life extending at least until 2020. The US administration intends to undertake a life-extension programme to maintain the system in operation into the 2040s, and it is believed that this will involve a slightly improved version of the missile. The UK government has not expressed a view on acquiring such an improved version, but it is unlikely that a request for it would be refused or that the cost would be very heavy by the standards of nuclear-weapon capability as a whole; and new missiles would certainly be designed to fit readily into current launch tubes.

The four SSBNs entered operational service over the period 1994–2001 with a design life of 25 years, but recent studies by the Ministry of Defence suggest that they could be sustained longer, perhaps into the mid-2020s.[2] Fourteen years elapsed between the 1980 decision to acquire a Trident-based force (though some design exploration had begun earlier) and the entry of the first boat into service. On that model, initial steps towards acquiring new boats, such as starting design studies, might be needed not later than the end of the current decade, and industry sources have suggested that some work will anyway be essential before long in order to keep design and production capability alive.[3] Under the Ministry of Defence's procedures for staged decisions on major equipment programmes, however, the main weight of financial commitment, if the decision were taken to go ahead, would not fall until well into the next decade.

The 'independence' issue

It is recurrently claimed, especially by root-and-branch opponents of UK capability keen to find additional arguments against it, that it is not truly independent in any substantial or useful sense.[4] Consideration of this claim requires understanding of the relevant meaning and point of independence, and then accurate knowledge of the facts.

Since (at latest) the end of the 1950s the US nuclear armoury has been amply adequate in weight, reach and diversity to underpin any security task to which the United States is dependably and credibly committed. The strict strategic case for any of the long-term friends of the United States to spend scarce resources on providing an independent capability can rest only on hypotheses that in some grave future scenario the United States might not be thus committed (or might be perceived by adversaries, whether wisely or not, as not being so). Given such hypotheses, what independence needs to mean in practice depends on what scenarios of perceived US non-availability are to be insured against. Such scenarios

[2] Ministry of Defence memorandum to House of Commons Defence Committee, 20 Jan. 2006, Annex B, para. 2c.

[3] House of Commons Defence Committee hearing, 28 March 2006, questions 170–71.

[4] See e.g. Dan Plesch, *The future of Britain's WMD*, published by the Foreign Policy Centre, March 2006, and in *New Statesman*, 27 March 2006, 'Trident—we've been conned again'. To sustain his denial of UK independence, Plesch has to predict a massive and successful US military operation to neutralize UK forces preemptively should their use contrary to US preferences ever appear to be in contemplation. On hypotheses and interpretations as remarkable as these the independence of French, Indian, Israeli or Pakistani capability could also be questionable. One might further wonder what adversary would be so confident of the prospect of such extraordinary action against non-US forces as to assign no deterrent weight to their existence.

could be of two kinds. The first would postulate that the United States, while not generally alienated from its friends, might either hold back when faced with the nuclear decision amid the heat and fear of war, or else might be less interested than they were in, or even disapproving of, some dangerous undertaking in which they were engaged. The second kind of scenario would postulate a deeper and longer-term estrangement from its friends—a radically changed environment in which the United States had disengaged from their security, and in particular had withdrawn its cooperation and abrogated any obligations to them in nuclear-weapon procurement and support.

If it is desired to cater just for the first kind of scenario, what is needed is simply operational independence—the evident ability in the last resort to launch nuclear strikes whether or not the United States chooses, or wishes others, to do so. But to insure against the second kind requires independence also in materiel procurement. It is unilluminating to argue about which level is 'real' independence; the practical point is that they are alternative insurance policies. As in most insurance situations, the wider the cover required, the higher the premium. The United Kingdom chose, from the beginning of the 1960s, to sustain just the 'operational' level of cover, even though it would have been capable of choosing to maintain the 'procurement' level—its technological base at that time was far from inferior to that of France—if it had not judged the opportunity cost too high in relation to other defence commitments within constrained budgets. France has pursued the deeper level of cover, at a long-run cost—and consequent opportunity cost—several times heavier. UK governments since 1962 have never claimed to possess the deeper level.

A degree—even a large degree—of procurement dependence in no way implies operational dependence. (One may buy a Ford car and have it serviced regularly by the local Ford dealer, but neither the purchase nor the servicing means that the Ford Motor Company controls its use.) Critics advancing the 'no real independence' argument, however, proffer two further assertions. The first is that the United Kingdom remains continuously dependent upon US information in key aspects of operation such as communication with the launching SSBN, its accurate positioning and the targeting of its missiles. UK governments have never published details, but the allegation of dependence in these respects was controverted directly and without qualification in recent evidence to parliament by a witness of unquestionable relevant expertise.[5] No other aspect of cooperation with the United States, such as the purchase of warhead components or the involvement of US nationals in contracts, makes it physically possible for hypothetical unfriendly acts to render the UK force non-operational in any short timescale.

The second assertion is that US influence over UK policy is such that in practice no UK government could act against US wishes. One may well feel, as this writer does over the 2003 Iraq war, that UK governments have sometimes conceded too much to that influence (which rests on much wider grounds than the nuclear-force procurement relationship), but sending UK troops to Iraq was nevertheless

[5] House of Commons Defence Committee hearing, 28 March 2006, questions 152–160.

a sovereign decision. Though the United States has weighty methods of influence, influence is not veto power. The United States has neither physical nor legal instruments for imposing contrary preferences in an emergency regarded by a UK government as of such extreme gravity as to warrant serious consideration of using nuclear weapons. (It is noteworthy, incidentally, that even when the United States deeply desired to enlist a UK military contribution in Vietnam in the late 1960s, there was never any suggestion of threatening abrogation of the Polaris sales agreement as a lever to overturn UK refusal.)

In brief, denials of UK operational independence—an issue of fact, not opinion or judgement—have no place in serious debate about future decisions. If such denials were true, the entire basis upon which successive governments over half a century have explained policy to the nation ('a second centre of decision-making'), have spent huge sums of money and have taken up the working lives of many thousands of people, in and out of uniform, would have been groundless and fraudulent—an extraordinary supposition.

International obligations

The United Kingdom, like the United States, Russia, China and France and every other United Nations member save India, Israel and Pakistan, is party to the NPT. Article VI of the treaty requires all parties 'to pursue negotiations in good faith on effective measures relating to cessation of the nuclear arms race at an early date and to nuclear disarmament, and on a treaty on general and complete disarmament under strict and effective international control'. Subsequent review conferences of parties to the treaty have reaffirmed commitment to the goal of eventual complete abolition of nuclear armouries; at the 2000 conference the five nuclear-weapon parties expressed this as 'an unequivocal undertaking to accomplish the total elimination of their nuclear arsenals'. In 1996 the International Court of Justice, in the course of giving an advisory opinion about the use of nuclear weapons, underlined the obligation.

Article VI is sometimes adduced as a consideration debarring UK renewal of capability. Several considerations, however, tell against an absolutist interpretation to such an effect. The article says nothing about the timescale of ultimate abolition, and no progress is apparent upon the parallel goal (not given any different status in the text) of general and complete disarmament. The 'arms race' certainly stopped many years ago, and all three western nuclear armouries have been massively reduced from their levels at the treaty's entry into force. The United Kingdom has made a full proportionate contribution to this reduction, and its armoury is now the least diverse and perhaps the smallest among the five treaty-recognized nuclear-weapon states.[6] There is neither evidence nor likelihood that any of the other four—to say nothing of known possessors not recognized under the treaty—will be willing to proceed to abolition in the foreseeable future, barring

[6] China publishes no official details, but a Chinese Foreign Ministry statement in 2004, cited in the *Bulletin of the Atomic Scientists*, May/June 2005, pp. 52–9, claimed that among the nuclear-weapon states China possessed the smallest arsenal.

some cataclysmic event; and there is no chance that an attempt now by the United Kingdom to propose multilateral negotiations towards abolition would be seen as anything but empty posturing. In all these circumstances it cannot plausibly be maintained that a legal imperative rests upon the United Kingdom—which has repeatedly affirmed its willingness to abandon capability when all others do—to do so unilaterally, regardless of action by others. That said, the broad thrust of article VI ought to be recognized as among the factors carrying some weight in the scales against renewal, and in particular against renewal at unchanged or increased magnitude.

Political and strategic considerations

Realistic practical planning has to assume, whether or not the prospect is welcome, that the world will probably continue to contain some nuclear armouries through the lifespan of a successor to the present UK force—that is, at least until the middle years of the century. That probability sets the context for those participants in debate who are not driven by fundamental ethical or similar conviction to insist that an absolute duty of abandonment rests upon the United Kingdom. The task then is to examine political and strategic arguments for and against continuance, and thereafter, if these are thought overall to yield a positive balance in favour, to consider whether the net advantage is worth the expected costs.

The prime politico-strategic argument suggested against continuance is that an example of abandonment set by the United Kingdom would much enhance UK leverage in diplomacy for universal abandonment, in influencing other possessors towards emulation, and in reducing impulsions among non-possessors to move towards acquiring their own armouries—this last being of especial concern at a time when the global non-proliferation regime looks less secure than at almost any time since the NPT entered into force. Such effects from UK actions, were they realized, would indeed be of much value. It is, however, not easy to put much faith in the prospect of their realization. Abandonment would undoubtedly be seen as a bold and striking decision, and would win applause from many governments and commentators. But none of the other 'recognized' four states would be likely to feel placed under pressure sufficient to modify decisions taken in their own perceived security interest; and there is even less likelihood that UK actions would feature materially among the factors governing the choices made by such countries as India, Iran, Israel, North Korea and Pakistan.

On the other side of the ledger, it is scarcely easier to assign high probability to any scenario now discernible in terms of specific actors, places and issues in which it would be important for the United Kingdom to have its own nuclear capability with the United States not closely engaged. Even if grounds for unease about Russia's internal evolution intensify, it is hard to imagine that country re-emerging as a military threat to the political freedom of the countries of the European Union; and the United States is at least as deeply engaged, for well-rooted political and economic reasons, as any European country in the security

concerns of the Middle East and East Asia. The government has indeed indicated that its current defence planning does not envisage undertaking major warlike operations overseas other than in concert with the United States.[7]

Any strategic case for continuance of nuclear capability would have to be made on an extremely general and long-term basis, and against the background that a decision for abandonment must be regarded as for practical purposes irreversible. (By the time circumstances sombre enough to yield a convincing public case for the massive step of reversal had unmistakably emerged—in the form, for example, of potential conflict with a specific adversary state capable of using weapons of mass destruction to inflict appalling harm upon UK forces or the UK homeland—it would in all probability be too late to implement the long process of recreating an operational force of acceptable quality.) The case might adduce the extreme difficulty of foreseeing crises as far ahead as the timescale of a successor force's life, with a likely mid-point of about 2035 or 2040—who in the late 1970s, the advocate might ask, would have successfully delineated even in the broadest terms the realities of today? And who foresaw even ten years beforehand the 1982 Falklands and 1990–91 Kuwait conflicts? History is full of painful surprises. Defence provision, by its nature, has to deal in insurance against darker possibilities, not in hopes or even median expectations, and force components are not routinely shaped on the basis of specific scenarios; they are—especially since the end of the Cold War—addressed, as it were, 'To whom it may concern'.

Two supplementary arguments might run as follows. First, the United Kingdom remains, both by all-round capability and by attitude towards its use, one of the few countries minded to shoulder difficult and dangerous international military responsibilities far from its own shores; and the last-resort underpinning of nuclear capability, even where its use seems remote, is a significant element in its confidence to continue doing so, especially if, however regrettably, nuclear weapons eventually come to be in the hands of an increasing number of states whose objectives may be at odds with what the United Kingdom is seeking to help achieve. Second, the United Kingdom has shared a growing desire that Europe, even if not in a closely institutionalized form, should enhance its collective ability to act coherently and effectively around the world without necessarily depending always upon US support or approval. Military capability is a necessary component of such ability; and in harsh crises even nuclear deterrent capability might have a valuable constraining part to play. It is (so the argument might continue) a matter not merely of ingrained British historical instinct but of wider European interest in the long term that that capability should not rest permanently and narrowly in the hands of France, whose political attitudes sometimes seem idiosyncratic. As long ago as 1967 Edward Heath spoke of British nuclear capability as 'held in trust for Europe'.

An argument, political rather than strategic, is sometimes mentioned—albeit nowadays less often by advocates wishing to rest on it than by those concerned to pour scorn on it—that nuclear-weapon status enables the UK to 'punch above its

[7] Cm. 6041-I, Dec. 2003, 'Delivering security in a changing world', paras 3.3, 3.5.

weight', 'keep a seat at the top table', or maintain its position as a permanent member of the United Nations Security Council. In the view at least of this writer, such considerations merit little weight in the continuance/abandonment debate (and the coincidence between nuclear-weapon status and permanent UNSC membership is if anything positively undesirable).

Scarcely anyone would claim that the highly unspecific strategic arguments sketched above would now amount to an adequate case for shouldering the political and economic costs of creating nuclear capability from scratch if it did not already exist; but that is not the situation. Many people might judge that the case, while not unconditionally compelling, is not vacuous. If so, the next questions concern what the options for continuance are, and then what are their costs.

It is perhaps worth noting that if the government came to accept the basic strategic analysis postulated above—that a case for continuance rests primarily on long-term uncertainties rather than nearer-term probabilities—but concluded that this and other arguments did not suffice to justify the investment cost of renewal, there would be legitimate ground for questioning whether maintaining the present force to the limit of its physical life warranted the continuing effort and expenditure, and indeed whether it would still have worthwhile credibility.

Options for continuance

Before the 1980 Trident decision both Labour and Conservative governments carefully surveyed other weapon-delivery options,[8] and a similar survey is presumably being undertaken now. It seems improbable, however, that any radically different conclusion will emerge. Land-based missiles within the United Kingdom's limited territory would be vulnerable, they would offer little deterrent capability to support commitments in distant regions, and their siting would pose awkward domestic issues. Aircraft-launched capability of strategic reach would need aircraft, missiles and perhaps warheads of kinds that the United Kingdom does not now possess, and the creation of such a capability, besides raising questions about basing, would be a new and unsure enterprise unlikely to offer, for a given weight of deterrent strike power, lower long-term costs than a submarine-based force. Surface ships, whether as launch platforms for aircraft or for cruise missiles, are vulnerable. It seems almost certain that if United Kingdom governments decide to maintain a nuclear-weapon capability, this will continue to rest on the familiar operational basis and established infrastructure of submarine-launched missiles.

It seems almost equally certain that such a force would continue to rely on ballistic missiles. Even if cruise missiles of strategic reach were as readily and economically available as Trident, they would be likely to require new supporting facilities and possibly radically different warheads, and would have operational limitations—notably potential vulnerability to defences—making them less suitable than ballistic missiles as the sole strategic delivery force. Again, considerably more

[8] See Defence Open Government Document 80/23, July 1980, 'The future United Kingdom strategic nuclear deterrent force', paras 22–57.

of them than of the multi-warhead Trident would be needed for a given weight of strike capability.

It is conceivable that new submarines could be designed to provide extra role options, for example through a mixed outfit of ballistic missiles for the nuclear role and cruise missiles for conventional attack. The Ministry of Defence will doubtless examine such possibilities, though at first look there might be awkward tensions between roles both in boat design and in patterns of operation, especially in a small force that represented the UK's only nuclear-weapon capability. Further dimensions of options—in addition to the desirability of maintaining some margin of flexibility in boat design to enhance the ability to accommodate an eventual US successor missile to Trident—might relate to weight of strike and to the degree of assurance required of permanent no-warning availability even in worst-case circumstances. Questions might reasonably be asked about whether fewer than four boats might suffice, and perhaps with fewer than 16 missile tubes—maybe 12 or an even smaller number—in each.

It is not normally reckoned, in naval planning, that four warships must be owned in order to have one operationally available (the government plans to acquire only two new aircraft-carriers) and the 1980s case for four SSBNs rested on a judgement that exceptionally high assurance of having one always on immediate-readiness station was essential in the Cold War circumstances of facing a massive superpower. The arguments for such extreme assurance—or for minimizing the risk that, if occasionally no boat was already at sea, one might have to set sail in time of crisis, possibly giving an undesirably escalatory signal—scarcely seem now to suffice as justification for the entire cost of a submarine (quite aside from any possibilities that might exist for operational coordination with France). Moreover, if the global setting did darken so severely as to warrant a return to previous levels of certainty, the option of adding a submarine to the production line would presumably remain open until late in the next decade or beyond. As to missile numbers, the deterrent weight of potential strike needed to be plainly available also seems no longer to call for Cold War levels. UK governments have not normally said what their targeting concepts are; but it is hard to foresee any need for credible deterrence to extend beyond an evident capability to launch a limited weight of accurate strike against state-power targets chosen to keep deaths among civilian populations as low as possible. Both the high accuracy of the Trident system and the availability of reduced-yield warheads might in such scenarios be of particular significance; and there might be a case for considering whether the maximum yield of any new warhead need match the present level. An underlying question would be whether capability need continue to be calibrated to hypotheses of Britain alone against a very large adversary.

For a compelling combination of political, legal and financial reasons there would be no question of cooperation over missiles and warheads with any partner other than the United States. The position might be slightly less clear-cut over submarines, given that UK procurement independence in that field has been nearly complete and that France has comparable competence and perhaps eventu-

ally comparable requirements; but nothing is publicly known about possibilities, constraints or attitudes in that regard.

Costs

Virtually no solid information is yet available on what the costs would be of whatever option may be chosen if continuance is decided upon, or on when and over what period they would arise (and still less on what costs would arise, and when, if abandonment were to be the outcome—such costs would not be trivial). Hostile conjectures have suggested £20 billion or more for continuance, but neither the components of such conjectures nor the assumptions being made about what is the option chosen are made clear. It will be difficult for value-for-money judgements to make much headway until the government has put a good deal more information into the public domain. The spread of costs will be little less important than the total amount; the opportunity cost, whether within or beyond the defence budget, of a bill of (say) £10 billion stands to vary greatly according to whether the bulk of it is concentrated within two or three years or spread more evenly across 12 or 15.

Overview

For some participants in the debate the 'right' conclusion to the debate about continuance is already evident almost a priori, whether in one direction on perceived ethical grounds—not explored in this article—or in the other for near-instinctive reasons of national identity, sovereignty and security. But for those (perhaps a majority, and including this writer) for whom the issue cannot be settled out of hand in such ways, the debate is scarcely yet sufficiently developed or fact-based to warrant categoric conclusions. The core of the issue becomes how to weigh possible strategic advantages—significant, but not overwhelming—against certain costs, also significant but probably not overwhelming. Government ministers, while giving several indications of a disposition towards continuance, have declared the government's readiness for full and open debate—by implication, in advance of a firm decision rather than, as in 1980, in examination and defence of a decision taken. It has as yet, however (at the time of writing), neither entered debate in any substantial degree nor provided much information to sustain that debate knowledgeably. So long as that remains so, key elements of the debate will continue to rest on speculative foundations.