
The Future of Deterrent Capability for Medium-Sized Western Powers in the New Environment

In collaboration with the Atomic Energy Commission (CEA)

Sir Michael Quinlan

Autumn 2001



**Security Studies
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THE NEW ENVIRONMENT***

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Proliferation Papers

Though it has long been a concern for security experts, proliferation has truly become an important political issue over the last decade, marked simultaneously by the nuclearization of South Asia, the strengthening of international regimes (TNP, CW, MTCR) and the discovery of fraud and trafficking, the number and gravity of which have surprised observers and analysts alike (Iraq in 1991, North Korea, Libyan and Iranian programs or the A. Q. Khan networks today).

To further the debate on complex issues that involve technical, regional, and strategic aspects, Ifri's Security Studies Department organizes each year, in collaboration with the Atomic Energy Commission (*Commissariat à l'énergie atomique*, CEA), a series of closed seminars dealing with WMD proliferation, disarmament, and non-proliferation. Generally held in English these seminars take the form of a presentation by an international expert. The *Proliferation Papers* is a collection, in the original version, of selected texts from these presentations.

The following text is based on a presentation given by sir Michael Quinlan at Ifri on November, 22nd, 2001.

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Introduction

What should be the longer-term future for the nuclear-weapons capabilities of France and the United Kingdom? I plan to tackle the subject in concrete terms. My presentation will be divided into three parts, and, though they are distinct rather than separate, they interact extensively. The first and largest part will relate to strategic context and concept: what aims, justifications and limitations should guide the future, or the absence of a future, for our capabilities? The second part, a good deal briefer, will be the practical content and character of the capabilities: what questions for decision will arise, and in what timescale, about the preservation, improvement or adjustment of the present capabilities? And the third part, still more briefly, will concern the political and institutional framework into which their future should or might be fitted.

Strategic Context and Concept

A. Historical Overview

Historically, the creation and maintenance of nuclear-weapon capabilities in each of our countries has had a mix of motivations. Some were international-political, to do with influence or national image. Some were domestic-political, to appeal to particular attitudes among our electorates. Some were perhaps institutional, connected with the preferences of influential actors like one or more of the armed forces, or elements of the scientific community. But the core of the argument has been related to strategic concern for national security. And for the initial decades our effort was driven primarily by a particular perception of threat. That perception, even when for presentational reasons phrases like “*tous azimuts*” were used, centred on the fact of massive Soviet power deployed far forward in Europe, possessing in massive quantities a complete range of weapons including nuclear ones, and driven by an outlook and an ideology which we did not feel we could trust. And that cardinal perception was partnered by another which our two countries shared even though we felt, or at least voiced, markedly different reasons for it and therefore drew rather different practical conclusions. This second perception or judgment was that it was not satisfactory or appropriate to leave the task of countering and deterring the Soviet military threat, at the crucial levels where nuclear weapons might come into play, exclusively in the hands of the United States.

The geopolitical environment in which we originally formed and sustained these two perceptions has changed dramatically since 1989. And we therefore need to ask ourselves afresh the two underlying questions: first, are there still, or may there credibly re-emerge, threats to us of a kind and scale that require to be countered or sealed off by the possession of nuclear weapons? And second, if there are such threats, will US possession of a substantial nuclear armoury – which I take for the purposes of this discussion to be a permanent given – be sufficient to dispense us from the need for possession of our own?

B. Implausible Scenarios

It seems to me extraordinarily difficult today to sketch any plausible near-term scenario in which either of our countries, or any of the close neighbours in Europe to whose fate we increasingly feel ourselves bound, comes under a military threat so grave that nuclear weapons would be at all a relevant or credible response. It is possible – it may even, for the present, still be prudent, since security provision is in the insurance business and needs to think about bad eventualities even if their likelihood seems low – to entertain a hypothesis of things going so wrong politically in Russia that she rebounds at least some of the way down the road to being again a hostile participant in the management of European and global security. But that could result in a revival of existential threat to us only if it were coupled with a resurgence of all-round Russian ability to project military force on a scale that for economic reasons alone also looks a far-fetched hypothesis; and the convergence of the two hypotheses looks, surely, too remote to be a plausible basis for our policy choices.

It may be just possible to imagine our being participants in some distant operation, in support of world order, where there was confrontation with a powerful adversary who possessed weapons of mass destruction (I dislike that term, but it has become entrenched) and the reach to hit our homelands with them; but the stretch of imagination required is considerable, and the stretch gets, I suggest, effectively to breaking-point if we have to postulate that we have allowed ourselves to get into such a situation without the United States being at least as deeply involved as we are.

Another speculation: if we came under attack, or felt ourselves to be under close threat of it, by nuclear, chemical or biological weapons in the hands of terrorists clearly supported or sheltered by identifiable states, nuclear weapons in our hands just might have a part to play in deterrence or response. But I find this a very remote hypothesis.

Just for completeness, I note one narrower speculation, particular to the UK, which I have heard briefly voiced: the notion that if the US were to go ahead with an NMD system on the lines of the “Clinton” architecture, and if the UK based on its soil system components of that, and if an aggressor armed with intercontinental WMD capability decided to attack the US, and if it felt that as a precursor there had to be a path-clearing attack by WMD on the early-warning facilities, then the UK could itself become a target. But the piling up of those “ifs”, to my mind, carries the scenario as a whole well over the edge of reality.

In summary, therefore, it seems to me that we cannot plausibly construct a strong case for our nuclear capabilities in terms of specific features of the world scene as it exists today or as we can hope to discern it in anything like the near future. I believe moreover, though this is a secondary point, that it would be politically unwise from the presentational standpoint, for example in relation to non-proliferation efforts, to try to construct a public case in such terms. Any strategic case, in my view, has to rest on much broader and, in an inescapable sense, much less precise considerations. I suggest for our discussion three such considerations.

C. Three Reasons for Keeping the Nuclear Watch

The first consideration relates to the near-irrevocability of any abandonment of our capability. This is not just or even mainly a matter of the material and technological problems of rebuilding a dismantled capability, though those problems would be formidable and the timetable for surmounting them would be long. The bigger factor is the extreme political difficulty there would be, both internationally and with much of our domestic electorates, in justifying a reversal of abandonment unless the global security environment had become unmistakably far more sombre than it is now, with major war a far more menacing possibility. And if we had to wait until changes of that kind became clear beyond argument we might well find that we had waited too long, given the practical timescales I have hinted at.

My second consideration is a very simple and general one. History is full of profoundly unpleasant surprises. It seems to us at present unlikely, I suspect, that the twenty-first century will be shaped and disfigured as the twentieth was, by massive military collision or confrontation between major powers; but there can be no guarantee of that unless we succeed in entrenching a much more rigorous and comprehensive system of world order than is yet anywhere in sight. If, as I have just implied, we have to think in very long timescales, we ought not lightly to leave ourselves open to darker possibilities than we can at present plausibly identify.

My third consideration is also general and speculative, but in a different way. It relates to Europe. I recognise that, despite the admirable success of cooperation between our two countries from St.Malo onwards, it is likely that preferred visions about what sort of Europe will emerge as an international actor in, say, fifteen years' time would still reveal substantial cross-Channel divergences. But I judge that even in Britain there would be a lot of support for a hope and desire that in the long run a cooperative and like-minded Europe, even if not a tightly institutionalised Europe, should be a significantly bigger player, a bigger burden-carrier, in global security matters than it is now – a less unequal partner with the United States in the management of the global system. If there is, over a long period, some such re-shaping of responsibilities as between the two sides of the Atlantic – I am not talking of rivalry or supplanting, but of re-balancing – then the notion of Europe having to accept heavy risks which US power would not necessarily cover could become less far-fetched than, as I have suggested, it seems today. Way back in 1967 Edward Heath, in a notable speech while out of government, spoke of British nuclear capability as potentially being held “in trust for Europe”. What I am postulating is a perspective of British and French capabilities maintained in trust, if not for Europe tout court, at least to keep open a European option.

Now that is my best attempt at stating a strategic case for UK and French maintenance of nuclear capability. Alongside this, there is arguably also a political case of a different kind, and some would say even a psychological one. Let me suggest, without necessarily endorsing them, what some of the components of such cases might be. Our countries are permanent veto-wielding members of the United Nations Security Council,

and for many years that status has coincided with that of NPT-recognised nuclear-weapons possessor. In addition, so at least some would maintain, nuclear-weapon possession is part of what gives us the confidence and readiness to carry military responsibilities beyond our own shores on a scale that no-one else save the United States does; and this readiness is an asset not only to our own direct interests but to world order generally. A converse way of expressing that is that, to a degree that scarcely anyone else (again, except the US) matches, we have very long continuous histories as major powers with global abandonment would convey would damage both our influence and our self-assurance. I recognise that for historical reasons both recent and distant, considerations like these may have especial resonance in France, where the investment in nuclear capability has moreover been much higher than in the UK. But in my view arguments of this type have less and less weight as history moves further and further away from the conditions and mindsets of the World Wars and the Cold War; the sort of military power that nuclear weapons represent is proportionately less and less significant as compared with other aspects and instruments of influence. Frankly, I would be very uneasy if we had to place much reliance upon politico-psychological factors such as these rather than on more directly strategic arguments like those I sought to sketch earlier.

Now those strategic arguments, I am well aware, are themselves ones which would readily be assailed by critics as lacking concrete specificity or persuasive immediacy; and indeed I would not attempt to claim for them the status of absolute imperative. But nor are they vacuous; and in my view therefore the nature of the assessment we have to make is whether they amount, in the round, to sufficient reinforcement of our security assurance to justify the costs – not just the financial costs – of our maintaining significant capability. I am not myself uncomfortable with the concept of a balancing assessment of this kind; in the world as it is now more and more of our security provision is a matter not of categorical and unqualified need but of weighing added value against cost and opportunity cost.

D. Political and Financial Costs

So let me turn now to costs. My first point is that they differ widely according to whether we are envisaging just the quiet maintenance of existing capability with present systems and perhaps minor adjustments to them, or major new steps to renew our capability for a much longer-term future. This difference applies to political costs as well as, obviously enough, financial costs.

I subdivide political costs into two categories, international and domestic. Internationally, our retention of nuclear capability attracts criticism from non-nuclear nations which want to see the NPT-recognised powers move more swiftly to bring about the Article VI aspiration for nuclear abolition. But both we and our critics have got used to the present situation,

which has been a familiar feature of the world scene for many years now; and I do not believe that, in a condition of low-key maintenance, our retention makes any real difference either to progress with the abolitionist aspiration or to the success of the non-proliferation regime. What happens in respect of Article VI will be shaped above all by the decisions of the big nuclear powers, not by us; and the choices made by potential proliferators, or by the non-recognised nuclear powers, will be determined overwhelmingly by their assessment of their own regional security, not by any example we may set. British and French abandonment of nuclear capability might deprive, say, India and Pakistan of an occasional debating point, but I do not believe it would make any difference to their actions.

I would rate rather higher the risks of adverse international political consequences if either of our countries were to take high-profile new decisions to undertake major modernisation, in effect advertising a belief that the Article VI aspiration was almost permanently unreal. Much would depend on the detail of the measures and the circumstances of the time; but even if the decisions envisaged, for the next generation, a smaller capability than each of us has now, they would certainly attract widespread and heavy criticism, and while they would be unlikely in themselves to have a conclusive effect they might well influence the balance of world opinion in ways that damaged the non-proliferation regime.

On the domestic political side, I shall not presume to speak at length about the scene in France. But within the UK, I judge, the pattern would be rather like that which I have sketched for the international dimension. Low-key maintenance would continue to be opposed by a longstanding but now relatively small section of actively anti-nuclear opinion, but none of the political parties shows any inclination towards making this a big or contentious issue. Anti-nuclear postures are perceived by Labour Party leaders as having been big vote-losers in the 1980s, and reconsideration of the Trident acquisition was the one subject specifically ruled out of discussion when the present Government embarked on its Strategic Defence Review in 1998. Decisions about significant new steps in modernisation would however be another matter, and in my judgment that would remain true even if the new steps were modest in scale and represented a reduction of capability. The very fact of renewal would reopen the whole nuclear debate. The issue would still be a very awkward one on the left, and indeed perhaps not only on the left if there were uncomfortable opportunity costs within the defence budget – that is, if important or popular other things were at risk of being displaced from the defence programme. There might also be a special problem with respect to Scotland, where our nuclear force is based. There is in some degree a distinctive and stronger strand of anti-nuclear opinion there, and Scotland is going through a constitutional evolution whose long-term outcome is uncertain.

But now for financial costs. Very broadly, the operation of the Trident force, which is now the UK's only nuclear force, absorbs somewhat over one per cent of the defence budget – perhaps around £280 million a year. That does not include the cost of our general nuclear-weapon infrastructure, such as the Atomic Weapons Establishment at Aldermaston – I would guess that that might roughly double the figure, so that the proportion approached three per cent. But even then that remains a modest

share of the defence budget. Moreover, as you will realise, abandonment of the capability would by no means swiftly save all the money – there would be heavy close-down costs of one kind and another.

Once more, any major modernisation programme would be a different matter. The capital cost of the Trident modernisation was in the end about £13 billion at today's prices. Even spread over several years, anything like that would now be a very uncomfortable burden on likely defence budget allocations. Many people – quite probably including me – would question whether a strategic case of the kind that I outlined earlier was really cogent enough to justify incurring a new burden in that order of magnitude.

To summarise up to this point: I believe that the case for maintaining British and French nuclear capabilities is strong enough today, and will remain strong enough unless there are very striking and dependable changes for the better in the environment and structure of global security, to justify our continuing to accept the political and financial costs that are imposed by keeping the capabilities going in broadly their current form and size. The current costs cannot be reduced by much, I think, at least for the UK.

You will gather from the survey that I have already offered that my conclusion of support for continuance would become progressively less certain, perhaps even to the point of reversal, if we had to face a situation of needing to renew or augment the capabilities in a high-profile and costly way. On such an analysis, the pivotal issue for practical policy then is whether, and if so when, we might find ourselves in such a situation. And that brings me to the next section of this opening presentation.

Practical Content and Character of the Capabilities

In my opinion, the need for and timing of any big new decisions will be determined essentially by technical factors, not by operational ones. Let me defend that assertion briefly. Our two nuclear forces have been configured, in both size and quality, to a benchmark of deterrent credibility set by the characteristics of a potential adversary that was a global superpower. That superpower no longer exists, and there is no likelihood of its replacement by any new adversary that would pose higher demands. I acknowledge of course that the scope for developments in the BMD field that could set new demands for us may be opened up, theoretically, by US actions; but even if that happens I would rate at virtually zero the probability of Russia or anyone else, the US apart, having either the means or the will to develop new ABM defences of a scale or sophistication that would call seriously into question French and British ability to land a terrible blow. Moreover, our Trident-centred system – and I would imagine this to be true of French systems also – is of a character that would, I think, provide options for reinforcing penetration capability, if that unexpectedly became necessary, without our having to cross any dramatic new threshold of decision.

A. Technical Factors

So I come to the technical factors. The UK's first SLBM system, based on the Polaris missile, lasted for twenty-eight years in operational service, from 1968 to 1996, and we had to face the replacement decision about half-way through that time. The Trident system entered operational service in 1994 and is in most respects of more modern and robust design than its predecessor. It would therefore be surprising, on the Polaris analogy alone, if big decisions about a post-Trident future had to be faced until at least late in the present decade.

But it is perhaps worth looking at the issue at one further level of detail, though I should make it clear that in attempting this even in respect of the UK – I shall not purport to speak at all of the French force – I am operating at the outer edge both of my technical understanding and of the information nowadays available to me.

There are five main system aspects: warheads, missiles, submarine hull, tactical combat capability –the equipment that enables the boat to evade or defeat attack by hostile submarines – and the propulsion reactor. The warheads undergo a regular refurbishment cycle, and their life should present no special problems. As regards the missiles, the United States may well undertake a programme to extend Trident life a very long way ahead, perhaps even to 2040. SSBN Hull life is better than that of attack submarines, since, by the nature of their task, they have a less stressful pattern of operation; and it is anyway likely that engineering measures could substantially postpone any fatigue problems. An advanced tactical combat system is a complex and costly affair, but it might well be possible to instal in the SSBNs the new system being provided for the next generation of attack submarines; and indeed it is anyway open to question whether it really remains necessary to cater for an ASW threat as severe as that posed by the Soviet navy. That leaves the reactor. It may be, I conjecture, that this will prove to be the first critical factor in overall system life; but even then it is not likely that new decisions will be needed about it before the middle of the decade at earliest – or, to express the matter in politically relevant terms, not within the lifetime of the current UK Parliament. I ought perhaps to note one other dimension of overall capability; and that is the scientific and technological competence available to support the capability in places like the Atomic Weapons Establishment. In the long run there may well be worries about this as time goes on without the challenge and stimulus of new projects; but I doubt whether this is a matter of acute near-term concern or of sudden cliff-edges.

To summarise that survey, I believe that the UK is not likely to have to take major decisions on any new generation of capability for at least several years to come. As you will be able to deduce from what I said earlier, I regard that as a good situation to be in, since on the analysis I have offered there is no strategic merit in trying to reach swift new decisions, whether for renewal or for abandonment. And I am tolerably sure that that will be the view of the UK Government.

I am not closely enough informed to attempt a matching analysis of similar detail in respect of France. The French nuclear force is now somewhat larger and more diverse, and moreover your pattern of modernisation, historically, has had more of the character of a rolling programme than the UK's, which has mostly tended to move in large step-changes at long intervals. In addition, I believe that French domestic opinion has not included as substantial and vocal a segment as there is in the UK of fundamental opposition to the nuclear role. For the combination of these reasons, I suspect that the replacement issue will not present itself in quite such clear-cut black-and-white terms – the Rubicon may be less precisely visible. But there will surely nevertheless, sooner or later, be decisions that recognisably entail an evident move to a new generation; and when that arises the political issues for France, I suggest, will be broadly of the same character, if not quite the same intensity, as for the UK.

Political and Institutional Framework for Future Capabilities

The third section of this presentation was to be about institutional arrangements. I shall keep this short; I want simply to indicate two possible areas for discussion. The first concerns cooperation between our two countries; the second is about whether we could or should do anything to set our nuclear capabilities in a more explicitly European collective framework.

A. Cooperation between England and France

When I left government service nearly ten years ago there was still, for reasons on both sides of the Channel, very little Franco-British exchange about our nuclear forces. Since then, as I understand, there has been considerable advance in discussion and indeed collaboration in several fields – concepts and doctrine, communications and planning for the management of accidents, for example. All that seems very desirable and positive, and I hope it is being continued and developed. But it follows from what I said a few minutes ago that there is, for the UK, little prospect for a considerable period ahead of any need for new steps that could offer scope for collaboration in the field of materiel even if we were not constrained, both legally and politically, by our close and long-standing links with the United States. To put the matter the other way round, though there is in the UK much respect for French expertise and for French infrastructure – which is in some respects considerably more extensive than ours - there seems to be little basis for expecting that new directions of Franco-British cooperation would offer any advantage to the UK, in either technical or financial terms, large enough to make it worthwhile to reduce or endanger the dividend we get from those transatlantic links. I have expressed that rather starkly; but it seems to me to be reality. And there are, I accept, limiting realities too on the French side, for example in regard to ideas of entry into NATO's Nuclear Planning Group or other such structures.

B. A New European Framework?

Finally, should our two countries seek to put our capabilities into some new European framework, for instance alongside the St. Malo initiative? Again, I have a rather stark answer to offer. Collective Europe is nowhere near the stage of development where it could act as an effective decision-taker in matters of the enormous gravity that would be implicit in any consideration of nuclear weapons. More proximately and more pragmatically, the management of ESDP is proving a big enough task politically as we seek – France and the UK being in effect the joint leaders of the project – to build a coherent military capability bringing together countries with widely different attitudes to the provision and use of military force. The attitudes would be still more widely different in respect of nuclear weapons – there would be immense sensitivities. Attempting to import anything about nuclear weapons – even just dialogue – would be severely divisive within the arena of the European Union, imposing an unnecessary burden on what we both want to achieve in European security effort. To pick up again that phrase of Edward Heath, we can perhaps choose to regard our capabilities as held in trust for Europe; but to try to formalise that – or even to advertise it - would be too much for the political market to bear.

My central proposition is that though the case for our two nuclear-weapon capabilities is less weighty than it used to be, it remains strong enough, in an uncertain world, to make their maintenance in broadly their present form a worthwhile element of long-term security insurance. I would be less confident about such a conclusion if we had to face decisions on conspicuous and costly new steps in order to carry the capabilities into a further generation; but at least on the UK side that is not the situation, and not likely to become so for at least several years yet. There is no need to rush to new conclusions, and no advantage in doing so.