THE FUTURE NAVY

INTRODUCTION

1. In the 1990s, the flexibility of British maritime forces helped them to change from a Cold War strategy based on open-ocean sea-control to a post Cold War one based on expeditionary operations. The *Strategic Defence Review (SDR)* strengthened the policy foundation for this shift, with the doctrinal impetus being the *Maritime Contribution to Joint Operations (MCJO)* – a concept which outlined the ways in which future maritime forces would operate within the framework of Joint operations. The *Naval Strategic Plan* directs that the Maritime Force Development process should evolve future fighting effectiveness. The time is ripe to take forward this directive and examine how the *Future Navy* should be developed in the light of recent policy advice, operational experience and contemporary technological innovation.

PURPOSE

2. This paper presents the Navy Board's strategic concept for the future naval service. Recent MoD reorganisation has created new joint organisations to deliver truly joint UK military capability. The role of the single service Chiefs of Staff (COS) has also been clarified:

> "The generation of the single service components of joint forces is thus the responsibility of each COS. This is a complex task; military capability arises from the effective combination of six essential ingredients or 'lines of development': concepts and doctrine; equipment/technology; [logistics] sustainability; [collective] training; force structures; personnel. Each Service places varying emphasis on each according to its needs, but it is the COS who is responsible for the current *coherence of balance of the constituent elements*."

Developing a strategic concept is an essential first step in achieving a coherent balance well into the future. Naval force development and strategic planning then provides conceptual detail, working in harmony with the MoD Central Staffs, Army and Air Force.

DEFENCE POLICY

3. Current Defence policy is laid out in the *Strategic Defence Review*. This defines the missions of the UK's Armed Forces and highlights key themes that currently govern the development of our future forces, especially: jointness and interoperability; capability across the spectrum of conflict; deployability; sustainability; cost effectiveness. This policy has been amplified more recently in the *Defence Strategic Plan 2000*, from which key deductions for maritime forces can be drawn:

- The strategic environment of the future will be complex and unpredictable, with "more diverse risks, challenges and opportunities". It will be difficult to predict precisely where in the world, when, with whom, at what scale, and in which part of the spectrum of conflict, our involvement will be.

- "The high operational demands of the last few years are likely to continue; in addition to international peace enforcement/support and conflict prevention roles, there may well be increasing pressures for humanitarian and disaster relief operations." This means that a greater proportion of UK Forces' time is likely to be spent deployed on operations or in support of the Defence Missions, as opposed to generic training and preparation.

4. Operations involving our Armed Forces are the visible expression of Government defence policy. The Defence Mission is to *defend the United Kingdom, and Overseas Territories, our people and interests, and act as a force for good by strengthening international peace and security*. In EU terms, the Helsinki Headline Goal (HLG) demands capabilities under the Petersburg tasks that range from humanitarian support to full warfighting in the Separation of Force scenario. Maritime assets are already well placed to fulfil these rôles – and the enabling concept of swing, introduced below, is entirely congruent with the HLG philosophy.

5. An overview of the naval service's involvement, within the context of the Defence Strategic Plan, in the current 8 Defence Missions gives a more substantive feel for the possible range and scope of our future tasks:

- Peacetime Security. The need to patrol, police and defend Britain's Territorial Waters and 200nm Extended Fisheries Zone (EFZ), and our offshore oil and gas reserves, has proved enduring. And, as witnessed in Sierra Leone, Non-combatant Evacuation Operations (NEOs) still remain a likely contingency, especially in Africa. Threats to British flagged ships overseas remain a national responsibility, particularly in view of the ongoing world wide terrorist threat.

- Overseas Territories. Contributing to the joint military presence in our overseas territories has continued to be an important naval task. In this role, ships in the Caribbean achieve continuing and increasingly major successes in anti-drugs operations.

- Defence Diplomacy. Naval forces have contributed across the full spectrum of defence diplomacy tasks. We, the Royal Navy have engaged in security building programmes, such as NATO's Mediterranean Dialogue with our participation in Standing Naval Force Mediterranean. And, as acknowledged world leaders in sea training, international demand for our sea training continues to grow.

- Wider British Interests. RN ships continue to support British interests and standing overseas, through, for example, port visits (providing venues for the FCO and British exporters) and participation in wider defence activities, such as the Five Power Defence Agreement exercises in SE Asia. Meanwhile, our hydrographic ships make a significant contribution to scientific understanding of the skies and oceans, and thus to key environmental issues such as global warming.

- Peace Support and Humanitarian Operations. Involvement in Peace Support Operations (PSO) has grown significantly. Ships, submarines, naval aircraft and commando forces have contributed variously to joint and combined PSOs of differing scale and intensity. From supporting coalition and UN land forces in the Balkans, Asia and the many conflicts in West Africa, to providing combat air patrol of exclusion zones and enforcing economic embargoes in support of UN Security Council resolutions. Humanitarian contributions have included disaster relief in the Caribbean and aid provision wherever the sea provides easy access (South America, East Africa and in the Mediterranean).

- Regional Conflict outside NATO. Joint NATO operations in the Balkans have underlined the necessity of being able to operate at high intensity in support of national economic and political interests, and international stability, especially in the Gulf and the Mediterranean areas.

- NATO Regional Conflict. Although the prospect of a NATO regional conflict continues to recede, this mission remains at the heart of our defence policy. Maritime units have continued, therefore, to train and exercise for it, in joint and combined scenarios, both to deter potential aggressors and give confidence of our ability to respond across the full spectrum of conflict; developing the necessary interoperability of both equipment and doctrine.

- Strategic Attack on NATO. The prospect of strategic attack on NATO appears remote, but our SSBNs, with their supporting assets, provide credible insurance. Retaining a broad range of capabilities provides a sound basis on which to rebuild larger forces if ever necessary.

6. It can be seen from the above that the Naval Service continues to make a contribution across the Defence Missions. But therein hangs a danger for the future. Currently we make excellent use of our existing capabilities, but could we better develop maritime forces optimised for high intensity joint operations and yet which are also relevant across the full range of other tasks expected of them – not by adaptation, but by design? And, recognising that policy and missions change, how can we best protect the government's investment in these forces – how can we "future-proof" them?

THE STRATEGIC VISION

7. It is not difficult to deduce that to do this we need forces that are inherently versatile. Recent MoD policy direction is clear on this point:

- "capabilities based on warfighting will give us the ability to contribute to less challenging types of operation, but the reverse is not true. Building a force by planning for both will produce a more robust force structure with wider utility."

- "we should increase the utility and versatility of equipments across the spectrum of conflict."

To meet these policy directives, and achieve the increasingly diverse range of likely future mission types, we will need a *versatile maritime force*, across five 'planes': spectrum and nature of conflict; geographic region; scale of effort; choice of partners; required readiness.

THE VISION

The future Navy will contribute to the Defence Mission by *retaining its core emphasis on warfighting*, but providing strategic impact across the defence roles through the development of a *versatile maritime force* which:

- is optimised for Joint power projection, assured access to the theatre of operations for the Joint force, Joint rapid effect, and information superiority, but able to play its part in all types of conflict.
- has the global reach, sustainability and endurance required to operate in the geographic regions identified in UK defence policy.
- can provide suitably configured maritime capabilities able to contribute at the different scales of effort required by MoD planning assumptions.
- is fully interoperable with the Future Army, Future Air Force, and other national and international military and civil partners likely to be encountered in the joint, combined or integrated operations envisaged in UK defence policy.
- can change efficiently and cost effectively between the different levels of readiness as dictated by real world operations.

Able to respond with appropriate capabilities in support of Government defence, security and foreign policy, the hallmarks of this *versatile maritime force* must be high quality leadership, teamwork, professionalism, flexibility, and the will to succeed – a *world class navy, ready to fight and win*.

To achieve this vision, we must take advantage of two key areas: the power and innovation of current and emerging technology; and the current fighting advantage of our training and people, as manifested in their technological adaptability, operational dexterity, morale and fighting spirit.

THE ENABLING CONCEPT

8. *Swing* is the enabling concept that will allow us to deliver this force.

Swing is defined as the ability to configure a force, formation or unit to allow it to operate successfully, and cost effectively, across a range of mission types and roles.

As seen in our contribution to all 8 Defence Missions, the concept is one we use today, but it is now technologically within our grasp to make sure that our research and development programmes recognise swing as a key user requirement from the outset. We need also to note that the concept is not solely equipment focused, not just 'multi-role.' It is force focused, and must be integrated across doctrine, equipment, personnel, collective training, sustainability and structures.

9. Swing has a number of key components:

- Adaptability – in military terms adaptability means being able to undertake a range of mission types. In a maritime platform multi-function sensors and weapons – for example, sonars that have an ASW and MCM function, should achieve this or medium calibre guns with a land attack, AAW and ASuW role capability.

- 'Configurability' – the ability to configure a unit to suit strategic, operational or tactical imperatives. In a ship, this might be achieved by changeable modular systems, multi-role vertical-launcher silos, or space for aircraft or troops – in each case the balance of equipments, munitions and embarked forces can be adjusted to suit the circumstance and without disproportionate effort. The aircraft carrier is a definitive example.

- Standardisation – to be cost-effective, economies of scale dictate that standardisation and flexibility go hand in hand. In equipment terms, this means we should rationalise towards fewer classes of more flexible ships, weapons and sensors.

- Simplicity of Operation – in order that personnel can operate effectively across rôles, we must simplify the demands that our equipment operation, and doctrine, tactics and procedures, place upon our people, and improve the decision support available to them.

- Information Superiority – information superiority, not only tactical and operational, but also strategic, managerial and support, is the final key component.

10. Embodying this concept carries two risks. First, in moving toward adaptable systems, it may be necessary to trade top end performance in one specialist area, for broader versatility. This will need to be done consciously on a case-by-case basis, recognising also the risk that highly specialist systems may be rendered obsolete through policy change or technological shift. Second, in operating a *versatile maritime force* people may lose warfighting edge in key specialist areas and become 'jacks-of-all-trades'; this is in part already the case. But currently, much of combat power generation is about mastering complex technological interfaces and procedures. This is why simplification is so important. Simplifying fighting and related equipments – putting the complexity back in the machine, not at the man-machine interface – will free up future users' capacity, as will simplifying doctrine, tactics and procedures. Both approaches will ensure better chances of success in battle conditions, and return doctrine and technology to their proper positions, as servants not masters.

11. *Swing* is not in itself a formula for reducing hull numbers – one versatile unit can no more be in two different places than one specialist unit. But the logic that underpins the concept bears repetition – if we accept that the future strategic environment will be confused and unpredictable, then our only rational course of action is to develop and procure units, formations and forces that are inherently adaptable.

DEVELOPMENT OF THE STRATEGIC VISION

12. We need to examine how we are to take forward the strategic concept through the Centrally-established 6 Lines of Development: concepts and doctrine; equipment; personnel; [collective] training; [logistics] sustainability; structures. The sections that follow include sets of medium to longer-term actions to be drawn into the *Naval Strategic Plan*, and delivered through its 5 Pillars. Ultimately their cumulative effect should be felt on the RN balanced scorecard. This relationship is depicted diagrammatically at Annex A.

Concepts and Doctrine

13. The evolution of future fighting effectiveness is achieved through a system of Maritime Force Development (FD), which must be congruent with, and flow into the medium term objectives mandated within the *Naval Strategic Plan*. The strategic concept in this paper, focused at the military-strategic level, provides the FD headmark and acts as source, from which an integrated suite of operational and tactical concepts and doctrines will flow. *MCJO*, which is the Navy's current operational doctrine, sits ideally within its framework. The way in which our future concepts and doctrine should evolve is also clear:

- **rationalisation** – we must refine our system for producing the concepts and doctrine required to underpin our strategic planning and force development.
- **simplicity** – we must ruthlessly simplify our doctrine, tactics and procedures, make them more understandable, and thus improve our chances of success in the fog and friction of war.
- **interoperability** – we must work with the JDCC, Army, Air Force, and other partners, especially other navies, to improve the interoperability of our doctrine, tactics and procedures.

Equipment Capability

14. A *versatile maritime force* will require platforms and equipments that can deliver a range of military capabilities either simultaneously or through strategic, operational or tactical configuration. Swing-role units have limits – one class, or one type of platform, cannot fulfil every maritime task. Our order-of-battle legacy means we will need to adopt an incremental approach to this long-term goal. Nevertheless, many existing maritime platforms already possess a very significant degree of versatility – we should exploit this strength further, and not be afraid to examine the approaches of sister services and foreign navies.

15. The following tenets explain how the concept of swing might be taken forward in the Equipment programme:

- **versatility** – we must examine ways in which the versatility of current platforms and equipments can be further enhanced.
- **implementing swing** – we must identify opportunities in the future equipment programme where greater flexibility and class rationalisation can be incrementally inserted. Design aspects of the T45 destroyer are an example of this.
- **simplicity** – we must make simplicity of equipment operation, maintenance and support a critical user requirement. Simplifying the man machine interface should be a key research focus in the Applied Research Programme.
- **affordability** – we must work to improve the affordability of our equipment by examining how we can reduce whole-life costs, and the cost drivers that produce marginal benefit.

This may also assist in addressing a key challenge of achieving coherence across equipments, as adherence to the above tenets will help produce an operationally capable force, in the most cost effective manner.

Personnel

16. The *Naval Strategic Plan* seeks greater flexibility for employing and deploying people. By exploiting the opportunities available in future rationalisations of training and support areas, and working hard at key recruitment and retention issues, we can make progress in manpower issues:

- **management** – we must ensure our manpower requirement is set at the right level to deliver our core functions.
- **versatility** – we must develop manning and deployment policies, which not only align with future operational concepts and equipments, but are also inherently flexible enough to respond to changes in demand.
- **employment opportunities** – we must ensure our people are provided with the correct skills and experience to contribute within joint organisations.
- **simplicity** – we must simplify existing systems to increase flexibility, optimising the way in which we match skills and experience to posts, whilst at the same time providing the individual with more varied and rewarding career paths.
- **career management** – the individuality of our people, their career aspirations, and their personal commitments must be recognised in order to recruit and retain the personnel of the quality required to sustain the future naval service.
- **harmony** – we must develop a concept of separated service, ensuring that our personnel management system impartially balances the needs and aspirations of the individual, and his or her family, with the need to sustain operational capability.
- **support** – we must ensure that our people (and their dependants) receive the level of pastoral, spiritual and welfare support they need to sustain them in the operational environment.

Throughout this we must not lose sight of our fundamental *raison d'être*. Ultimately our people must be prepared to fight and win. Success in combat will hinge on some timeless virtues – leadership, teamwork, loyalty, discipline and courage. As we evolve more flexible personnel management and manning systems, we must retain these fundamental elements of our ethos.

Collective Training

17. High quality, collective training is central to enabling the *versatile maritime force*:

- **training and readiness** – we should examine critically the linkage between collective training and readiness to ensure relevance and cost effectiveness.
- **infrastructure rationalisation** – we must improve our training infrastructure's responsiveness, whilst exploiting maritime force sea training opportunities through the better alignment of ship, submarine, aviation and amphibious training.
- **skill fade** – we must adapt our drafting policies to mitigate the critical impact of trickle drafting upon team fighting effectiveness. Enhancing our mobile sea training teams will help ameliorate current shortfalls, and also create an internationally deployable training element with good defence diplomacy potential.
- **training approaches** – we must examine the utility of embedding training functionality in new platforms, the cost benefits of federated and confederated training approaches, and in the longer term the balance of investment between sea and shore training.[1]

By providing a strategic framework within which to sit our training policy, we can ensure our training investment is accurately focused.

Logistic Sustainability

18. Improving logistics sustainability is central to improving force versatility:

- **stores and logistics rationalisation** – we must ensure that moves to improve platform and system standardisation go hand in hand with those to simplify stores and logistics inventories, thereby improving stores availability, particularly in the front line.
- **self-reliance** – we must make our platforms and units even more self-reliant – more reliable, more self-maintainable and self sufficient. Minimising our logistics needs will help reduce stores weight and volume, improve operational tempo, reduce the land force logistic footprint and, thus, enable concepts such as Ship-To-Objective-Manoeuvre.
- **partnerships** – the interfaces for example between our operators, maintainers, providers of logistics support, Sponsored Reserves and contractor personnel will need to be carefully managed in order to maximise their potential.

1 Federated – linking onboard trainers in a platform. Confederated – linking onboard trainers in multiple, geographically dispersed platforms.

- **new technology** – we must exploit new logistics technology. Containerisation has revolutionised commercial stores delivery and the British Army has exploited similar thinking with DROPS.[2] The DLO logistics IS programme has the potential to revolutionise the provision of materiel and logistics information to the Fleet and hence the provision of materiel requirements.
- **DLO** – we must ensure that the Fleet gains maximum benefit from current and future DLO initiatives. We must harmonise our front line logistic processes with those of the DLO, and identify areas where the DLO and we need to place further effort.

19th and 20th Century British expeditionary experience showed that success hinged significantly on getting logistics and sustainability right – the same point will be equally valid in the 21st Century. As General Swartzkopf noted: "… logistics is not the tail but the spine."

Force Structures

19. Our structural reform should work toward the production of a versatile maritime force:

- **command and control** – our shore and afloat C4ISTAR capabilities should facilitate Joint Force command and control, improve linkages with partners and allies, and empower decision makers at the operational and tactical level. We need routinely to exercise maritime command at sea at the 1* and $^{1}/_{2}$* level – these are our Brigade command equivalents.
- **rationalisation and balance** – our structures must be inherently responsive in order to deliver force packages at the different scales of effort and readiness required in our planning assumptions, while working to achieve military balance at lower force levels, and weave our force packages more by scale than specialisation.
- **infrastructure cost effectiveness** – we need to examine our infrastructure development to ensure that our training estate and naval base rationalisations deliver optimum warfighting capability cost effectively.
- **estate, people and stability** – our training estate and base rationalisation must also take account of the need to improve the area and family stability of our people.

A taut, streamlined decision making process will be crucial in delivering a *versatile maritime force*.

2 DROPS – Dismountable Rack Offload and Pick-up System.

CONCLUSION

20. The *Defence Strategic Plan 2000* and work on the changing *Strategic Context* have taken forward the work of the *SDR* firmly to establish a coherent departmental view of the missions and task of the armed forces for the future. *MCJO*, our current doctrine has provided a solid foundation for the Navy as it moves to a force posture that already has the flexibility to contribute fully to all the Defence Missions and Military tasks, while maintaining our qualitative edge in warfighting capability.

21. This more *versatile maritime force* should be able to undertake more effectively the wider range of rôles that might be expected of us, yet remain within anticipated resources. It will have two other crucial advantages:

- Future Proofing – a force so designed will be inherently adaptable for the future. By reducing high level decision-making procurement risk, we can ensure the best strategic and financial result. This is wholly consistent with Smart Procurement and is the best way of protecting the Government's investment in the naval service.

- Responsiveness to Change – complex and rigid systems are brittle and particularly susceptible to change fatigue. A *versatile maritime force* will be, by design, adaptable and responsive to change throughout all its lines of development.

These two additional benefits could prove to be enduring. Realising the vision of the versatile maritime force's potential will depend on a conscious recognition of possibilities in *swing*, and a determined drive to deliver them by design rather than by pressure of circumstance. In the final analysis, the force must be able to meet the Navy Board's goal of:

A World class Navy, ready to fight and win.

Printed by
Naval Staff Directorate
June 2002