

2 Conclusions

2.1. In this inquiry we are concerned with the proposed merger of BAe and VSEL, a company incorporated in the UK. We are required by the first question in our terms of reference (see Appendix 2.1) to investigate and report whether arrangements are in progress or contemplation which, if carried into effect, will result in the creation of a merger situation qualifying for investigation, as defined in section 64(8) of the Fair Trading Act 1973 (the Act), in that enterprises carried on by or under the control of VSEL will cease to be distinct from enterprises carried on by or under the control of BAe. The reference provides that, if we find the test in section 64(1)(b) of the Act (the assets test) or the alternative test in section 64(1)(a) (the market share test) satisfied, we shall exclude the other from our consideration.

2.2. Section 67 of the Act provides for the determination of whether the assets test is satisfied. As is apparent from paragraph 3.77, the value of the assets to be taken over (ie those of VSEL) exceeds £70 million, and the test in section 64(1)(b) of the Act is thus satisfied.

2.3. BAe announced an offer to acquire VSEL on 12 October 1994. The offer was recommended by the Board of VSEL. It was revised on 18 November 1994, following an offer from GEC, but lapsed automatically on being referred to the MMC. BAe has indicated to us its continuing intention, unless some unforeseen development were to occur, to acquire VSEL if permitted following this investigation, and that BAe itself regards the arrangements as remaining in contemplation. We conclude that arrangements are in progress or contemplation by BAe which if carried into effect will result in the creation of a merger situation qualifying for investigation.

2.4. In the period 1992/93 some discussions were held between BAe and GEC about the possible merger of their naval defence activities, together with those of VSEL. There were also some discussions between the parties in 1994, in which BAe informed GEC of its interest in acquiring VSEL, but the parties differ on whether these discussions took place before or after the announcement by VSEL on 29 September that it had received approaches that might lead to a bid. They agree that following BAe's Stock Exchange announcement on 4 October 1994 that it was in discussion with VSEL, meetings between GEC and BAe were held during which GEC suggested that the two companies should consider a joint offer for VSEL. A proposal for a joint venture in naval systems which would encompass the whole of VSEL was also discussed. BAe told us that it had decided almost immediately not to proceed with these discussions.

2.5. In view of these earlier contacts, we asked GEC and BAe whether each currently had in contemplation arrangements with the other for any kind of joint venture concerning VSEL or YSL, the warship-building yard owned by GEC. GEC stated that no such arrangement with BAe was contemplated, although it would be obliged to consider the position if BAe returned to it to pursue the possibility of a joint bid for VSEL or a joint venture. BAe made clear that it had not ruled out the possibility of a joint venture with GEC either if both bids were cleared or if either it or GEC were successful in bidding for VSEL. It did not appear to us that these statements of the companies' positions supported the conclusion that, for the purposes of the Act, arrangements for such a joint bid or joint venture were in progress or contemplation. Moreover, if firm proposals were to be made for such a joint venture it appears to us that there would then be a new merger situation qualifying for investigation.

2.6. As the proposed arrangements described in paragraph 2.3 have not been carried into effect the second question in our terms of reference relating to the actual results of the arrangements does not require an answer. We have now to consider the third question in our terms of reference, whether the creation of the merger situation may be expected to operate against the public interest.

2.7. The proposed merger has a Community dimension for the purposes of the EC Merger Control Regulation.¹ As indicated in the preamble to our terms of reference (see Appendix 2.1), on 19 and 26 October 1994 Her Majesty's Government took measures under Article 223(1)(b) of the EC Treaty² to the effect that BAe should not notify the proposed merger to the EC Commission under that Regulation in so far as the transaction relates to military activities. Accordingly the EC Commission examined under that Regulation only those aspects of the proposed merger relating to non-military activities and cleared them in a decision communicated to BAe on 24 November 1994.

2.8. The proposed merger was referred to the MMC by the Secretary of State on 7 December 1994. This is the first occasion on which the Secretary of State for Trade and Industry has referred a merger with a Community dimension for the purposes of the EC Merger Control Regulation to the MMC by virtue of the provisions of Article 223.

2.9. In our consideration of the public interest issues we have taken account of the measures taken by Her Majesty's Government and the decision of the EC Commission and have confined our consideration to those aspects of the proposed merger which relate to military activities; we refer to non-military activities of the companies concerned only to the extent necessary for the purpose of our conclusions on the aspects relating to military activities.

The companies involved

2.10. VSEL was established in 1986, when parts of British Shipbuilders were privatized. Its activities are concentrated at Barrow-in-Furness which, following the closure of VSEL's Cammell Laird (CL) yard, is the only UK shipyard now operational that has a submarine-building facility and the only one capable (with modest investment) of building surface warships over 7,000 tonnes. Submarines have been built at Barrow for many years and have been the only warships produced there over the last decade, but VSEL is keen to get back into supplying surface ships. Two years ago it secured a contract as prime contractor for a large surface vessel, the Landing Platform for Helicopters (LPH), and is bidding to construct one or two Landing Platform Dock (LPD) assault ships (see paragraph 2.17). While submarine construction is dominant VSEL also produces howitzers and ship-mounted guns. Over 95 per cent of VSEL's business relates to these military activities, with a turnover in 1994 of just over £450 million; its non-military activities are limited to the supply of small amounts of equipment for the oil and gas industry and of consultancy and engineering services in these sectors.

2.11. BAe is a major aerospace and defence company with a turnover in 1994 of over £7 billion. It is the UK's largest exporter. It is mainly engaged in the design, development and production of military and civil aircraft and, through its Defence Division, supplies guided weapon systems and defence support services. The disposal of its 80 per cent shareholding in the Rover Group in 1994 and the agreements announced in January 1995 for the management of its regional aircraft business (see paragraphs 3.11 and 3.16) reflect its strategy of concentrating on its core aerospace and defence businesses.

¹Council Regulation (EEC) 4064/89 on the control of concentrations between undertakings.

²Article 223(1)(b) provides that any member state may take such measures as it considers necessary for the protection of the essential interests of its security which are connected with the production of or trade in arms, munitions and war material; such measures shall not adversely affect the conditions of competition in the common market regarding products which are not intended for specifically military purposes.

2.12. BAe's naval interests are mainly pursued through its joint venture company formed in 1991 with the French SEMA Group, BAeSEMA. BAe transferred to this joint venture its existing underwater systems business (sonar systems, mine warfare, systems integration and electronic warfare activities). As well as complete ship design services BAeSEMA is able to provide naval command, or combat management, systems. It is one of three UK suppliers of these combat management systems, the other being Ferranti Naval Systems and Plessey Naval Systems, both now owned by GEC-Marconi Naval Systems (GMNS). BAe Defence also supplies guided missiles for warships, most importantly the Sea Dart surface-to-air missile and the Sea Wolf anti-missile and anti-aircraft missile. BAeSEMA is providing combat management systems for the first Trident submarines, the latest Type 23 frigates, the Fort Victoria class Auxiliary Oiler Replenishment (AOR) ships and the Swiftsure and Trafalgar update programmes. It is working with GEC on the design of the planned CNGF. In none of these cases, however, is it a prime contractor.

2.13. BAe also owns RO, which manufactures ammunition, guns and other equipment. It is the only UK maker of medium-calibre gun barrels and breeches, which it provides for VSEL's land and naval guns. It is in direct competition with VSEL and other non-UK suppliers to provide a new lightweight towed 155 mm howitzer for the US Defense Department.

2.14. In our consideration of the proposed merger, so far as it relates to military activities, we have examined first the effects on the supply of warships and armaments, in which both companies are active, and then other more general aspects of the merger.

UK warship supply

2.15. The market for warships has a number of unusual features. There is a single UK buyer of warships, the MoD, and only a few suppliers. It is stated government policy to buy warships only from shipbuilders in the UK (see paragraph 6.1). The business is moreover 'lumpy', with large orders placed infrequently. Planning horizons for a new requirement are distant, and a period of 15 years may elapse from initial concept studies to the acceptance of the first completed ship. A single order may provide work for three or four years for the shipbuilder. To keep down prices the MoD has increasingly sought tenders for batches of ships to be built by a single supplier instead of ordering ships singly. Success or failure on a single bid can have a major effect on a supplier's viability; Swan Hunter Ltd (SH), for example, cited its failure to get the LPH contract in 1993 as a major contributory factor to its going into receivership. The end of the Cold War has led to substantial reductions in the size of the Royal Navy and in the expected orders for new ships. This, together with productivity improvements, has led to reductions over the last five years in the total UK workforce engaged in building warships from 20,000 to about 9,000; of these about 6,500 are currently employed on MoD orders.

2.16. The recent closure of SH has left only three companies, YSL, VSEL and VT, as suppliers of warships. None currently has the operational facilities to build the complete range of ships the MoD may require. YSL is a naval yard located on the Clyde and engaged solely on the construction of frigates. It can build surface ships of up to 7,000 tonnes displacement but substantial investment would be needed for it to build larger ships. It has a mothballed facility to build GRP hulls. VT is based at Woolston near Southampton with a second yard at Portchester. It can assemble a single ship of up to about 6,500 tonnes at a time and has a GRP facility where two hulls can be moulded concurrently. VSEL is the most fully equipped of the three yards but lacks a facility to produce GRP ships and, as noted in paragraph 2.10, would need some modest investment in order to produce larger surface ships.

2.17. The main categories of ship for which we are told by the MoD that there is likely to be a continuing requirement, with the expectation, therefore, of further orders, are:

- nuclear submarines with a strategic missile capability, of which two Tridents¹ are currently under construction by VSEL;
- nuclear hunter killer submarines, currently the Swiftsure and Trafalgar classes. A tender invitation for three to five B2TC submarines (for an initial programme of three plus options on two more) has been issued and responses are due in June. Looking ahead a new design is currently under consideration and first orders might be placed in 2007;
- aircraft carriers, for which replacements may be required, and orders might be placed in the first decade of the next century;
- LPD assault ships, to carry and support amphibious landings of troops and their equipment. VSEL has been asked to submit a 'single source' tender for one, or for two, of these ships;
- frigates for anti-aircraft warfare and for anti-submarine warfare. Three Type 23s are currently under construction by YSL and the final batch of three is currently out to tender. Design work has started on the CNGF to be procured jointly by the UK, France and Italy, but with each country constructing its own first-of-class ship. These frigates are intended to enter service from the turn of the century. On present plans the UK will order 12 in all;
- larger support ships, which include LPHs, one of which is currently under construction by VSEL, Landing Support Logistic (LSL) ships, and large auxiliary ships, including AORs and the less versatile Auxiliary Oiler (AO) ships; orders for two of the latter are likely to be placed in 1997/98;
- minesweepers and minehunters; these are GRP ships, most of which have been supplied by VT which received in 1994 an order for seven minehunters to be delivered over the period 1998 to 2001;
- survey ships (OSVs), of which one has recently been ordered from BAeSEMA as prime contractor, to be built by Appledore Shipbuilders Ltd (ASL), a commercial yard; and
- patrol ships and craft of various types, ranging from 50 to 1,500 tonnes.

2.18. The types of work carried out at the individual yards since they were returned to private ownership in 1985 to 1987 have been different. VSEL has concentrated on building nuclear- and diesel-powered submarines, and is currently building the last two of four submarines in the Trident programme. YSL has built seven Type 23 frigates for the Royal Navy and is now building three more, and two smaller frigates for export. VT has built smaller corvettes and missile boats, all for export; GRP mine counter-measure vessels and single role minehunters for the MoD; and some minehunters for export.

2.19. For reasons set out more fully in paragraphs 4.20 to 4.25, commercial shipbuilding and warship-building are traditionally carried out in separate facilities; commercial standards differ substantially from the full naval standards required for combat ships and different techniques and organization are required. However, revised commercial standards and the possibility of building some support ships to less than full naval standards have together created an opportunity for commercial yards to play a role in providing some ships for the Royal Navy. The requirement for

¹Vanguard class submarines carrying Trident missiles.

the LPH is for a vessel built to a mixture of commercial and naval standards and the hull is being constructed at the Clydeside yard of Kvaerner Govan Ltd (KG) with technical assistance from VSEL. As already noted, ASL is also to construct an OSV for the MoD. The MoD has drawn our attention to the possibility of further opportunities for the involvement of commercial yards in constructing ships not required to operate in combat conditions. In addition, a team led by GEC is investigating the possibility of building the B2TC submarines outside a naval shipyard.

2.20. The modern warship can be characterized as a platform on which is integrated a range of increasingly sophisticated systems (weapons, communications, electronic warfare systems, sensors and decoys), usually provided by subcontractors, which together form the combat system. The testing of these systems and their compatibility, their integration into the hull, and the provision of the powerful combat management system through which all the information provided by the systems and other incoming information can be handled by the captain and crew, has become an increasingly important task and is accounting for an increasing proportion of the total cost of a warship. For our purposes, therefore, we have distinguished three important aspects of warship-building:

- the prime contractor role (until recently in effect carried out by the MoD);
- the ship construction task (essentially the supply of the hull, the propulsion system and services); and
- the supply of combat systems (and the combat management system).

2.21. Over the last 15 years there have been major shifts in the MoD's defence procurement arrangements which have achieved substantial savings. Cost-plus contracts have been replaced by the widespread use of firm or fixed price contracts (see paragraph 4.32). Where possible these are let by competitive tender but where competitive procurement is not available the MoD will still seek a fixed price based on access to detailed information about costs and comparable work elsewhere. From the mid-1980s, as part of its drive to contain costs, the MoD has been moving away from the arrangements under which it designed the ship and itself procured and supplied some of the main systems.¹ Before these changes began the shipbuilder's task as lead contractor was to produce detailed construction drawings, to build the ship with its propulsion system and to integrate those systems and equipment procured and supplied by the MoD. As much responsibility as possible was delegated to the shipbuilder but the ultimate risk lay with the MoD. VSEL, YSL and VT have all carried out this task in the past and it is essentially the role VSEL is carrying out for the Trident submarines it is building.

2.22. Under the new arrangements the MoD seeks to appoint a prime contractor responsible for supplying a complete working product to a price. The prime contractor is thus responsible for procuring and integrating all systems which are included in the contract, for guaranteeing their performance, and for providing support for that performance for a specified number of years. For new products, for example the CNGF, the prime contractor may also be responsible for producing the design to meet the MoD's requirements. Prime contracting has operated for some years for aircraft and avionics, but it has only recently been adopted in warship-building, in consequence of the changing role of the MoD described in the previous paragraph. It is likely that the MoD will always retain a voice in the selection of weapons and major systems, so that the prime contractor is unlikely ever to have a completely free hand in deciding how to deliver the requirement. Both the MoD and GEC, however, made clear that the prime contractor's greater assumption of risk means that it must have a greater degree of discretion and choice in deciding how to carry out its responsibilities.

¹These systems were usually provided as 'free issue' government equipment or government-furnished equipment (GFE).

2.23. Two aspects of the prime contractor role described above should be distinguished. First, the prime contractor enters into the contract and thus assumes the overall risk on it and the responsibility for successful systems integration. Second, the prime contractor is responsible for the initial assessment and subsequent management of that risk (including the selection of subcontractors where discretion to do so has been passed to it) and for the provision of the technical expertise to manage the integration task. In most cases the prime contractor will itself undertake both aspects of the role but sometimes subcontractors will provide some or all of the expertise required for the management of risk and of the integration task. Prime contractors are required for the LPD, Type 23 and B2TC orders which are out to tender; VT, YSL and VSEL are all ready to take on the entire prime contractor role for the Type 23, but VSEL has secured an expert input on risk management and combat systems integration from a US firm, Loral Aerospace Systems Integration Corporation (Loral ASIC), in order to undertake the more challenging responsibility of prime contractor for the B2TC first-of-class.

2.24. The development of prime contracting from the earlier MoD arrangements under which the shipbuilder was designated as the lead contractor has meant that the owner of the hull-building capacity generally tenders for the prime contract. Thus all the shipbuilders mentioned in the preceding paragraph plan to tender as prime contractors. It is possible, however, for these two functions to be split. Thus, although BAe has no hull-building capacity, BAeSEMA has recently been appointed prime contractor for the survey ship to be built by ASL. And, although GEC-Marconi Ltd (GEC-Marconi) has no submarine-building capacity, it is leading the team preparing the alternative bid for the B2TC contract, which envisages that the submarines will be assembled in a non-traditional yard. There are differing views on whether a prime contractor needs to own hull-building facilities to be fully effective. GEC considers that it is not necessary if the prime contractor has access to the necessary design and construction facilities, either through teaming or subcontracting arrangements. The MoD told us that a prime contractor does not have to own a yard but must demonstrate assured access to one to be acceptable. BAe, however, told us that without ownership of a yard it would not expect to be able to establish itself as a fully credible prime contractor for the whole range of Royal Navy contracts or in export markets.

Competition in warship supply

2.25. In the light of the relationships described above, we looked first at possible effects of the proposed merger on competition between prime contractors for warship orders (including effects on the ability of firms without their own hull-building capability to act as prime contractors, and effects on the supply of such hull-building capability). We deal in a later section with effects on the procurement of systems from subcontractors.

2.26. The UK market for warships consists of a small number of individual orders, actual and potential. We have, therefore, looked at the effects of the merger in relation to expected orders examined individually. The Royal Navy's forward programme has been cut back but several important orders are likely to be placed in the next 18 months. The MoD is currently seeking tenders from prime contractors for a final batch of three Type 23 frigates and for a major order for B2TC nuclear-powered submarines. The closing dates for submission of tenders are 13 June and 29 June respectively. VSEL intends to bid for both contracts and has recently been designated under single tender procedures as prime contractor to submit a tender for either one or two LPDs (see paragraph 2.17). In the near future there may be a requirement for two AOs. The next major project, already in hand, is the collaborative design by the UK, France and Italy of the CNGF. GMNS is leading the UK designated team of GEC, BAe and VT, with responsibility for coordinating the UK contribution to the design in the international joint venture company (IJVC) that will take the project forward. Subject to agreement on price, YSL will build the UK first-of-class but the 11 follow-on vessels currently planned will be open to competition from other UK suppliers. Orders for these, the next major procurement after the orders currently out to tender are

secured, will be placed on present plans over the period from 2000 to 2005. Yet further in the future, although no precise requirement has yet been formulated, and barring some major change in policy, substantial orders can be expected at some stage after 2005 for a new design of nuclear attack submarine and for aircraft carriers.

2.27. We look first at the effects of the proposed merger on the supply of prime contracting services. BAe has no shipyard of its own and until recently has not acted as prime contractor for UK warships. Through BAeSEMA, however, it has recently secured its first prime contract from the MoD for an OSV. This, as noted in paragraph 2.19, is to be built to commercial standards by ASL. BAe told us that a main purpose of the proposed merger of VSEL is to establish itself as a credible prime contractor for the whole range of warships by securing access to a shipyard that can build to full naval standards. Through the proposed merger it would replace VSEL as prime contractor on any contracts the latter would otherwise have secured. There would thus be a reduction in the number of potential prime contractors for UK ships. But in relation to the main projected contracts, for the B2TC and the CNGF, which are for warships built to full naval standards, this loss of competition is more apparent than real.

2.28. For the Type 23 and LPD and B2TC tenders, bidding arrangements are already being finalized and BAe is not involved as a potential prime contractor. Looking further ahead there are only three UK warship yards capable of building the CNGF follow-on ships and all have expressed an interest in bidding as prime contractors. VSEL in particular told us that while it remains independent it regards it as essential to act as prime contractor for the ships it builds and said that negotiations on BAe's participation as prime contractor in the VSEL bid for the B2TC foundered on this point. We see no reason to believe, therefore, that in the absence of the proposed merger BAe would have been able to bid as prime contractor for any of these substantial warship contracts.

2.29. In relation to the B2TC contract, however, VSEL has been able to assume full prime contractor responsibility only with the support of Loral ASIC to provide the risk assessment skills and systems integration experience needed for this challenging task. It is possible that, if the proposed merger took place, BAe would wish to make some changes to the Loral ASIC role. Provided that the arrangements made were acceptable to the MoD we see no reason to expect such a transfer to give rise to any loss of prime contracting skills.

2.30. Invitations to tender for the two AOs are expected to be issued in 1996. These ships are likely to be built, in effect, to commercial standards and to be suited to construction at a commercial yard. Harland & Wolff (H&W) and KG would both be well qualified to bid and both could act as prime contractors in their own right, with technical design support if necessary. VSEL, without recent experience of commercial ship design and construction, is unlikely to be able to offer a competitive price and BAe will not be a significant systems supplier for a vessel of this type. The proposed acquisition by BAe would, therefore, be unlikely to affect competition for this order.

2.31. Since BAe does not itself own capacity for building warships the transfer of VSEL to it would not directly affect competition at that level. However, we examined whether the proposed merger, by bringing these hull-building facilities together with the prime contractor skills of BAeSEMA, might foreclose opportunities for others to tender as prime contractors. The main UK competitor at this level is GEC, which already owns the YSL yard and has great experience and resources as a prime contractor. It has also been encouraged by the MoD to explore as potential prime contractor an innovative approach to producing the B2TC platform. Other potential competitors are VT, which provides full prime contractor services for its current export orders, and Loral ASIC, a US firm which is prime contractor for the Merlin helicopter project.

2.32. As already indicated in paragraph 2.28, potential prime contractors for the forthcoming contracts, and effectively for the CNGF follow-on orders, already own shipbuilding facilities and

have already decided to bid; no opportunities for other potential prime contractors would be foreclosed by the proposed merger.

2.33. Looking further ahead there is the possibility of substantial orders for replacement aircraft carriers and submarines being placed from 2005 onwards. It is clear that the proposed merger would transfer to BAe the only proven facilities currently available for the construction of submarines, or for surface ships above 7,000 tonnes to full naval standards. It is possible, however, that by then ways may be found of providing alternative facilities. The MoD has drawn our attention to the possibility that competition could be stimulated for future prime contracts through arrangements involving commercial yards, the Royal Dockyards, or even facilities not traditionally used for naval shipbuilding, such as those being devised for the B2TC. All may be technically feasible, although whether they would be effective in establishing competitive prices is not known. Moreover for a Royal Dockyard to build as well as refit would require substantial investment; this would be unlikely to be undertaken without the firm prospect of sufficient ship orders to justify it.

2.34. At this distance in time there are inevitably increasing uncertainties about the background against which procurement might take place, for example whether such ships might be procured in collaborative ventures, as with the CNGF, and whether at that stage the policy of buying warships only from UK shipyards will be maintained.

2.35. While it is possible, therefore, that the proposed merger may make it more difficult for other prime contractors to bid for these contracts, we think the uncertainties are too great for us to form any firm expectation that adverse effects would arise.

2.36. The preceding analysis suggests that, for most of the MoD's projected warship procurement programme, the proposed merger will have little effect on the arrangements for the supply of prime contracting or of warship-building facilities. We do not, therefore, consider that the proposed merger can be expected to lead to adverse consequences in relation to the supply of prime contracting services or of warship-building facilities.

2.37. We also examined the suggestion from the MoD that if BAe acquired VSEL it might put in a loss-making bid for the Type 23 which might have the effect, whether intended or not, of putting a competitor, YSL, out of business. Bids for the Type 23 are due by 13 June and it seems unlikely that any transfer of ownership of VSEL will be completed by then. VSEL told us that BAe has not been given any information about the VSEL tender. The MoD told us that given the maturity of the Type 23 design the competition is unlikely to produce much in the way of innovative new design and that it does not expect significant post-tender clarification or 'best and final' bids to be necessary. All this suggests that BAe may have little ability to reopen the bidding with a lower tender, even if it so wished.

2.38. If, however, BAe were to acquire VSEL in time to influence the bid price, the MoD told us that, from its experience with the earlier Type 23 contracts, and for the reasons set out in the preceding paragraph, it has a clear view of the level at which competitive tenders should be pitched. It would therefore be for the MoD to decide whether to accept a tender from VSEL (or VT) and risk the possible consequences for YSL. GEC and the MoD both told us that if GEC did not acquire VSEL and if YSL did not secure the Type 23 contract, YSL would probably have to close. However, YSL has been designated to build the UK first-of-class CNGF and GEC told us that it could keep YSL open for that purpose by mothballing the main facilities but maintaining the CNGF design and development teams until the CNGF was built; it might well decide that this was to its long-term advantage. Moreover the possibility that VT might put in a successful tender for the Type 23 cannot be ruled out. We think the uncertainties are too great to form any expectation that the proposed merger would give rise to adverse consequences in relation to this bid.

2.39. It is likely that if the proposed merger proceeded it would be completed before the Type 23 order was placed. We therefore also considered the possibility that BAe, after the proposed merger, might withdraw a VSEL bid that it considered too low, as it would be entitled to do. VSEL told us that it is its intention to put in a bid supported from reserves and we think that if allowed to it will do so. BAe told us that if VSEL had put in an uneconomic bid, BAe might wish to increase it, since it would seek a normal commercial return on capital employed; such a move would also demonstrate that it was not entering into predatory pricing. It may be, therefore, that if the proposed merger takes place the MoD would be deprived of the opportunity of accepting a low bid from VSEL and so would face the possibility of having to pay a higher price for these frigates than if the proposed merger had not taken place. The uncertainties, however, about competitors' bid levels and bid strategies for this tender are such that the evidence is not sufficient to provide an expectation that these adverse effects will occur.

Systems supply and subcontracting

2.40. We also considered the effect of BAe's proposed merger of VSEL on competition in the supply of the various systems that go into a warship and in particular the possibility that BAe, in relation to any warship-building contracts for which it became prime contractor as a result of its ownership of VSEL, might favour systems or components produced within its own organization.

2.41. As described in paragraph 2.20, a warship is a platform on which the warship-builder brings together many different systems, almost all supplied by other firms as subcontractors. Elements of these systems are themselves subcontracted, perhaps several times. The subcontractor's role can range from the provision of a complete weapon system to a comparatively small contract for a standard systems component, and the subcontracts can vary in price from several million pounds to a few thousand. There are many interlocking relationships between prime contractors and main subcontractors: rivals for one contract will be working closely together in another. GEC is the prospective UK prime contractor for the CNGF project, with BAe as its principal subcontractor; Rolls-Royce Nuclear Engineering Ltd (Rolls-Royce) is a member of the GEC team bidding for the B2TC order, and would be VSEL's main subcontractor for the same project; BAe is the prime contractor for the recently-placed OSV order, with GEC as a potential subcontractor; VSEL is the prime contractor for the LPH, with BAe and GEC as systems subcontractors; GEC (through YSL) is building Type 23 frigates, with VSEL as subcontractor for the 4.5 Inch Mark 8 gun and other GEC and BAe subsidiaries as systems subcontractors. At the lower levels, of subcontract to sub-subcontractors, the relationships become progressively more complex.

2.42. The extent to which the MoD oversees the prime contractor's selection of subcontractors depends on the nature of the contract. Where there is competition at prime contract level, the MoD does not involve itself in ensuring competition at the subcontract level. It must be fair and even-handed in its dealings with its own contractors but relationships below that level are essentially a matter for the parties involved. The MoD takes the view that potential prime contractors, when in competition, will seek best value for money from their subcontractors in order to put forward their most competitive bid for the project as a whole. The prime contractor will be held accountable by the MoD for the performance of its subcontractors, and so the responsibility for selecting them must lie with it. Detailed information is provided to the MoD by the prime contractor about the selection procedures it adopts for subcontractors and with some tenders it may be required to provide detailed 'make-or-buy' plans (see paragraph 4.110). The MoD does not oversee the tendering processes themselves to ensure that they are fairly conducted. The MoD does, however, need to be satisfied over the quality and performance of subcontracted items and sometimes the supplier may offer it a choice of equipment to be procured, with consequential adjustments to price.

2.43. On the other hand, where the prime contract has not been awarded as a result of effective competition, leading to a single tender the MoD will impose its 'no acceptable price-no contract' (NAPNOC) arrangements (see paragraph 4.33). The MoD will then monitor the subcontract arrangements. It will wish to see 'make-or-buy' plans, usually for items costing £50,000 or more, and may require specified proportions of the work to be put out to competition and the cost-effectiveness of the prime contractor's proposals to be demonstrated.

2.44. We noted that in the context of our merger inquiry a potential for detriment would arise only in relation to new prime contracting opportunities which BAe might be expected to secure as a result of the proposed merger. We do not expect that the proposed merger would in itself increase the likelihood that VSEL will secure those contracts for which it is expected to bid. VSEL, however, is now the single tenderer for the LPDs and so BAe could be expected to become prime contractor for that contract. We have therefore considered subcontracting issues in relation to it.

2.45. We looked first at the market situation for the main systems and equipment which a warship prime contractor will procure. BAe is not a significant supplier of equipment below the level of major items. As shown in paragraphs 4.121 to 4.126, BAe supplies three of these: combat management systems, weapon systems, and communications systems. For combat management systems it is in competition with GEC-Ferranti, but has recently been successful in securing major contracts for the design and supply of systems for the Royal Navy. For weapon systems BAe's main competitor is GEC-Marconi. Both of these areas are so central to the ship's performance that they are sometimes developed and selected by the MoD before the warship tenders are prepared. The communications system for the LPD has already been selected.

2.46. We also looked at information provided by the parties and by the MoD on the proportions of the LPD contract that were likely to be selected by the prime contractor, the proportions that were likely to be put to competition, and the proportions for which BAe companies might compete.

2.47. The MoD has said that NAPNOC procedures will apply to the LPD contract. It estimates that the proportion of the total contract available for competitions managed by the prime contractor will be about 25 per cent or perhaps £[*] million for each vessel.

2.48. For the LPD BAe has been selected as part of a consortium with BAeSEMA and Thomson to supply the communications system, which is worth a substantial amount. It has already been told that its combat management system will not be selected. Again VSEL told us that it does not expect to have a free choice to procure any items BAe might provide.

2.49. BAe told us that it considered it important as a prime contractor to be seen as impartial and that it had therefore avoided greater involvement in the equipment business. GEC indicated to us, in general terms, that, although it would expect the MoD to nominate the main subcontractors for systems for its contracts, it would have some concern about its subcontracting prospects for export orders if BAe were to take over VSEL. However, other UK systems suppliers who gave us their views told us that they had no concerns that their interests would be prejudiced by the proposed merger.

2.50. Against this background, in relation to the prime contract that BAe may be expected to acquire as the result of the proposed merger, we do not expect any adverse effects on the supply of systems for UK warships or on the ability of other suppliers to compete as subcontractors to supply such systems or equipment for them. We noted GEC's concerns about its ability to compete for the provision of systems or equipment for any export prime contracts BAe might win but, as noted in paragraph 2.75, we consider that such export prospects are too uncertain to be relied on.

*Figure omitted. See note on page iv.

Future of UK warship-building

2.51. There has been a sharp decline in employment in UK warship-building in the three yards over the last five years, from 20,000 to about 9,000, and the level of current and expected orders suggests that a further decline is likely. If this situation continues it is possible that at some stage closure of a yard will be cheaper than continuing to operate it underloaded. The MoD drew our attention in its submission to this possibility and indicated that it saw further concentration as largely a matter of time. VT told us that it thought the reduction of naval employment to levels expected within the next few years indicated work for only two yards.

2.52. The need for and timing of such moves, and how they would affect the three yards, depend on several factors. Other aspects besides order prospects, such as employment and the MoD view at the time of the need to maintain capability, could all come into the equation. Export orders, or the lack of them, could have a major effect; even a single order achieved by a yard might secure its future for a couple of years. However, as we note in paragraph 2.75, it is uncertain whether such orders might materialize and BAe itself does not expect to secure any for VSEL before [*]. We have not taken them into account in considering the future of the yards. Exports by UK yards, with the exception of VT, have been small in comparison with the MoD programme and in the following discussion we consider only the effects of prospective MoD orders.

2.53. None of the three UK warship yards looks likely to close for the next two or three years, although the current order books will not maintain the present levels of employment. The Trident programme will provide VSEL with some work until 2000. YSL has the slimmest order book; the current Type 23 and Malaysian frigates will be completed by 1997, but work on the UK first-of-class CNGF will not start at the earliest until that year, so that without the further Type 23 contract there would not be continuous employment for many of YSL's present workforce. VT has export orders for surface ships and GRP minehunter orders, but the former will be completed by 1998 and the latter by 2001.

2.54. We have been told by several industry sources that tonnage produced, although far from precise, is a fair measure of the volume of a shipyard's work. Recent and expected orders are set out in Tables 4.4 and 4.7 (and see also paragraphs 4.67 and 4.72). Looking at prospects to the end of the century, we note that MoD warship orders have fallen from an annual average of about 20,000 tonnes in the period 1985 to 1989 to an average of about 9,000 tonnes per annum in 1990 to 1994. Over that period as a whole they averaged 14,700 tonnes per annum. These figures compare with the average level of about 12,000 tonnes per annum projected in the MoD forward programme for the period 1995 to 1999. These tonnage figures cannot be translated directly into amounts of work available at the yards but they suggest that the decline in total work over this period is not likely to be severe. The outlook for the three yards will depend largely on how the contracts for the LPD, the Type 23s and the B2TC submarines are placed. YSL can bid only for the Type 23 work and GEC told us that in the absence of the Type 23 order YSL would probably have to close in two or three years. GEC also assured the MoD that if it acquires VSEL it will keep YSL open for the time needed to complete the CNGF first-of-class, which implies until 2002. GEC has indicated, however, that this could involve simply maintaining the CNGF design team and mothballing the other facilities until the time came to start building the CNGF. VSEL is bidding for all three contracts. It now appears that it will get the LPD contract, but that alone is not a sufficient source of work. VSEL hopes to offer a bid for the Type 23 pitched at a level to offset YSL's learning curve advantage, and is also confident that its bid for the B2TC will win the contract. Were it to lose the B2TC to the GEC team it might still get some fabrication work and the loading of the nuclear core. VT has work on the minehunters until 2001, though far below what would be needed to maintain current employment levels.

*Details omitted. See note on page iv.

2.55. In theory there are a range of outcomes that, at one extreme, could leave all three yards adequately placed or, at the other extreme, with insufficient work to stave off the closure of one and, in the longer term, perhaps two of them.

2.56. We do not think the proposed merger can be expected to have a material effect on the prospects of closure. As discussed more fully in paragraph 2.75, the proposed merger may help VSEL's export prospects, but they are likely to remain uncertain. Nor do we expect the proposed merger to affect significantly the placing of the MoD orders. In particular, as explained above, we do not think it would affect the likelihood of VSEL securing the Type 23 order at the expense of YSL.

2.57. In the longer term BAe would be able to apply at VSEL some of its experience, gained in aircraft production, of cutting costs and improving efficiency, and this can only improve its ability to tender successfully for contracts to provide work for VSEL.

2.58. Against this background we do not think the proposed merger would be likely to affect materially the prospects for VSEL over the next few years. In the longer term the proposed merger might strengthen VSEL's position but other factors are likely to determine which, if any, of the UK yards might have to close. Accordingly we do not consider the possible closure of the VSEL yard as a matter which may be expected to result from the proposed merger.

Artillery

2.59. BAe told us that possible benefits from the bringing together of its armaments interest with those of VSEL had not been a factor taken into account in its decision to acquire VSEL. Both companies, however, are important suppliers, with complementary and competitive activities in this area.

2.60. VSEL is a supplier to the MoD of naval guns and artillery. Over the last 25 years, as the sole supplier and design authority, it has supplied the Mark 8 4.5 Inch naval gun used on Royal Navy frigates. The orders have been linked to warship orders and are thus small in volume and spread over a long period. New orders for these guns will probably cease when the last batch of three Type 23 frigates is completed, but the guns are likely to remain in service until 2025 and they will require maintenance and spares until then. It appears virtually certain that for the CNGF a larger, 127 mm, gun will be required and this will probably be selected from foreign models already in production.

2.61. VSEL also supplies towed and self-propelled artillery. It has produced several hundred FH70s, a 155 mm towed howitzer, and is currently in the final stages of completing a £300 million contract for 179 AS90s, a 155 mm self-propelled tracked howitzer. There are unlikely to be further UK orders for this gun but VSEL hopes that there are export prospects. VSEL has also been chosen as prime contractor for an upgrade contract to provide a new barrel for the AS90. VSEL's only other gun project is a 155 mm lightweight towed howitzer which has been designed to meet a US requirement and is currently under test there.

2.62. RO was bought by BAe in 1987 from the MoD and is the major UK supplier of ammunition, complete light gun systems, mines and minefield equipment. It is the only UK supplier of gun barrels and breeches and provides them to VSEL for the Mark 8 4.5 Inch naval gun and the AS90. RO is likely to compete for part of the AS90 upgrade contract for which VSEL is prime contractor. It also makes L118 and L119 105 mm towed howitzers, but in the last decade only for export. It has recently, however, designed a lightweight towed howitzer for the US requirement described above, where it is in direct competition with the VSEL product.

2.63. There are several UK manufacturers in related fields, notably Alvis, GKN, and Vickers Defence Systems (VDS), but they tend to specialize in different products from those of BAe and VSEL partly for historic reasons and partly because of the nature of the market. When RO was privatized in 1985 the patents and other intellectual property rights held by the MoD for most artillery and tank guns were allocated to RO and those for the platforms to Alvis, GKN and VDS. VSEL, however, received from the MoD the patents for the 155 mm FH70, for which the barrel and breech had been provided by a German firm, Rheinmetall. The fact that the orders are for a durable product that requires support for many years tends to mean that the firm that provides the initial design and products is well placed to get follow-on orders.

2.64. As shown above, the main links between VSEL's arms activities and those of RO are vertical. In only one area are they in direct competition, the lightweight towed howitzer, for which both have produced designs. It is likely that the UK will have a requirement, worth up to £1 billion, for a lightweight mobile artillery weapon system, in service by the year 2006, which would probably be met by purchasing a lightweight howitzer already in production, although alternatives are under consideration. There is thus a loss of potential UK competition here. Both VSEL and BAe have produced their designs to meet the specific US requirement. The US authorities are expected to make a decision in 1996 [

Details omitted. See note on page iv.

].

2.65. There is also a potential longer-term loss of competition for any artillery requirements that may be formulated in the more distant future. The AS90 programme is only just being completed, however, and it seems unlikely that there will be any such requirements for many years.

2.66. If VSEL and RO were both controlled by BAe, this might lead to concern if there were programmes for which VSEL was likely to be competing against the other UK manufacturers mentioned in paragraph 2.33. But these UK suppliers currently specialize in different areas; none has expressed concern to us about the merger.

2.67. VSEL, however, has been nominated as prime contractor for the AS90 upgrade (see paragraph 2.61) where RO is expected to be in competition with US and German suppliers. The total value of the contracts is currently estimated at some £83 million. As with other non-competitive contracts, the MoD will oversee the arrangements for selecting subcontractors.

2.68. There might in theory be some loss of competition in the armaments field, but we think the nature of the market and of the likely future programme make it in practice unlikely. There are other UK firms (see paragraph 2.63) capable of responding to any substantial new requirement and the MoD has demonstrated its willingness to buy from overseas suppliers. There will be a need for the MoD to supervise aspects of the AS90 upgrade competition, as it has on similar occasions in the past, but we do not see this as raising a sufficient problem to constitute an adverse effect arising from the merger. It is possible that a link between RO and VSEL may lead to some efficiency improvements in design and production and BAe's export marketing and sales experience may help the AS90 overseas. Overall we see no significant detriment which may be expected to arise from the proposed merger in this area.

Other aspects of the merger

2.69. We also considered some more general concerns about the future of VSEL's current military activities if the merger took place, in particular whether BAe had the requisite financial strength and commitment to provide the necessary investment and support to these activities.

2.70. Following its privatization in 1986 and some major acquisitions in the late 1980s, BAe decided in 1991 to concentrate on its defence interests and civil aircraft as core businesses. In

particular BAe sought to address its loss-making regional aircraft business and made provisions totalling £1,750 million between 1991 and 1993 to reorganize the business and cover future losses. Recently BAe announced a joint venture with the European regional aircraft consortium ATR to form a joint marketing and sales organization for turbo-prop and regional jet aircraft with a longer-term intention of merging their manufacturing operations. At the same time BAe announced that it would cease production of the J61 aircraft. The effect of these measures, after a one-off cost of £250 million has been absorbed, will be to improve the profitability of the regional aircraft business by £50 million per annum.

2.71. The most important step in BAe's restructuring process was the disposal of its 80 per cent share of the Rover Group in early 1994 for some £800 million. This enhanced BAe's profitability and reduced its level of borrowings. As a result of this and other measures BAe reported a substantial increase in profits in 1994 and ended the year with a net cash balance.

2.72. We have considered the progress BAe has made in restructuring its business and dealing with its loss-making activities, and the improvement in its present financial position, together with likely developments on the regional aircraft business. For the purposes of our inquiry we are not called on to express a view on how successful BAe will be in future but to consider whether there is an expectation that VSEL's military activities will be put at risk. We do not consider that the information before us supports any such expectation.

2.73. A related question is whether, within BAe, the current VSEL operation will receive adequate support, including funds for investment, in the light of suggestions that a main reason for the proposed merger was BAe's wish to secure VSEL's cash reserves and to offset its own tax losses. Both VSEL and BAe think the incremental investment needed to enable VSEL to build the ships currently out to tender will be modest-of the order of £8 million to £15 million. BAe said that its record of providing funds for investment it considered necessary, even in times of financial difficulty, was good. We see no reason to expect adverse effects in this respect from the proposed merger.

2.74. We noted that shortly before this reference was made GEC had acquired 14.9 per cent of VSEL's shares, the maximum permissible under VSEL's Articles of Association. GEC told us that it had not considered whether to retain this shareholding if BAe were to acquire VSEL or whether in that case it might seek to have a director on the Board. We asked BAe about the effects on its management of VSEL if GEC were to retain this stake. BAe said in that event if it were free to bid it would expect to acquire about 80 per cent of VSEL's shares. The continued existence of a minority holding would cause some administrative inconvenience to BAe because VSEL would have to be maintained as a separate company. But BAe was confident, having taken legal advice, that GEC's shareholding would not interfere in any material way with BAe's plans for VSEL, either financial or operational. We see no reason to conclude that the proposed merger of VSEL shares by BAe, if accompanied by the retention by GEC of its 14.9 per cent holding, would create adverse effects in relation to the management of the VSEL shipbuilding operations.

Exports

2.75. VSEL told us that its main reason for welcoming the merger was that it believed ownership by BAe, and access to BAe's marketing and sales skills in the defence area, would markedly improve VSEL's export prospects. As a result of its success in securing exports of defence equipment, most notably in the Al Yamamah contract, BAe is the UK's largest exporter and it told us that a main strategic reason for the proposed merger was the chance to use ownership of a naval warship-builder to expand its overseas business as a prime contractor. We agree that the proposed merger, by giving VSEL access to the full range of BAe's export marketing and sales support, would put it in a stronger position to compete for export orders. However, several witnesses have stressed the difficulties of the export market for warships and the strength of overseas competition. BAe itself considers that its support will be unlikely to lead to any export orders before [*]. It is uncertain how far BAe's hopes may be translated into firm orders and any benefits are likely to take some years to materialize.

Conclusions

2.76. Our consideration of the public interest issues has been confined to those aspects of the proposed merger which relate to military activities. We have examined the effects of the proposed merger on competition in warship supply, including effects on the supply of prime contractor services and of warship-building facilities (paragraph 2.36), on the price of the Type 23 frigates to be procured (paragraphs 2.38 and 2.39), on competition for the supply of warship systems (see paragraph 2.50), and on the future of warship-building and the possibility of closure of the VSEL yard (paragraphs 2.56 and 2.58). We have also examined the effects on competition in the supply of armaments (paragraph 2.68) and concerns about other aspects of the proposed merger (paragraphs 2.72 and 2.74).

2.77. We have not identified any adverse competition or other public interest consequences that may be expected to arise in relation to any of these aspects of the proposed merger.

2.78. Accordingly we conclude that the merger situation in contemplation may not be expected to operate against the public interest.

*Figure omitted. See note on page iv.