

BAE Systems Undertakings Review

Advice to the Secretary of State

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The Competition and Markets Authority has excluded from this published version of the report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [✂].

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Executive summary and advice

1. Executive summary

- 1.1 On 29 November 1999, British Aerospace plc, now BAE Systems plc (BAES), acquired the Marconi Electronic Systems business (MES) of the General Electric Company plc (GEC).
- 1.2 The Office of Fair Trading (OFT) assessed the transaction under the merger provisions of the Fair Trading Act 1973 (FTA). To address competition and other public interest concerns arising from the transaction, British Aerospace plc gave undertakings, in lieu of a reference to the Competition Commission, to the then Secretary of State for Trade and Industry on 28 March 2000.
- 1.3 The undertakings included provisions to safeguard competition at prime contractor and sub-contractor level and to address national security concerns arising in the defence sector. There were initially 17 undertakings. BAES was released from all but two of these following reviews in 2002, 2005 and 2006.
- 1.4 The remaining two undertakings (the Undertakings) now consist of the following provisions:
 - (a) Access by prime contractors to BAES in house suppliers – BAES is obliged to make its resources available on request and on fair, reasonable and non-discriminatory terms to other actual or potential third party prime contractors to permit them to bid for or undertake work on MOD programmes and, relatedly, to seek the prior written consent of the OFT (now the Competition and Markets Authority (CMA)) before entering into certain teaming agreements involving more than one BAES company.¹
 - (b) Appointment of a compliance officer – BAES is obliged to appoint a compliance officer to facilitate and oversee compliance with the Undertakings, including through annual reports to the OFT (now CMA) and the Ministry of Defence (MOD).
- 1.5 BAES initially asked us to review the Undertakings on 10 August 2014 and, following discussions with the MOD, we agreed to delay the review until 2016, by which time the outcome of the 2015 Strategic Defence and Security Review would be known. In early 2016, we checked with the MOD that it would be an appropriate time for our review to proceed and the MOD

¹ BAES can decline an access request for three reasons, see paragraph 2.21.

confirmed that it was. On 29 July 2016, the CMA announced its decision to appoint a Group to undertake a review.

- 1.6 The CMA has a statutory duty to keep undertakings under review. From time to time, it must consider whether, by reason of any change of circumstances, undertakings are no longer appropriate and either:
- (a) one or more of the parties to the undertakings can be released from them, or
 - (b) they need to be varied or to be superseded by new undertakings.
- 1.7 If it appears to the CMA that any person can be released from undertakings or that the undertakings need to be varied or superseded, the CMA has a duty to provide such advice to the Secretary of State for Business, Enterprise and Industrial Strategy (BEIS) as it may think proper in the circumstances.²
- 1.8 The Undertakings cover all defence sectors. However, in our assessment, we have focused on the sectors identified by the MOD and BAES as areas in which the Undertakings are or could be relevant. These are maritime (warships and submarines), combat aircraft and munitions. These also cover the areas that the OFT cited as examples of areas in which the Undertakings could be relevant in its review in 2006.

BAES

- 1.9 At the time of the transaction, British Aerospace plc was the fourth largest aerospace and defence company in the world, with a strong position in civil and military aircraft and defence systems in the UK. MES had a strong position in submarine and ship building.
- 1.10 BAES is now the largest defence supplier in the UK, with global turnover of £17.9 billion in 2015. It was paid £3.7 billion by the MOD in the financial year 2015/16, representing 15% of all MOD procurement expenditure in that year (more than twice as much as the next largest defence supplier). MOD payments represented around 22% of BAES' global revenues.

² Paragraph 16(2) of Schedule 24 to the Enterprise Act 2002 gives the CMA itself the power to vary or remove undertakings given under the FTA but applies only to undertakings that have been specified in an Order made by the Secretary of State. No such Order has been made in relation to these Undertakings. Hence the old law continues to apply and the final decision remains with the Secretary of State.

Changes of circumstances

- 1.11 We identified three areas in which there have been substantial changes since the last review of the Undertakings:
- (a) structural changes to BAES;
 - (b) changes to defence procurement by the MOD in the UK; and
 - (c) changes in defence suppliers' capabilities.
- 1.12 Since 2006, BAES has sold, closed or otherwise reduced the significance of its business in a number of areas:
- (a) BAES has sold most of its capabilities in avionics and electronics systems in the UK;
 - (b) BAES has closed five combat vehicle manufacturing and engineering support sites;
 - (c) BAES has closed a number of munitions facilities since 2000; and
 - (d) BAES has ceased shipbuilding manufacturing in Portsmouth and rationalised this activity on the Clyde.
- 1.13 There have also been substantial changes to the MOD's defence procurement practices:
- (a) The MOD has entered into a number of long term procurement frameworks with BAES and, in one case, other parties:
 - (i) MASS³ – in 2008 BAES entered into a single source 15-year agreement to supply certain munitions to the MOD. This runs until December 2022.
 - (ii) TOBA – in 2009 BAES entered into a 15-year exclusive agreement with MOD to build complex warships. This runs until July 2024.
 - (iii) SEPP – in 2011 BAES, together with Babcock International and Rolls-Royce, entered into an open-ended long-term agreement with the MOD to build submarines (each party is responsible for a particular aspect of build or support).

³ See glossary for definitions, eg MASS: Munitions Acquisition Supply Solutions partnering agreement; TOBA Terms of Business Agreement; SEPP: Submarine Enterprise Performance Programme.

- (b) The proportion of the MOD's procurement from BAES that is the result of a competitive procurement process has reduced substantially (93% of BAES' revenue from the MOD in 2015/16 was through non-competitive contracts, compared with 56% in 2006/07).
- (c) The MOD has made increasing use of an alliance procurement model (for example the Queen Elizabeth class aircraft carrier programme). In this model, each of the main suppliers has a direct bilateral contract with the MOD in relation to a particular part of the programme.
- (d) The MOD now seeks to procure more goods and services from suppliers on a European or worldwide basis rather than solely from the UK.

1.14 Finally, there has been an increase in the capabilities of UK shipbuilders other than BAES and overseas defence contractors have established on-shore bases in the UK. Both of these changes mean that there is a greater number of credible suppliers in certain sectors.

Use of the Undertakings

- 1.15 We have seen no evidence that the Undertakings have been used to protect competition. The majority of access requests recorded by BAES have been in relation to small contracts. The requests in respect of larger contracts appear not to have played a role in enabling other prime contractors to compete for MOD contracts. We have also not received any evidence that, as a result of the operation of the Undertakings, the MOD has awarded a contract to an alternative prime contractor which used BAES as a subcontractor.
- 1.16 We sought evidence of examples of occasions when the Undertakings have enabled other prime contractors to bid and thereby led to competition which would otherwise not have occurred. No such evidence was received.
- 1.17 The MOD said that the existence of the Undertakings, and BAES' and other firms' knowledge of them, creates the potential for competition. We sought evidence of this in the form of reports, policy papers or Board/Committee minutes that refer to the use of the Undertakings in discussions, decisions or negotiations but no such evidence was received that pre-dated our review.
- 1.18 [✂]
- 1.19 In addition, the strategic decision of the MOD to procure through long-term, non-competitive contracts has reduced the need for competing potential prime contractors to seek access to BAES' resources.

Assessment of appropriateness of the Undertakings in each sector

1.20 The second stage of our assessment was to consider, in relation to each of the relevant sectors, whether the Undertakings are still appropriate. This analysis has been particularly important as the MOD told us that they felt that the Undertakings ‘should be retained to protect the potential for effective competition where BAE Systems still holds a dominant position.’ We gave this due consideration when carrying out our assessment of the present and foreseeable need for the Undertakings. Our conclusions for each sector are set out below:

Warships

- 1.21 There are a number of alternative options for the MOD to procure non-complex warships and other naval vessels and so the Undertakings are only potentially appropriate for complex warships. There are currently two major programmes where the Undertakings may potentially be relevant, the Type 26 frigate and the Type 31 general purpose frigate.
- 1.22 We consider it unlikely that the MOD will seek to involve other potential prime contractors in relation to the Type 26 frigate programme. BAES currently has an exclusive contract (pursuant to the TOBA) to produce Type 26 frigates. We have not seen any evidence to indicate that the MOD is likely to seek to change this arrangement.
- 1.23 Although the Parker Report⁴ envisages the possibility of competitive procurement for the Type 31 general purpose frigate, we have seen no evidence that procurement will be through a competitive process among alternative prime contractors. [REDACTED]. Moreover, we have seen no evidence that BAES has essential resources⁵ to which an alternative prime contractor would require access in order to build this frigate.

Submarines

- 1.24 BAES, together with Babcock International and Rolls-Royce, is party to an agreement with the MOD called SEPP to build nuclear submarines. There are no other credible prime contractors in the UK that could replace BAES in the unlikely event that the MOD chose to alter the current procurement arrangements. We have not seen any evidence to indicate that the MOD

⁴ [Parker Report](#): Independent Report advising government on naval shipbuilding (29 November 2016).

⁵ ‘Essential resources’ in this context are resources to which another potential prime contractor would need access in order to bid for an MOD contract.

would consider offshore suppliers or prime contractors or that it will seek to alter the existing arrangements in the foreseeable future.

Combat Air

- 1.25 The MOD is currently purchasing F-35 combat aircraft from a US company which has subcontracted a proportion of the manufacturing to BAES in the UK. The F-35 programme is likely to run [redacted]. Hence there is no prospect of the Undertakings being used until the start of a successor programme, the nature of which is currently uncertain and, in any event, is likely to be decades away.
- 1.26 BAES is also part of a multi-party contract to design the Future Combat Air System (FCAS).
- 1.27 We note the current use of international procurement for combat aircraft and have seen no evidence to suggest that this procurement policy is likely to change in respect of the next generation of combat aircraft (manned or unmanned).
- 1.28 Moreover, we have not seen evidence of credible alternative onshore prime contractors if future MOD policy in the combat air sector were to require new combat aircraft to be designed and manufactured in the UK. Hence it is unlikely that the Undertakings will be used to facilitate entry by onshore prime contractors.
- 1.29 Crucially, BAES does not appear to have essential resources in this sector that could not be procured from international competitors. [redacted]. This points in the direction of continued reliance on international procurement.
- 1.30 We are not persuaded that there is a reasonable prospect that MOD policy will shift towards onshore procurement of combat air in the foreseeable future, or that there could be a competitive procurement process involving credible onshore prime contractors. BAES is unlikely, therefore, to have the ability to foreclose.
- 1.31 Support services contracts for combat aircraft are generally awarded to the original manufacturer of the aircraft and the evidence we have received indicates that this is likely to remain the case. For Typhoon support, the MOD recently signed a ten year sole supply agreement for Typhoon support. For F-35 support, the MOD has wider options, [redacted].

Munitions

- 1.32 Around half of munitions acquired by MOD are procured under the MASS partnering agreement which is a long-term single source arrangement. This lasts until 2022. There is little or no possibility of the Undertakings being used for munitions covered by the MASS partnering agreement in the period up to 2022. For munitions not covered by the MASS partnering agreement, onshore provision is not a requirement and there are alternatives to BAES internationally.
- 1.33 After the expiry of the MASS partnering agreement, the MOD may choose to procure the munitions currently covered by the MASS partnering agreement through a competitive process. BAES has the only UK facilities able to produce the products required by the MOD. The absence of competitors is due (at least in part) to the single source approach MOD has taken to the procurement of munitions.
- 1.34 Furthermore, while there are offshore suppliers which could supply the munitions currently supplied by BAES, the MOD has not decided whether it would wish to procure from non-UK suppliers (offshore).
- 1.35 [✂]
- 1.36 We consider it unlikely that the prime contractor/subcontractor model would be applied for munitions currently covered by the MASS partnering agreement.

Consultation on provisional advice

- 1.37 We published our Provisional Advice on 10 March 2017 and invited comments and representations on this, including from other defence contractors. None of these responded, nor did any other third parties. BAES said that it had no further comments to make.
- 1.38 The MOD provided a short response, attached in Annex 3 with this Advice, which stated that it did not agree that BAES should be released from the Undertakings. The MOD did not provide new evidence or raise any new substantive points.
- 1.39 The MOD repeated its view that the Undertakings were beneficial as a negotiation lever. We had already considered this point in our Provisional Advice but do not consider this potential use to be a reason to retain the Undertakings, for the reasons set out in this Advice (and in our Provisional Advice). We have not received any evidence showing that the Undertakings have previously led to more effective negotiations.

1.40 The MOD also said that if BAES were to be released from the Undertakings, this would be premature and that such action should be delayed. Our advice to the Secretary of State for BEIS is that BAES should be released from the Undertakings. If the Secretary of State agrees with that advice, the question of when BAES is released from the Undertakings is for the Secretary of State to decide.

Our advice

1.41 In light of our finding that there have been changes of circumstances, which mean that it is no longer appropriate to retain the Undertakings in any sector, we advise the Secretary of State that BAES should be released from the Undertakings.

1.42 We considered whether the Undertakings should instead be varied or superseded but our advice is that the Undertakings are no longer needed and so BAES should be released from them.

2. Introduction and background

- 2.1 On 29 July 2016, the CMA announced its decision to appoint a Group to carry out a review relating to the Undertakings given by British Aerospace plc, now BAES, arising from its acquisition of the MES business of GEC on 29 November 1999. This transaction was assessed by the OFT under the merger provisions of the FTA. To address competition and other public interest concerns arising from the transaction, British Aerospace plc gave Undertakings, in lieu of a reference to the Competition Commission, to the then Secretary of State for Trade and Industry on 28 March 2000.
- 2.2 The 17 original Undertakings⁶ have been subject to three reviews to date (in 2002, 2005 and 2006).⁷ Two Undertakings currently remain in force (the Undertakings), which are identical to two of the original Undertakings.
- 2.3 The CMA has a statutory duty, by virtue of paragraph 13 of Schedule 24 to the Enterprise Act 2002 as amended by the Enterprise and Regulatory Reform Act 2013, to keep under review the carrying out of undertakings accepted under section 75G of the FTA.
- 2.4 The CMA launched a review of the Undertakings because, having considered responses to its consultation⁸ and the evidence presented by BAES, it considered there was a realistic prospect of finding that there has been a change of circumstances, such that the Undertakings are no longer appropriate and should be varied or superseded or BAES should be released from them.
- 2.5 The review has been undertaken by a group of CMA panel members, appointed by the CMA Panel Chair, comprising John Wotton (Chair), Rosalind Hedley-Miller and Jayne Scott. The group of panel members has been advised by a case team of CMA staff.

Merger of British Aerospace and Marconi Electronic Systems in 1999

- 2.6 British Aerospace plc (now BAES) acquired the MES business of GEC on 29 November 1999. At the time of the merger, MES was a major prime contractor in naval surface ships in the UK and was vertically integrated with its own UK shipyards.

⁶ [OFT summary of 17 original Undertakings](#).

⁷ On 10 January 2002, BAES was released from one of the obligations in the undertakings which had become redundant. On 29 September 2005, the undertakings were varied to permit an extension of the term of appointment of the Compliance Officer. A further review was conducted in 2006 which resulted in most of the obligations in the undertakings being removed on 2 February 2007.

⁸ See the [invitation to comment](#) (November 2014).

- 2.7 The MES businesses in the UK which were acquired by BAES broadly comprised:
- the Submarines business located primarily in Barrow-in-Furness;
 - the Shipbuilding businesses located primarily in Scotstoun and Govan, Glasgow;
 - the Underwater Weapons business, manufacturing torpedoes, located primarily at Waterlooville, Hampshire; and
 - the Avionics businesses, comprising radar and other electronic systems, including Head Up display, laser and other avionics activities, located in Rochester, Plymouth, Basildon and Edinburgh.
- 2.8 As a result of the merger, BAES also acquired a number of joint venture interests covering sonar, space technology and command, control and communications systems activities.⁹
- 2.9 At the time of its acquisition of MES, British Aerospace plc was the fourth largest aerospace and defence company in the world, after Boeing, Lockheed Martin and Raytheon. Its major product areas were civil aircraft, military aircraft and defence systems. Prior to the merger, it was not heavily involved in the maritime sector.

OFT's 1999 advice to the Secretary of State

2.10 The transaction was assessed by the OFT under the merger provisions of the FTA. The OFT recommended that the proposed merger should be referred to the Competition Commission (CC). The Undertakings were given in lieu of a reference.

2.11 The OFT's advice to the Secretary of State in August 1999 said that:

“horizontally, the merger would bring together the two UK companies with defence prime contracting capability, and at the same time would combine their various sub-contracting activities. Vertically, the merger would combine prime contracting and sub-contracting activities, in particular in fixed-wing combat aircraft,

⁹ These JVs were:

- Astrium who were involved with space technology including satellites, located primarily in Stevenage and Portsmouth.
- Thomson Marconi Sonar, located primarily in Templecombe, Dorset.
- Alenia Marconi Systems, located primarily in Chelmsford, Cowes, Frimley, New Malden, and Broad Oak (Portsmouth), which were involved with command, control and communications systems, combat management systems, radar systems, air traffic control systems, and training simulators.

where British Aerospace is the sole prime contractor and MES is the major avionics sub-contractor; and in naval ships, where MES is the major prime contractor and British Aerospace is an important sub-contractor. In addition, and largely in reflection of these horizontal and vertical overlaps, there are various current contracts at the competitive stage where British Aerospace and MES are in competing teams.”

- 2.12 Many of the original Undertakings in 2000 related to specific programmes and were therefore subject to specific time periods. The two Undertakings that remained after the 2006 review were more general in nature. However, this does not mean that the OFT’s (and the Secretary of State’s) position necessarily related to concerns applying in each and every area of defence procurement.

Timing and scope of this review

- 2.13 In August 2014, BAES requested that the CMA should conduct a further review, eight years after the last review. We consulted the MOD and, at the MOD’s request, agreed to delay the review until after the 2015 SDSR was completed. In early 2016, we checked with the MOD that it was an appropriate time for the review to proceed and the MOD confirmed that it was. In July 2016, we published a decision document stating that there was, in the CMA’s view, a reasonable prospect of finding that there had been a relevant change of circumstances.
- 2.14 In November 2016, the MOD said to us that defence procurement may be liable to change in the future and asked that we delay the review. However, in our view, there is unlikely to be a time when there are no impending changes to defence procurement.

Current undertakings

- 2.15 The remaining Undertakings now consist of two provisions:
- (a) **Access by prime contractors to BAES in house suppliers** – BAES is obliged to make its resources available on request and on fair, reasonable and non-discriminatory terms to other actual or potential third party prime contractors to permit them to bid for or undertake work on MOD programmes and, relatedly, to seek the prior written consent of the OFT (now CMA) before entering into certain teaming agreements involving more than one BAES company; and

(b) **Appointment of a Compliance Officer** – BAES is obliged to appoint a Compliance Officer to facilitate and oversee compliance with the Undertakings, including through annual reports to the OFT (now CMA) and the MOD.

- 2.16 The term ‘resources’ is not defined in the Undertakings. It may include, for example, equipment, buildings, people, intellectual property, and a range of other facilities and capabilities. In general we refer to ‘resources’ within this report, but we also use the terms ‘capabilities’ and ‘facilities’.
- 2.17 The Access Undertaking related originally to concerns that, following the merger, BAES could restrict competition at the prime contractor level. In December 2006, the OFT recommended that the Undertakings should remain in force because of the concentration of UK manufacturing capacity in sectors such as warships, combat aircraft and general munitions.
- 2.18 The Undertakings cover all defence sectors. However, in our assessment, we have focused on the sectors identified by BAES and the MOD as areas in which the Undertakings are or could be relevant. These are also the areas that the OFT cited as examples of areas in which the Undertakings could still be relevant in its review in 2006.

Prime contractors

- 2.19 Our understanding, based on the information provided to us, is that, when procuring defence programmes, the MOD sometimes contracts directly with one party (a prime contractor), which acts as the single point of contact for the MOD and sub-contracts with other parties involved in delivering the programme. Both the MOD and BAES told us that one of the main responsibilities of a prime contractor is to manage the supply chain and to be a single point of responsibility for the management and delivery of a programme.

How the Undertakings operate

- 2.20 When BAES bids for work or when another company approaches BAES requesting use of BAES’ resources, if this relates to an MOD contract, BAES flags this as requiring compliance with the Undertakings. This occurs irrespective of whether the approach comes from a company which is currently or potentially a prime contractor. BAES told us that it was not aware that any potential prime contracting company, when making a request for assistance on a MOD programme, actually referred to the provisions of the Undertakings.

- 2.21 BAES can decline a request and not provide its resources for three reasons:
- (a) insufficient capacity;
 - (b) no capability; or
 - (c) if it is already a member of a competing team (see teaming arrangements discussed below).
- 2.22 Access requests are not restricted to where BAES is the only supplier of a specified service. Rather, it may be the case that a request to supply a particular product/service is made to BAES and to other suppliers, as the company making the approach is seeking to identify the most suitable supplier through a process of market testing. In some cases, the company making the approach has the relevant capability itself.
- 2.23 The Undertakings relate to 'contracts for the purposes of an MOD programme'. They therefore only apply where the MOD is the contracting authority.
- 2.24 We discuss the use of the Undertakings since 2006 in Section 6 of this report.

Teaming arrangements

- 2.25 Teaming occurs when a contractor joins with other contractors to supply a product/service.
- 2.26 The provisions in the Undertakings relating to teaming arrangements were retained in 2006, to prevent a BAES business that provides goods or services of which it is the only supplier from choosing only to work with another BAES company as its sub-contractor, thus foreclosing the market.
- 2.27 Where BAES proposes a teaming agreement involving two or more BAES entities in relation to an MOD contract, the Undertakings require BAES to seek approval from the OFT (now CMA). The OFT has in practice consulted the MOD to check that there have been no concerns that other potential bidders would be excluded. BAES has sought permission from the OFT to pursue teaming arrangements five times and permission was granted on each occasion.

Compliance

- 2.28 BAES' internal audit function is responsible for ensuring compliance with the Undertakings. The requirements of the Undertakings are covered by staff training and included in internal policy and procedural governance

arrangements. BAES' business units are required to sign Operational Assurance Statements twice a year and to complete a quarterly compliance declaration and spreadsheet showing details of access requests made and how these were taken forward. The internal audit function also undertakes dip-samples of the business units each year to check on compliance. BAES submits an Annual Compliance Report on its compliance with the Undertakings to the CMA and the MOD each year.

3. Overview of the UK defence sector

Ministry of Defence

3.1 The MOD is the UK government department responsible for the implementation of government defence policy. The principal objective of the MOD is to secure the defence of the UK and its interests. The MOD is responsible, among other things, for UK defence procurement and delivering major UK defence programmes.

3.2 MOD defence expenditure in 2015/16 is shown in the following table:

Table 1: MOD defence expenditure in 2015/16

MOD annual expenditure	£20.0 billion
MOD expenditure with top 10 suppliers	42%
MOD expenditure pursuant to contracts awarded in competitive tenders	£9.9 billion
UK exports of defence equipment/services	£7.7 billion

Source: UK Statistics, [MOD trade, industry and contracts 2016](#).

3.3 The objective of defence procurement is to provide the UK Armed Forces and national security agencies with the best capabilities that are affordable, to enable them to protect the UK's security and to advance the UK's interests, both now and in the long term, and, in doing so, to obtain the best possible value for money.

3.4 There are some areas of defence procurement where, as a result of national security considerations, the MOD requires UK manufacture. These areas include complex warships, submarines and some types of munitions. This does not necessarily mean the entire supply chain is manufactured in the UK. For example, the MOD told us that for complex warships, some elements of these vessels have been sourced from overseas suppliers and integrated into the final product by the prime contractor.

3.5 There have been several public announcements on defence procurement policy since the last review of the Undertakings:

- (a) **2012 Defence White Paper:**¹⁰ The White Paper described the MOD's intention to 'seek to fulfil the UK's defence and security requirements through open competition in the domestic and global market' except where national security concerns require it to seek only UK providers. For

¹⁰ [The 2012 UK Defence White Paper, National Security Through Technology](#).

those tenders that are conducted more widely than the UK, there were two relevant issues:

- (i) firstly, there would be a wider range of potential prime contractors; and
- (ii) secondly, companies outside the UK might have capabilities which they could utilise themselves as potential prime contractors with the MOD or which could be utilised by a range of other potential prime contractors.

The White Paper identified limitations to the intention to source through open competition, namely where the MOD seeks to protect 'our operational advantages and freedom of action where this is essential for national security.'

- (b) **2015 SDSR:** In 2015, the UK government published the 2015 Strategic Defence and Security Review (SDSR). This builds on the principles of the White Paper by, for example, emphasising a policy requirement for the MOD to procure defence requirements through open competition, on domestic and global markets, thus providing an opportunity for non-UK companies to bid for some MOD programmes. The SDSR¹¹ included making support for exports a core task for the MOD as well as actions to enable SMEs and non-traditional suppliers to bid for defence and security contracts more easily. This complements the MOD's preferred approach to use open competition on the global market. The MOD considered that these policies would enable it to secure strong military capabilities for the UK Armed Forces, and best possible value for money for the taxpayer. The MOD also noted that open competition offers the ideal catalyst for UK-based industry in the defence and security sectors to improve efficiency, remain competitive and generate innovative solutions for domestic and international customers.
- (c) **Parker Report:** The government commissioned a new National Shipbuilding Strategy to deliver the aims of the 2015 SDSR and Sir John Parker was appointed in March 2016 to provide independent leadership for the National Shipbuilding Strategy and report to ministers before the 2016 Autumn Statement. His recommendations were published in November 2016 (the Parker Report) and the government's response to the report will become the National Shipbuilding Strategy.¹²

¹¹ [SDSR - 2015 Strategic Defence and Security Review \(SDSR\)](#).

¹² [Parker Report](#), p2.

BAES

- 3.6 BAES employs over 82,000 people, predominantly in the USA, the UK, the Kingdom of Saudi Arabia and Australia, with around 33,000 employees in the UK.
- 3.7 In the UK, BAES' business comprises four areas: Air, Maritime (including the design and manufacture of complex warships, the design and manufacture of submarines and the provision of in-service support of surface ships in the UK), Land and Cyber Security.
- 3.8 BAES' activities in these sectors are shown in Table 2.

Table 2: BAES activities in UK defence sectors

Air	Manufacture, development, upgrade and in-service support of Typhoon combat and Hawk trainer aircraft
	In-service support of Tornado combat aircraft
	Design and manufacture of sub-assemblies and electronic systems for F-35 Lightning II combat aircraft
	Development of next generation unmanned combat air systems
	Defence Information Systems
	Design and manufacture of avionics equipment for military aircraft
	Design and manufacture of avionics equipment for commercial aircraft
Maritime	Design and manufacture of complex warships
	Design and manufacture of submarines
	Provision of in-service support of surface ships and facilities management in the UK
	Design and manufacture of naval gun systems, torpedoes, radars, and naval command and control systems
Land	Upgrade and support of vehicles for the UK Armed Forces
	Manufacture of ammunition and precision munitions for US, UK and other armed forces
Cyber Security	Supply of defence-grade cyber solutions for the commercial market
	Supply of cyber, intelligence and security capabilities to UK and other government agencies

Source: BAES.

- 3.9 In 2015, the breakdown of BAES' global sales of defence, aerospace and security products and services was 53% air, 28% maritime, 13% land and 6% cyber security.

- 3.10 BAES achieved global sales of £17.9 billion in 2015, 23% of which (approximately £4 billion) were in the UK (including non MOD sales). BAES' global EBITDA¹³ in 2015 was approximately £1.7 billion.¹⁴
- 3.11 The main locations of BAES' facilities used for the MOD programmes in which it participates are summarised below.

BAES Main MOD Programmes and facilities

Maritime

- 3.12 BAES Naval Ships has manufacturing facilities based on the Clyde, operating from yards at Govan and Scotstoun, and also has a presence at Babcock International facilities in Rosyth. The major programmes are the Queen Elizabeth class aircraft carriers, Type 26 frigates and offshore patrol vessels (OPVs).
- 3.13 BAES Submarines is based mainly at Barrow-in-Furness. The major programmes are the Astute and Dreadnought class submarines.
- 3.14 BAES Maritime Services is based mainly at Portsmouth, where it provides support services to the Royal Navy and is responsible for facilities management of the Naval Base.

BAES combat air production facilities

- 3.15 In terms of production facilities and engineering capability, BAES has sites at Warton and Samlesbury. Manufacturing of sub-assemblies for the F-35 aircraft is carried out at Samlesbury, as is manufacturing of subsystems for the Typhoon. BAES also has facilities for final assembly, testing and commissioning at Warton.
- 3.16 [✂]

¹³ EBITDA is a company's earnings before interest, taxes, depreciation, and amortization. It is an accounting measure calculated using a company's net earnings, before interest expenses, taxes, depreciation and amortization are subtracted, as a proxy for a company's current operating profitability

¹⁴ [BAE Systems plc Annual Report 2015](#).

BAES Munitions facilities

3.17 BAES' munitions business, which supplies a range of different calibre munitions for the MOD, is based at Radway Green, Glascoed and Washington. Support services for the munitions business are provided at satellite facilities in Bishopton, Ridsdale and Shrivenham.

Other areas

3.18 BAES Land (UK) has a number of sites in the UK. The armoured vehicles business is based in Telford, with satellite operations in Washington and Filton.

3.19 BAES Applied Intelligence is primarily based in London and Guildford.

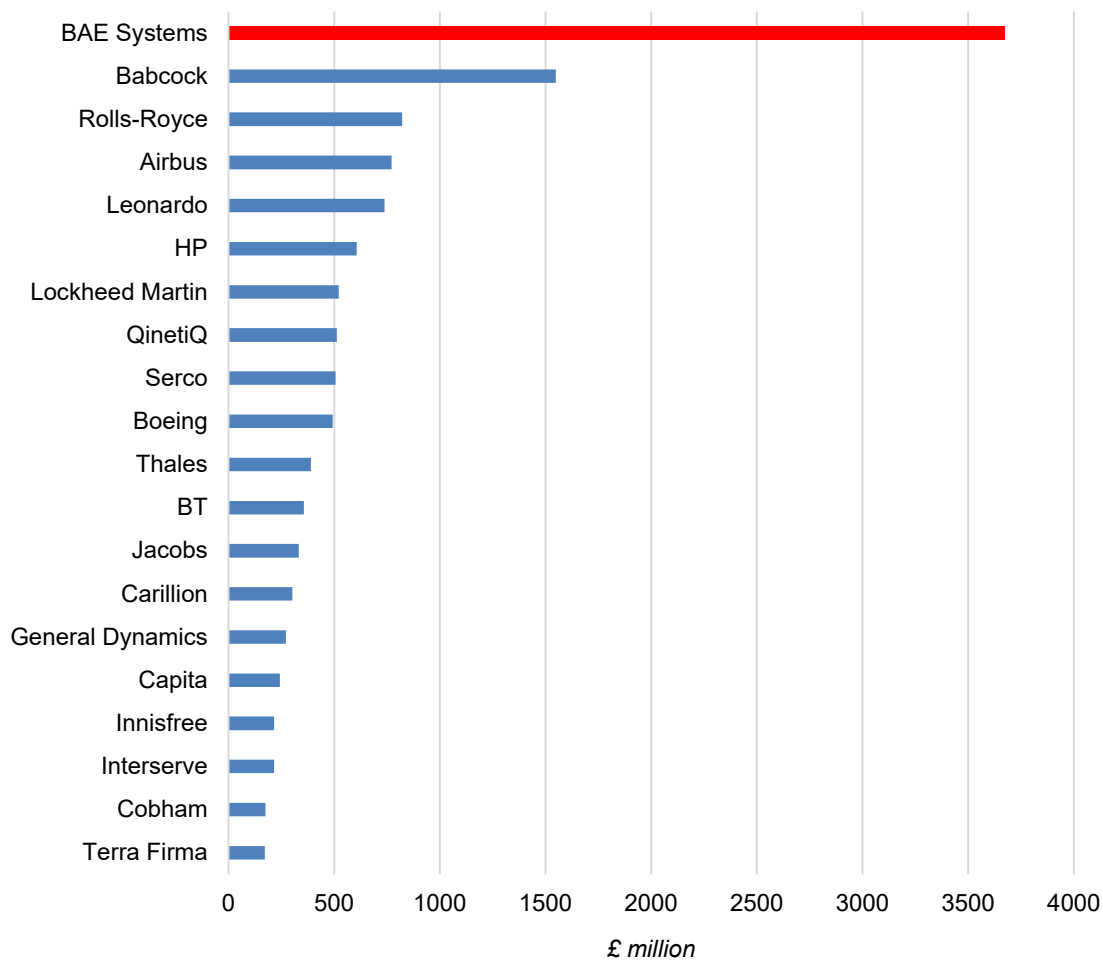
3.20 BAES Electronics Systems is based in Rochester, Kent.

BAES role in the UK defence sector

3.21 BAES is by far the largest defence supplier in the UK. It was paid £3.7 billion by the MOD in the 2015/16 financial year, representing 15% of all MOD procurement expenditure in that year (more than twice as much as the next largest defence supplier). MOD payments represented around 22% of its global revenues.

3.22 Figure 1 below shows MOD expenditure with BAES and the 19 next largest suppliers by value. Beyond these 20 companies there is a long list of smaller suppliers.

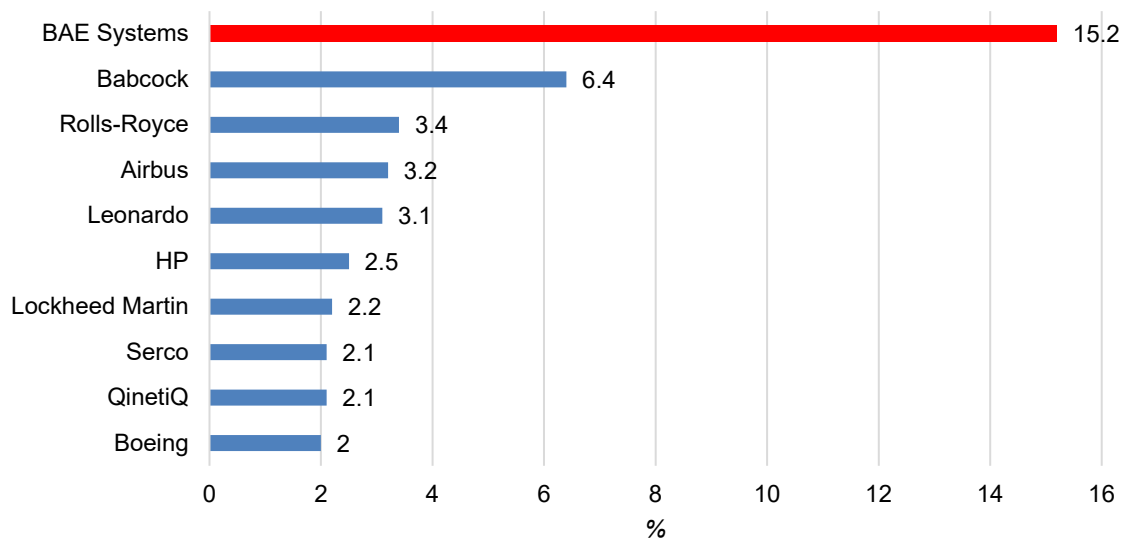
Figure 1: MOD expenditure 2015/16, top 20 suppliers



Source: UK Statistics, [MOD trade, industry and contracts 2016](#), published 25 August 2016, Table 4 annex.

3.23 BAES has received the largest proportion of MOD expenditure for many years. In 2015/16 it received 15.2% of MOD expenditure. The remaining nine suppliers in the top 10 accounted for shares of between 2.0 and 6.4% of total MOD expenditure, as shown in Figure 2.

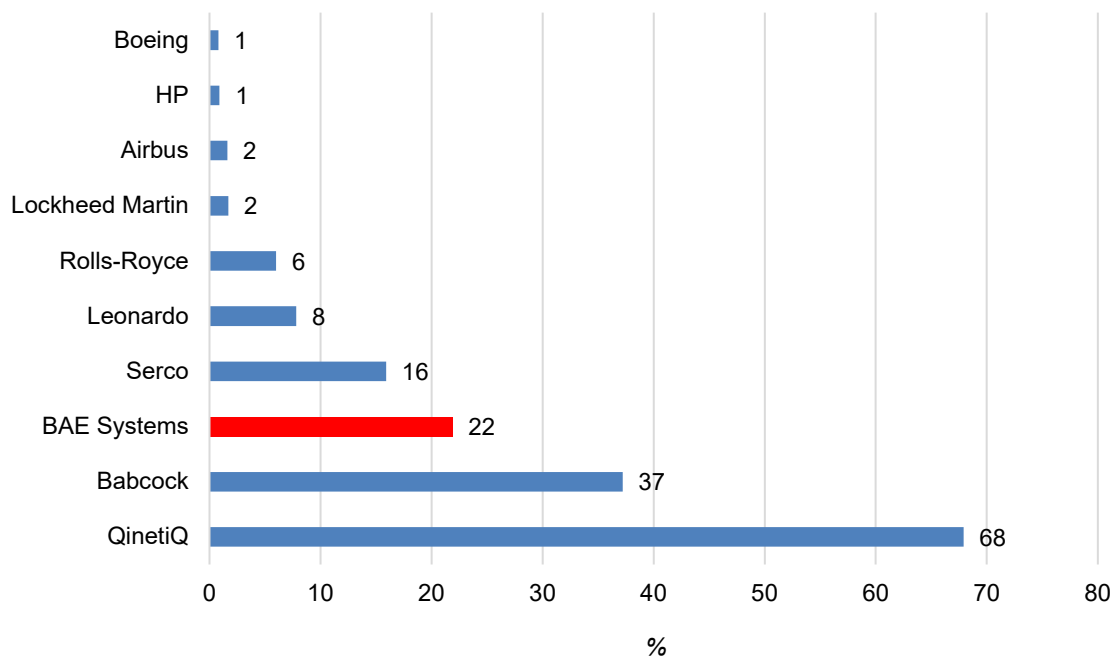
Figure 2: Percentage of MOD expenditure 2015/16, top 10 suppliers



Source: UK Statistics, [MOD trade, industry and contracts 2016](#), Table 5a.

3.24 Over the last ten years, sales to the MOD have represented between 15 and 25% of BAES' global revenues. Figure 3 shows that, in the last financial year (2015/16), MOD expenditure accounted for 22% of BAES' global revenues.

Figure 3: Dependency of top 10 suppliers on MOD business



Source: UK Statistics, [MOD trade, industry and contracts 2016](#), Table 5b.

Main suppliers

3.25 The main companies operating in the parts of the UK defence sector in which BAES is active include:

Babcock International

3.26 Babcock International is based in the UK. It has the following divisions: Marine & Technology, Defence & Security, Support Services & International. It has over 25,000 employees and operates the Rosyth Dockyard in Scotland and the Appledore shipyard. It is involved in the *Queen Elizabeth* class aircraft carrier programme. Babcock International is the sole provider of in-service maintenance, in-service support and through-life engineering support for the UK fleet of nuclear-powered submarines. It also builds sections of submarines. It has joint MOD contracts with BAES to maintain British warships, submarines and naval bases.

Cammell Laird

3.27 Cammel Laird is based in the UK and focuses on the shipbuilding sector. It has a 130-acre shipbuilding yard on the Mersey, with 1,200 to 1,500 employees. Its capabilities include ship-building, repairs, refurbishments and conversions. Its current programmes include work on modules for Astute Class Nuclear submarines- and it has previously built flight deck modules for the QE Class Carriers. It is also building the Sir David Attenborough polar research ship. Cammell Laird also builds small passenger ferries and supplies modules for larger military ships and submarines.

Leonardo (formerly Finmeccanica)

3.28 Leonardo is an Italian / British company which trades in the UK as Leonardo MW. It has operations in Italy, the UK, US and Poland. The UK operations are mainly in Luton, Basildon, Yeovil and Edinburgh. Leonardo's seven divisions are: helicopters; aircraft; aerostructures; airborne & space systems; land & naval defence electronics; defence systems; and security & information systems. In combat air, it provides radar, defensive aids and avionics for the Tornado and Typhoon platforms. Leonardo previously operated as four separate companies in the UK – Agusta Westland, Selex, DRS and Finmeccanica.

Rolls-Royce

3.29 Rolls-Royce is a British public company which operates internationally. It designs, manufactures and distributes power systems for the aviation,

maritime (ships and submarines) and other industries. Rolls-Royce is the world's second-largest manufacturer of aircraft engines. In co-operation with other European manufacturers, Rolls-Royce has been a major contractor for the Tornado and Eurofighter Typhoon programmes. It is also involved with Lockheed Martin in the Joint Strike Fighter (JSF) F-35 Lightning II programme. In 2012, Rolls-Royce was awarded an MOD contract for integration of the reactor design for the UK's next generation nuclear-armed submarines.

Thales

- 3.30 Thales, previously Thomson-CSF, is a French company and is partially state-owned. It employs around 64,000 people worldwide. Thales UK employs 6,750 people. Thales has five branches: Defense; Security; Space; Aerospace and Ground transportation. It is involved with UK programmes including the Watchkeeper unmanned aircraft for the British army and the *Queen Elizabeth* class aircraft carrier alliance, along with Babcock International and BAES. Thales also provides sonar sensor and systems for the UK's Astute submarines, together with radar and communications systems for Royal naval surface vessels. Thales is one of the few companies with capabilities to manufacture and install naval combat management systems.

MOD current defence programmes

- 3.31 In this section, we describe the current major defence programmes in the maritime, combat air and munitions sectors.

Table 3: Current major MOD programmes in Maritime, Combat Air and General Munitions

Maritime equipment programmes include	Queen Elizabeth Class Aircraft Carriers
	Type 26 Global Combat Frigate
	Type 31 General Purpose Frigate
	Offshore Patrol Vessels
	Type 45 Destroyers
	Astute Submarines
	Dreadnought, the Deterrent Successor
Combat Air equipment programmes include	Hawk
	Tornado
	Typhoon (Eurofighter)
	F-35 Lightning II aircraft
	Future Combat Air System
	Unmanned Air Systems
General Munitions include	Small arms and medium-calibre ammunition
	Mortar bombs
	Tank ammunition
	Artillery shells
	Naval gun shells

Source: MOD.

Maritime – complex warships

3.32 Aircraft Carriers: The Queen Elizabeth class of aircraft carriers is currently in the final stages of being built. The programme is one of the largest engineering projects currently being undertaken in the UK. The aircraft carriers are being built by an alliance, originally formed in 2003 and made up of Thales UK, BAES and the MOD. Babcock International and VT Group¹⁵ joined in 2005, creating the Aircraft Carrier Alliance (ACA) and the memorandum of understanding for the construction contract was signed the following year. Since then, VT Group has sold its shipbuilding operations to BAES and the remaining support and training part of the business has been

¹⁵ VT: Vosper Thornycroft.

bought by Babcock International. As a result, the ACA now comprises three alliance members from industry (BAES, Thales and Babcock International).¹⁶

- 3.33 The 2015 SDSR committed the government to maintain a fleet of 19 frigates and destroyers, with the ambition to increase this force by the 2030s through a new class of lighter, flexible, exportable general purpose frigates (also called Type 31 frigates). The SDSR also set out the government's plans to procure eight new Type 26 Frigates and two more offshore patrol vessels (OPVs).
- 3.34 Type 31 frigates: The MOD is currently developing the procurement strategy and timeline for this programme and it would like to purchase at least five frigates. The MOD told us that a procurement strategy could be published in early 2017, with invitations to tender in late 2017.
- 3.35 Type 26 frigates: BAES is the prime contractor for this programme and has almost completed the design engineering for the programme. It has signed heads of agreement with the MOD to build eight Type 26 frigates at its shipyards on the Clyde. The Defence Secretary, Michael Fallon, confirmed the government's commitment to the programme on 4 November 2016, saying that 'the UK government's commitment today will secure hundreds of high-skilled shipbuilding jobs on the Clyde for at least two decades and hundreds more in the supply chain across Britain.'¹⁷
- 3.36 The Type 26 frigate programme is currently in the design and demonstration stage and BAES expects to receive the contract to build the first three frigates in summer 2017.¹⁸
- 3.37 OPVs: The Defence Secretary also announced on 4 November 2016 that the MOD will contract with BAES for it to build two OPVs at the Clyde shipyard to ensure continuity of work and secure jobs in this shipyard before the Type 26 frigate programme gets fully under way. These OPVs are expected to be delivered by 2019.¹⁹
- 3.38 Type 45 warships: Project Napier is an MOD programme to address problems with these warships. The MOD is considering its procurement options for this programme.

¹⁶ [Aircraft Carrier Alliance](#). The ACA has four members. The fourth, the UK Ministry of Defence, has a dual role, acting as a member of the Alliance as well as the customer.

¹⁷ [MOD press notice: Type 26 frigates](#).

¹⁸ In November 2016, Defence Secretary Michael Fallon announced the steel cut for the new Type 26 frigates will be in summer 2017, see [MOD press notice: Type 26 frigates](#).

¹⁹ [MOD press notice: Type 26 frigates](#)

- 3.39 Regarding other prospective warship programmes, the MOD told us that a future complex warship programme to replace the Type 45 ships that are currently in service would not be expected until the late 2020s or 2030s.

Maritime – submarines

- 3.40 Submarine programmes are long-term commitments with current programmes setting out submarine design and production in the UK for several decades until the late 2030s. There are currently two MOD submarine build programmes, the Astute class and Dreadnought class programmes. The Maritime Underwater Future Capability programme, which is at a very early stage of development, relates to the future replacement for the Astute Class.
- 3.41 Submarine programmes are delivered mainly by three companies, which each have direct contracts with the MOD – these are BAES (Barrow-in-Furness²⁰/Frimley), Rolls-Royce (Derby/ Bristol) and Babcock International (Devonport in Plymouth and HM naval base on the Clyde (Faslane)). BAES is the lead contractor for design, manufacture and in-service support for the Combat Systems; Babcock is the lead contractor for in-service support (excluding the Combat Systems and nuclear reactor); Rolls-Royce is the lead contractor for the design and build of the nuclear reactor.²¹
- 3.42 The Astute class submarine programme is being managed pursuant to the SEPP agreement and is currently in the build phase. Seven Astute class submarines will eventually form the fleet; three have been constructed and are in service, with the remaining four in various stages of construction. Under current planning assumptions, the remaining submarines will enter service at various points from 2018 through to 2024. These submarines are the replacements for the Trafalgar class and Swiftsure class fleets. The contracts for the last two submarines in the programme (Astute 6 and 7, which are expected to enter service in 2023 and 2024, respectively) are currently being negotiated.
- 3.43 The Dreadnought class submarine programme has also begun. Two contracts have been awarded to BAES which is leading on the design and build of the submarines. The MOD is funding the upgrading of facilities at the BAES Barrow-in-Furness yard to enable the manufacture of the Dreadnought submarine. Cutting steel started in September 2016 and the submarines are expected to be in service from the late 2020s to the 2060s. These submarines will replace the current Vanguard class fleet.

²⁰ Devonshire Dockhall is one facility at BAES' Barrow-in-Furness site.

²¹ Nuclear Steam Raising Plant (NSRP)

- 3.44 The MOD said that it is currently reviewing the operational arrangements for the Dreadnought submarine programme to see how it can be improved. The MOD aims to have a new submarine delivery body in place by April 2017. Once the current 18-month contract comes to an end, in March 2018, the MOD intends to enter into a new contract in respect of the Dreadnought programme.
- 3.45 As noted above, the MOD has instigated the Maritime Underwater Future Capability programme to consider options for the future replacement of the Astute class submarines. This is at a very early stage.

Combat Air

- 3.46 Historically, combat air programmes have been developed through international alliances or consortia, with partner companies in each participating country carrying out a share of the manufacturing onshore.
- 3.47 The MOD's current combat air programmes include the Typhoon,²² the F-35,²³ the Tornado,²⁴ the Hawk and the Future Combat Air System (including unmanned aircraft). The F-35s will replace the Tornados, which were introduced into service in 1980 and are due to go out of service in the next few years.²⁵
- 3.48 The Typhoon is now moving out of production phase and into support; new orders relate only to the export market. The Typhoon will remain in service until 2040.
- 3.49 The F-35 is a fifth generation combat aircraft and is currently under development. The MOD contracts through a Joint Programme Office in the US with the Department of Defense's US-based prime contractor for the F-35 aircraft programme.
- 3.50 The Future Combat Air System (FCAS) is likely to include unmanned aircraft. Procurement options for this are at an early stage. Unmanned aircraft is a

²² The Eurofighter Typhoon consortium founded in 1986 brought together 4 European nations: UK, Germany, Italy and Spain. The partner companies are BAE Systems, Leonardo and Airbus. The Typhoon was brought into service between 2003 and 2005.

²³ The F-35 programme is the US led Joint Strike Fighter with 9 original partners (US, UK, Australia, Canada, Denmark, Italy, Netherlands, Norway and Turkey). In 2001 Lockheed Martin won the competition for the programme and teamed with Northrop Grumman and BAE Systems.

²⁴ The Tornados were jointly developed and manufactured by Italy, UK and (West) Germany, the partner companies were British Aerospace, Messerschmitt-Bölkow-Blohm (MBB- now part of Airbus) and Aeritalia. The Tornados were introduced into service in 1979-80 and have remained at the forefront of combat aircraft for over 30 years due to a combination of major upgrade programmes and enhancements.

²⁵ MOD news story (15 August 2015): [Defence Secretary Announces Tornado Extension](#).

new product area that has emerged since British Aerospace plc merged with MES.

Munitions

- 3.51 The MOD's munitions needs cover a broad range of products and there are many programmes in this area rather than one or two large programmes.
- 3.52 The MOD and BAES signed the long-term MASS partnering agreement on 20 August 2008. This secures national supply to the UK Armed Forces in certain product areas over a 15-year period to 31 December 2022. Munitions procured through the MASS partnering agreement represent around 50% of the MOD's munitions needs by value (80% by range).
- 3.53 The MOD does not intend to revoke the MASS partnering agreement prior to its termination in 2022. This means that munitions falling within the scope of the MASS partnering agreement will be procured on a single source basis from BAES until at least 2022.
- 3.54 Munitions not covered by the MASS partnering agreement are sourced from a range of suppliers, including overseas companies.

4. CMA review and legal framework

Statutory test

4.1 The CMA has a statutory duty, by virtue of section 75J of the FTA and paragraph 13 of Schedule 24 of the Enterprise Act 2002 as amended by the Enterprise and Regulatory Reform Act 2013, to keep under review the carrying out of undertakings accepted under section 75G of the FTA. As these Undertakings were originally given under the FTA, the Group must apply the test set out in that Act. Specifically, from time to time, the CMA must consider:

whether, by reason of any change of circumstances, an undertaking is no longer appropriate and either:

(i) the relevant parties can be released from the undertaking, or

(ii) it needs to be varied or to be superseded by a new undertaking, and

if it appears that ...any person can be so released or that the undertaking needs to be varied or superseded, to give such advice to the Secretary of State as [it] may think proper in the circumstances.

Applying the statutory test

4.2 Our guidance (CMA11)²⁶ states that 'The precise nature of the CMA's consideration of any change of circumstances will depend entirely on the individual circumstances affecting a particular undertaking or order.'

4.3 In this report we have:

(a) identified what it was about the prevailing circumstances that led to a finding that the British Aerospace/MES merger 'operated against the public interest'. The underlying issue in the public interest test is a lessening of competition;²⁷

²⁶ CMA11 at paragraph 2.5.

²⁷ This is based on the 'Tebbit Doctrine' set out in 1984 by the then Secretary for State for Trade and Industry Norman Tebbit – 'references to the Monopolies & Mergers Commission would be made primarily, but not exclusively, on competition grounds, taking into account the international dimension of competition.' See [House of Commons Research briefing: public interest tests](#), section 2.

(b) reached a decision as to whether there has been a change of circumstances from those which led to the adoption of the Undertakings;²⁸ and

(c) reached a decision as to whether we should advise the Secretary of State that the Undertakings should be varied, superseded or that BAES should be released from them.

4.4 There is wide discretion as to what kinds of change of circumstance may be taken into account. CMA11 gives three examples of types of circumstances that have led to variations in the past:

- undertakings that have time-expired or clearly become obsolete;
- undertakings that are affected by new legislation; and
- undertakings that are affected by changes in market conditions.²⁹

4.5 This is an indicative rather than exhaustive list. The change of circumstances must be such that the undertaking is no longer appropriate in dealing with the competition problem or adverse effects, arising from the merger, which it was designed to remedy.³⁰

4.6 The Undertakings were varied by the Secretary of State in 2002, 2005 and 2007. Therefore, the Secretary of State has already accepted advice relating to the changes of circumstances between 2000 and 2007. It is appropriate now to consider whether there have been changes of circumstances since the OFT last reviewed the Undertakings, as well as since the original advice to the Secretary of State,³¹ particularly where they have been incremental.

Structure of our assessment

4.7 In the following sections, we set out our assessment as follows:

²⁸ and the retention of the Undertakings in 2007.

²⁹ CMA11 at paragraph 2.6.

³⁰ CMA11 at paragraph 2.5.

³¹ Under section 76 of the FTA (see Appendix 1 to this note), the Director General of Fair Trading had a duty to examine mergers and to make recommendations to the Secretary of State. The Secretary of State could refer the merger to the Monopolies and Mergers Commission (the predecessor of the Competition Commission/CMA) under section 64 or accept undertakings in lieu of a reference under section 75G of the FTA. Once undertakings had been accepted, any review of those undertakings was the duty of the DGFT (replaced by the OFT under the Enterprise Act 2002 and by the CMA under ERRRA).

(a) In Section 5 we set out the changes of circumstances that have occurred in relation to BAES and defence procurement since the Undertakings were last reviewed.³²

(b) We then assess, for each of the sectors whether the evidence we have obtained indicates that they should be retained or removed (in whole or in part).

4.8 In line with our statutory remit, our focus is on the competition issues which the Undertakings were put in place to address. We have therefore not applied a wider public interest test, which would involve broader issues such as national security. This does not preclude the Secretary of State from taking such issues into account when reaching his decision.

³² We note that the existing Undertakings have been in place since 2000, so where relevant we took this into account in our assessment.

5. Changes to BAES and to defence procurement

Introduction

5.1 In this section we set out the changes that have occurred to BAES and to defence procurement in the UK since the Undertakings were last reviewed in 2006.

BAES structural changes

5.2 In its 2006 review, the OFT noted that BAES had divested or closed a number of businesses that were active in areas which had previously been identified as areas where the Undertakings could be relevant. BAES has informed us that, since 2006, it has sold, closed or otherwise reduced the significance of its business in a number of areas. We set these out below.

Avionics

5.3 BAES has sold most of its capabilities in avionics and electronics systems in the UK since the Undertakings were accepted. Specifically, in 2007 BAES sold its remaining 25% share of Selex Sensors and Airborne Sensors (Selex) and its Inertial Products business. BAES' only remaining avionics business is the UK-based business of BAES Inc Electronic Systems.

5.4 The MOD told us that BAES' market position is now much reduced in avionics and air electronics in the UK, and that Leonardo (formerly Finmeccanica) is now considered the principal supplier of air avionics and electronics products.

Shipbuilding

5.5 BAES has ceased manufacturing ships in Portsmouth and rationalised its shipbuilding facilities on the Clyde.

Combat vehicles

5.6 BAES no longer has a manufacturing footprint in combat vehicles in the UK. As part of its rationalisation, it has closed five manufacturing and engineering support sites, the last in 2014. We have therefore not reviewed the combat vehicles sector in detail during this review.

Munitions

5.7 BAES has closed a number of munitions facilities since 2000.

Changes to MOD procurement

Long-term procurement frameworks

- 5.8 In a number of sectors, the MOD has moved away from the competitive prime contractor model and has instead chosen to put in place long-term procurement frameworks which it considers have enabled it to secure value for money, freedom of action and operational advantage. BAES is exclusively involved in a number of these arrangements, as noted below.
- 5.9 Summaries of these arrangements and, where applicable, the related exclusions from the Competition Act 1998 are set out below.

15-year framework for complex warships: TOBA

- 5.10 The BAES Naval Ships Business entered into a 15-year Terms of Business Agreement (TOBA) with the MOD in July 2009 to sustain a minimum level of work to keep UK facilities operating and to maintain sovereign capability in the shipbuilding sector. The TOBA grants BAES the exclusive right to contract with the MOD for the design and manufacture of complex warships.
- 5.11 In addition, the Competition Act 1998 (Public Policy Exclusion Order) 2006 No. 605 (Maritime Services PPEO) came into force on 3 April 2006. The Maritime Services PPEO disapplied the Chapter I prohibition in relation to agreements relating to the maintenance and repair of surface warships. This enables the two prime contractors in this area (BAES Maritime Services and Babcock Marine) to work together, as required by the MOD.

Long-term framework for submarines: SEPP

- 5.12 In relation to submarines, the three key (or 'Tier 1'³³) companies in the UK operating in this sector – BAES Submarines, Rolls-Royce and Babcock Marine – entered into the Submarine Enterprise Performance Programme (SEPP) Memorandum of Understanding with the MOD in October 2011. The SEPP sets out their respective roles and responsibilities in relation to submarine construction on a non-competitive basis. The respective roles and responsibilities are locked in through direct contracts between the MOD and each Tier 1 company.

³³ Tier 1 in this context refers to the most important member in the supply chain.

5.13 In July 2008, the Competition Act 1998 (Public Policy Exclusion Order) 2008 No. 1820 ('Submarine PPEO') came into force. This disapplied the Chapter I prohibition of the Competition Act 1998 in this context.

15-year framework for munitions: MASS partnering agreement

5.14 In August 2008, the MOD and BAES entered into the MASS partnering agreement, a 15-year agreement for BAES to supply certain munitions on a single source basis. The purpose of the MASS partnering agreement was to facilitate the preservation and modernisation of the UK's sovereign capabilities in respect of munitions deemed important for national security.

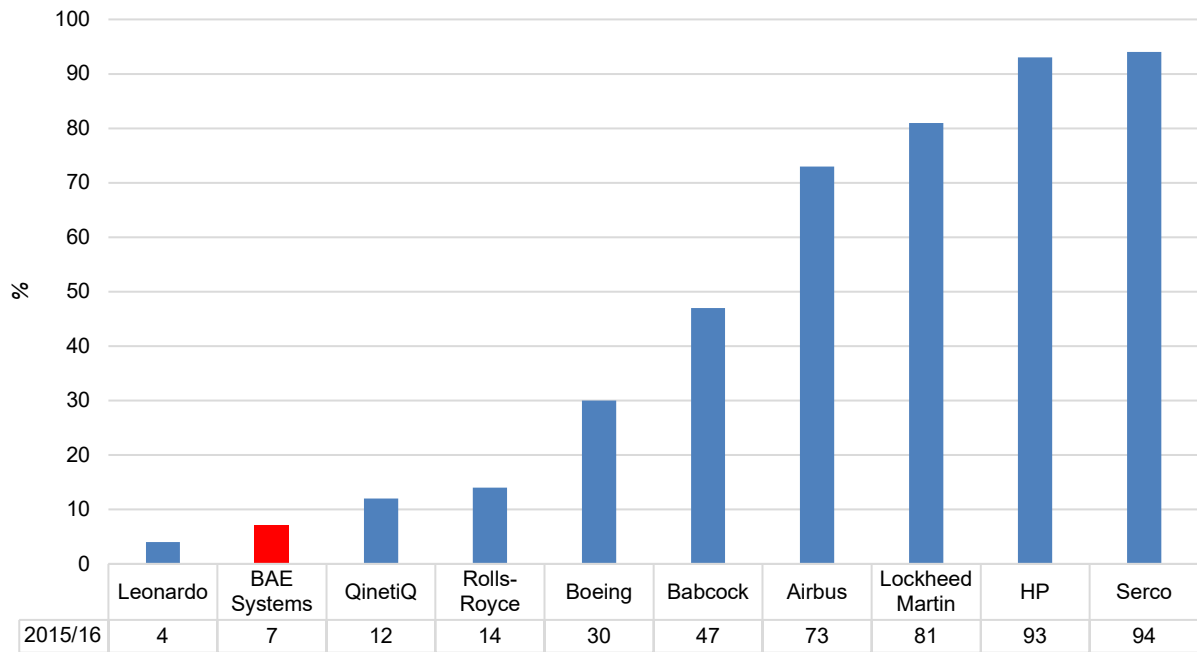
Increase in non-competitive contracting

5.15 The MOD has adopted a single source supply approach when there have been strategic reasons to do so (in particular to ensure the maintenance of a national capability) or when it considered that there was only one supplier with the necessary capabilities.

5.16 The Single Source Regulations Office (SSRO) was established in December 2014. Its statutory obligations are to ensure that good value for money is obtained for the UK taxpayer in expenditure on qualifying defence contracts, and that single source suppliers are paid a fair and reasonable price under those contracts. The SSRO examines contracts that are qualifying defence contracts, namely where the Secretary of State for Defence purchases goods, works or services for defence purposes, and the contract is not the result of a competitive process and has a value of £5 million or more.

5.17 Figure 4 below shows the revenue received by the MOD's top 10 suppliers from competitive contracts as a proportion of their overall sales to the MOD in 2015/16. This proportion is influenced by the type of product/service involved. Service based companies, such as Serco and Hewlett-Packard, received almost all of their work through competitive contracts. For BAES and some of the other more defence-focused companies, competitive contracts represented a much smaller proportion of total sales by value.

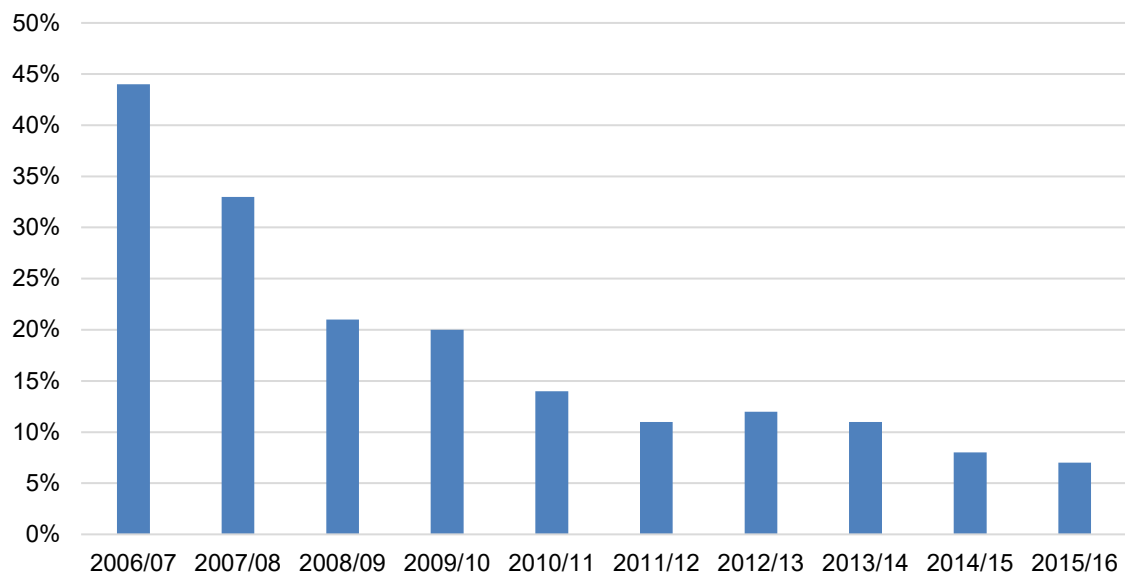
Figure 4: Percentage of sales from MOD competitive contracting in 2015/16 with top 10 suppliers



Source: UK Statistics, [MOD trade, industry and contracts 2016](#), Table 5c.

5.18 The vast majority of revenues received by BAES from the MOD is related to non-competitive contracts – 93% of expenditure in 2015/16 compared with 56 % in 2006/07. Figure 5 below shows how the percentage of MOD expenditure with BAES awarded through competitive contracts has changed since 2006/07.

Figure 5: BAES percentage of sales from MOD competitive contracting 2006 to 2016



Source: UK Statistics, [MOD trade, industry and contracts 2016](#), Table 5c.

Alliance model

- 5.19 The MOD uses alliance models in the maritime sector. The main practical applications of the alliance model have been the aircraft carrier and submarine programmes. The alliance members for these programmes were not selected by competition, although in the case of the aircraft carrier, the alliance was formed following a failed competition. The companies concerned initially proposed the approach and the MOD worked with the companies involved to put this arrangement in place in 2007.
- 5.20 [✂]
- 5.21 BAES told us that a key reason for the alliance model is to ensure better alignment of the interests and incentives of the key stakeholders, including the MOD as the purchasing authority.

Offshore procurement

- 5.22 We set out in the following sections examples of recent MOD procurement involving overseas providers. This has been driven by two factors:
- (a) The MOD is now more open to overseas procurement, although in some areas an on-shore capability is still required.
 - (b) Many overseas defence contractors have acquired and/or expanded facilities located in the UK. Hence they do not require access to BAES resources to bid for or fulfil contracts.

Combat aircraft

- 5.23 BAES told us that next generation manned military aircraft requirements have already been met by offshore prime contractors, pointing to the current procurement of the F-35 Lightning II aircraft, for which BAES is a subcontractor to the US-based prime contractor, Lockheed Martin.
- 5.24 BAES also noted that, following the termination of the Nimrod MRA4 programme in 2010, the MOD now procures its maritime patrol capability (the P-8 Poseidon) from Boeing in the US, and the A400M (military transport aircraft) from Airbus.

Unmanned aircraft

- 5.25 The MOD procures the Watchkeeper unmanned surveillance aircraft from the French defence contractor, Thales, and the Reaper unmanned combat aircraft from the US Company, General Atomics.

Non-complex ships

- 5.26 The MOD has awarded a contract for MARS fleet tankers to Daewoo Shipbuilding and Marine Engineering (DSME), which is based in South Korea.

Land vehicles

- 5.27 The MOD has procured combat vehicles from several overseas suppliers, including the FRES Specialist Vehicle Programme supplied by General Dynamics, and the Warrior Capability Sustainment Programme supplied by Lockheed Martin.
- 5.28 In addition, as noted earlier, BAES has closed its combat vehicle manufacturing sites in the UK.

Supply-side changes

- 5.29 Finally, we note that there has been an increase in the capabilities of UK shipbuilders. The Parker Report said '[a] renaissance in shipbuilding is emerging in a range of regional shipbuilding companies'.
- 5.30 This has been driven in part by the work given to various shipyards under the aircraft carrier programme. Examples of their increased capabilities include Babcock International winning a contract to build four OPVs for the Irish Navy and Cammell Laird winning the contract to build the research ship 'Sir David Attenborough'.
- 5.31 Other supply-side changes include the fact that many overseas defence contractors have established on-shore bases in the UK, as noted above.

Conclusion on changes of circumstances

- 5.32 We consider that, since 2006, there have been the following changes of circumstances:
- (a) BAES has sold businesses and closed other facilities including in combat air and general munitions. These sales and closures mean that BAES has a substantially reduced presence in certain sectors.
 - (b) Changes to MOD procurement practices across a number of sectors:
 - (i) the MOD now seeks to procure more goods and services from suppliers on a European or worldwide basis rather than solely from the UK;

- (ii) the MOD has entered into a number of long-term procurement frameworks with BAES including the MASS partnership agreement for munitions, the TOBA for warships and the SEPP for submarines;
 - (iii) where the MOD's focus is on preserving the UK's defence capability, there are a number of areas in which the MOD now seeks co-operation between suppliers when seeking to maintain UK sovereign capabilities; and
 - (iv) the MOD has significantly reduced the proportion of its contracts that are let by way of competition among potential prime contractors (whereas the Undertakings were designed to facilitate and protect competitive procurement by means of tenders by competing potential prime contractors).
- (c) Supply-side changes, especially the increase in the capabilities of UK shipbuilders and the fact that overseas defence contractors have established on-shore bases in the UK. Both mean that there are a greater number of credible suppliers in certain sectors.

6. Use of the Undertakings

6.1 In this section we set out evidence in relation to the number and value of access requests made to BAES, the extent to which other potential prime contractors have relied on the Undertakings to bid for contracts with the MOD and evidence of the Undertakings being useful in relation to contract negotiations between BAES and the MOD.

Number of access requests

6.2 BAES has provided us with its compliance databases for the period since the last review of the Undertakings in 2006. These show that the following access requests relating to MOD contracts were made to BAES:

Table 4: Requests for access to BAES resources for the purposes of MOD programmes

	<i>No. of access requests</i>	<i>No. rejected by BAES</i>
2007	69	0
2008	108	1
2009	187	2
2010	170	4
2011	194	1
2012	162	25
2013	286	95
2014	216	57
2015	144	10
2016	100	9

Source: BAES.

Access requests by sector

6.3 Table 5 shows the breakdown of access requests by defence sector.

Table 5: access requests by defence sector

<i>Sector</i>	<i>% in period 2007–2016</i>
Air	10%
Ships	48%
Submarines	17%
Munitions	7%
Other (cyber, shared services, electronic systems, vehicles etc)	19%

Source: BAES, percentages do not total 100% due to rounding.

6.4 BAES told us that Table 4 records each instance when a party has made a formal request to BAES for a quote. BAES makes a record of all such requests if they are in relation to an MOD contract and BAES is asked to be a sub-contractor to an actual or potential prime contractor. If BAES provides a quote in response to an access request by a potential prime contractor, this does not necessarily mean that the bid to be subcontractor was successful. Likewise (if the request concerned a potential prime contractor), if BAES

provided a quote, this does not necessarily mean that the bid by the potential prime contractor was successful.

6.5 We noted that the number of requests is relatively high, averaging 164 per year from 2007 to 2016. We asked BAES about this and it made the following points in response:

- The Undertakings require BAES to provide access to both a potential prime contractor on a bid for a MOD programme and an already contracted prime contractor on a MOD programme.
- There is no definition of 'MOD programme' in the Undertakings so BAES ensures that it records requests made in relation to any MOD contract, ie whatever its size, value or strategic importance.
- The Undertakings require BAES to provide access if it has the resources and the capacity to assist (unless Undertaking 2.3 applies).

6.6 BAES told us that 'requests for assistance are typically small and often relate to capabilities which could readily be sourced from other UK or non-UK companies.' We assess the evidence in relation to this in the next section.

6.7 With regard to the requests rejected by BAES, the majority³⁴ of requests rejected in 2013 and 2014 related to requests to the BAE Systems Naval Ships Business by the Naval Design Partnership (NDP). BAES told us that the NDP is a group of eight to nine companies which undertake tasking services for the MOD for small value studies.³⁵ Originally, bids for NDP tasks were sent out by the MOD but this was subsequently changed with the MOD requesting that BMT (another NDP member) request bids. BAES said that when seeking bids for a task, BMT typically sends all task requests to all NDP members without any regard for whether the task is within the capability of each NDP member. Some of the requests rejected related to areas where BAES did not have capability (small boats) or were requests directed to a specific NDP member and therefore not intended for BAES. Accordingly, in all of these cases, we consider that the absence of the Undertakings would not have led to a different outcome in the tendering process.

³⁴ 79 out of the 95 in 2013 and 41 out of the 57 in 2014

³⁵ In 2014, the largest value study was around £180,000

Value of access requests

6.8 BAES provided us with the following breakdown of the values of contracts which were the subject of access requests in the four years 2013–2016:

Table 6: Number of access requests by value of contract

	<i>No. of access requests 2013–2016</i>	<i>% of total</i>
Rejected	171	23%
£1k–£10k	107	14%
£10k–£100k	189	25%
£100k–£500k	101	14%
£500k–£1m	49	7%
£1m–£9.9m	31	4%
Over £10m	4	1%
Not known at time of submission	94	13%
Total	746	

Source: BAES, percentages do not total 100% due to rounding.

6.9 A large number of instances where BAES was asked to provide a quote relate to low value contracts. BAES told us that, over the last decade, there have been only ten requests involving amounts exceeding £10 million.³⁶

6.10 The highest value access request was in 2012 and this related to a £900 million ‘facilities management’ contract, which BAES told us is a service that many other companies could provide. The prime contractor in this case (Serco Limited) asked for bids from a number of potential subcontractors and the BAES bid to Serco was not successful.

Review of access requests greater than £10 million

6.11 We asked BAES for more information on the ten access requests over the last decade where the contract value exceeded £10 million. BAES said that it provided bids in each of these cases.

6.12 The bids related both to contracts for which BAES was likely to be the only credible supplier and to bids in relation to which there were several alternative suppliers apart from BAES. For those where BAES appeared to be the only credible supplier, we consider that the access requests did not facilitate an alternative prime contractor to bid for or perform contracts for the purposes of an MOD programme. These related, for example, to requests to support or upgrade legacy equipment or ships built by BAES and in use by the MOD. These also include a contract where the prime contractor had already been

³⁶ However a certain number of access requests were for unknown values. 13 to 15% of access requests had unknown contract values in 2013 and 2014 respectively but only 1% had unknown values in 2015.

selected and was a joint venture of several companies including BAES. In these cases, we consider that the absence of the Undertakings would not have led to a different outcome. Details are provided in Annex 4.

Award of contracts to alternative prime contractors – sector analysis

- 6.13 We also considered whether, in the period since the merger, there have been examples of the Undertakings supporting an alternative prime contractor to win an MOD contract in the complex warships, combat air and munitions sectors. We found no examples of any such cases.
- 6.14 BAES told us that there were no such examples in relation to MOD programmes in the complex warships, submarines or munitions sectors. In combat air, BAES told us that it regularly competes in global competitions as part of a consortium for combat air products that are in competition with large US prime contractors. BAES did not suggest that the Undertakings were used to facilitate this.
- 6.15 We asked for evidence of examples of the Undertakings having resulted in the award of a contract by the MOD to an alternative prime contractor which had needed access to BAES' resources. The MOD said that it was not able to identify any such examples.

Evidence of use of Undertakings in contract negotiations

- 6.16 BAES told us that no reference has been made to the Undertakings when BAES has discussed procurement strategies with the MOD.
- 6.17 We asked for evidence, such as reports, policy papers or Board / Committee minutes that refer to the use of the Undertakings in MOD decisions or negotiations. The MOD did not provide any such evidence that pre-dated our review. The MOD said that the existence of the Undertakings, and BAES' and other firms' knowledge of them, mean that the potential for competition is created.
- 6.18 [✂]

CMA assessment on use of the Undertakings

- 6.19 Based on the information set out above, we consider that:
- (a) The high number of access requests reflects BAES' resource capabilities in all sectors of UK defence and its comprehensive recording system. It appears that many companies approach BAES for a quote as part of their market testing process.

- (b) The high number of access requests also reflects the wide application of the wording in the Undertakings rather than the number of occasions that another potential prime contractor has needed to rely on BAES for access to essential resources.
- (c) Most of the recorded requests were in relation to very small value contracts. This suggests that these do not relate to major MOD programmes, at least in terms of BAES' involvement.
- (d) In relation to several of the larger value access requests (more than £10 million) the party making the request sought bids from BAES and other parties. On several occasions, the contract which was the subject of the access request was not subsequently awarded to BAES. There were also several access requests which related to work to upgrade or modify BAES legacy products already in use by the MOD. We therefore consider that the evidence indicates that the Undertakings did not have a role in supporting actual or potential prime contractors in bidding for or performing MOD contracts.
- (e) If BAES (or a joint venture involving BAES) is the only credible prime contractor, the Undertakings have no role in supporting alternative prime contractors to bid for or perform MOD programmes.
- (f) Likewise, where there are several alternatives to BAES, the Undertakings have no role in supporting prime contractors to bid for or perform MOD programmes.
- (g) In addition, we have not received any evidence that the Undertakings have been used (i) in order to facilitate the award of a contract by the MOD to an alternative prime contractor which used BAES as a subcontractor; or (ii) in direct negotiations between the MOD and BAES. While it is in theory possible that the existence of the Undertakings may have influenced the outcome of processes involving the award of contracts by the MOD since the merger, if this was actually the case, we would have expected to see explicit evidence of this.

6.20 In summary, we have seen no evidence that indicates that the Undertakings have enabled other actual or potential prime contractors to bid for or win contracts relating to MOD programmes.

7. Economic framework and sector analysis

7.1 In this section, we first set out the economic and analytical framework for our assessment. We then present our sectoral analysis which uses this framework. We then conclude on whether the Undertakings remain appropriate.

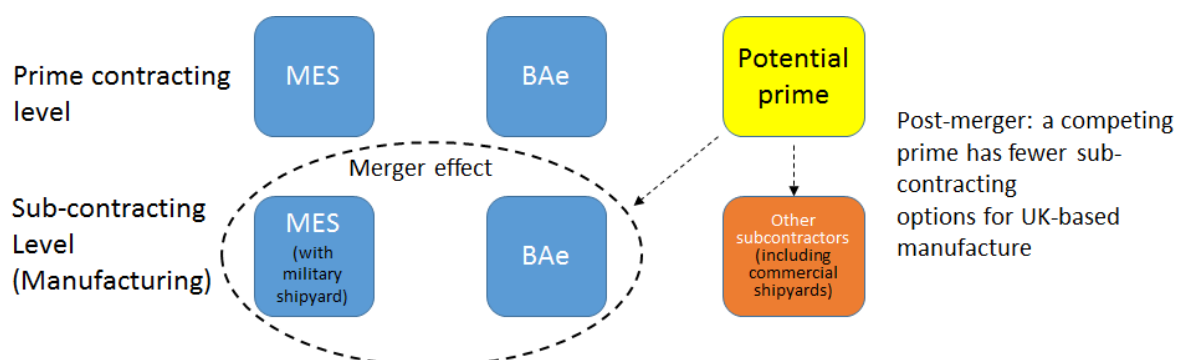
Economic framework for assessment

7.2 As described in Section 2, the effect of the BAES/MES merger was to create vertical and horizontal links at both the prime contracting and sub-contracting level. The aim of the Undertakings is to protect competition at the prime contracting level and address the concern that the merger of British Aerospace plc and MES could have resulted in the foreclosure of other prime contractors.

7.3 We use the warship building sector to illustrate this. Prior to the merger, there was a range of possibilities for competition to occur in relation to MOD warship programmes. For example, British Aerospace could have been the prime contractor using MES as a subcontractor or vice versa. Alternatively, another prime contractor could have teamed with MES shipyards to bid for an MOD contract, or could have teamed with British Aerospace (eg in relation to the supply of radar and combat systems (CS)) together with shipyards owned by other parties to bid for MOD programmes (thus potentially meeting MOD concerns regarding national security). See Figure 6 for illustration.

7.4 The merger led to a reduction in the number of onshore suppliers. This might have changed BAES' incentives to subcontract with alternative prime contractors. For potential prime contractors, the reduced range of onshore subcontractors and high barriers to entry in establishing their own onshore capabilities in the relevant areas might have made it difficult or impossible for them to compete with BAES for MOD prime contracts.

Figure 6: Illustration of merger effect for warships



Source: CMA analysis.

- 7.5 One of the main concerns was that the merger could have resulted in the foreclosure of other prime contractors. This could have taken the form of total foreclosure, where BAES refused to allow other prime contractors access to its resources (eg shipyards, manufacturing or sub-system capabilities), or partial foreclosure, where BAES provided access to its resources but on disadvantageous terms.
- 7.6 The Undertakings were designed to ensure that other potential prime contractors would be able to compete for MOD contracts in a prime contracting procurement model when BAES had essential resources.
- 7.7 In order for BAES to be able to foreclose other prime contractors, first, a competition needs to be held among potential prime contractors (ie the MOD needs to tender for prime contractors); and, secondly, there need to be credible actual or potential prime contractors to compete against BAES in the tender process.³⁷ If there is no competition or there are no other credible prime contractors, there is no opportunity for BAES to foreclose.
- 7.8 Before our sector analysis, we discuss how we define essential resources and the increasing use by the MOD of the alliance model.

Essential resources

- 7.9 In order for BAES to be able to foreclose, it would need to possess resources to which a potential prime contractor would need access in order to be able to compete for an MOD contract. The resources concerned would not necessarily have to be unique but 'essential resources' in the sense that alternatives would not be available at a price that allowed an efficient prime contractor to compete.

Alliance model

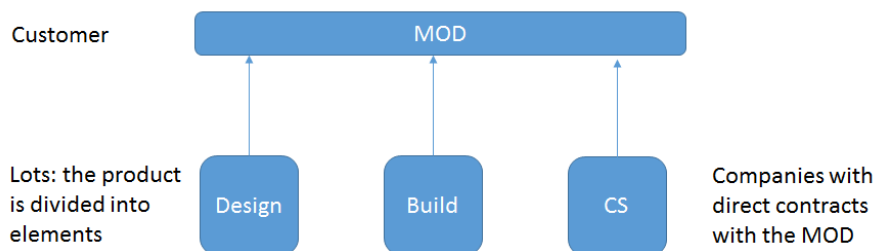
- 7.10 The alliance model is different from the prime contracting model in that each member of the alliance is responsible directly to MOD for its defined aspect of the programme or 'lot'.³⁸ This is illustrated in Figure 7, using warships as an example.

³⁷ This includes assessing whether suppliers with capability internationally (but with no UK base) are a credible alternative prime contractor to BAES.

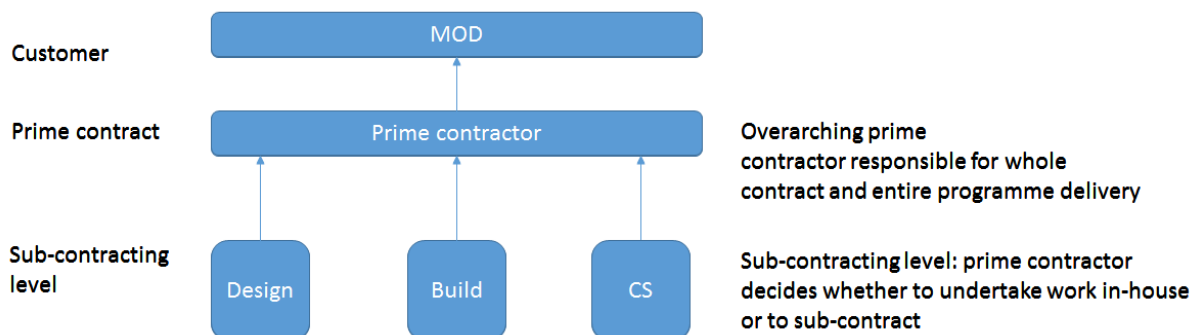
³⁸ The MOD has told us that a direct contract between the MOD and a supplier could be called a prime contract.

Figure 7: Illustration of alliance model and prime contracting model for warships

ALLIANCE MODEL



PRIME CONTRACTING MODEL



Source: CMA analysis.

- 7.11 We considered whether foreclosure is possible under the alliance model. We looked at whether the selection of alliance members is by competition. As described in Section 5, the main practical applications of the alliance model have been the aircraft carrier and submarine programmes.
- 7.12 In the evidence presented to us, we did not see examples of alliance models in the sectors that we reviewed where alliance members were selected by competition. [✂]
- 7.13 We considered whether (should the selection of alliance members be by competition), BAES would have the ability to foreclose under this model. To do this, we assessed whether BAES has essential resources as described above. We also assessed whether the design and sequencing of the procurement process under the alliance model would allow BAES to foreclose other prime contractors for a lot in a given programme. The incentive for BAES to do so would be to seek to obtain a larger share of a programme than it would otherwise obtain. Our findings are set out later in this section, in the sector analysis.

Cost transparency

- 7.14 During our review we considered whether, if the Undertakings were removed, cost transparency would provide protection against the possibility of partial

foreclosure, ie where a BAES company provides access to its resources, but on disadvantageous terms compared with the terms it would provide itself as prime contractor. We considered that, should the MOD choose to have a competition among prime contractors and should BAES participation be considered essential, then the MOD has a number of options to ensure cost transparency of the BAES component of the work and therefore protect competition among prime contractors.

- 7.15 BAES told us that the MOD has the ability to compare the costs put forward by BAES as a potential prime contractor, with the costs BAES offers as a sub-contractor to a competing potential prime contractor. The MOD said that cost transparency was available for single source contracts, but less visible in competitive situations and would need to be clearly laid out in any Invitation to Tender.

Analytical framework

- 7.16 For the Undertakings to remain appropriate, two conditions must hold:

- (a) There must be a likelihood that procurement will, in the future, be on a competitive basis (which, in turn, means that there must be alternative credible prime contractors) such that the Undertakings would be relevant. If there is no reasonable prospect of MOD competitively tendering contracts in a given area of defence spending, the Undertakings have no role in that area; and
- (b) BAES must have the ability and incentive to foreclose other potential prime contractors.

- 7.17 We are required to reach a view on whether we should advise the Secretary of State that, by reason of the changes of circumstances identified in Section 5, the Undertakings are no longer appropriate. In order to do so, we assess the changes of circumstances as they affect each sector and we establish what the changes of circumstances mean for (i) the likelihood of future procurement being by competitive tender and (ii) the ability and incentive of BAES to foreclose.

Analysis by sector

- 7.18 In this section we apply the analytical framework to the sectors identified by the MOD and BAES as areas in which the Undertakings are or could be relevant.

Maritime (complex warships, submarines)

Complex warships

- *Background*

- *BAES exclusivity under the TOBA*

7.19 Since the long-term agreement giving BAES exclusivity for design and build up until 2024 (the TOBA) relates to complex warships, we consider how complexity is defined and hence the types of warships that are covered by the TOBA.

7.20 The TOBA does not define the term complex. The MOD said that complexity is considered on a sliding scale and is determined by factors including the complexity of combat systems (CS) and structural requirements such as acoustic performance.

7.21 The MOD said that, for the purposes of the TOBA, the Type 26 frigate is complex. [✂]

- *Capacity*

7.22 The extent to which potential competitors have spare capacity for future warship programmes has relevance for evaluating whether the MOD will be able to put contracts out to competitive tender. If BAES is capacity constrained and there is capacity elsewhere, the MOD may look to source outside the TOBA.

7.23 [✂]

7.24 The Parker Report states that a number of UK shipyards have the necessary capacity to build the Type 31 general purpose frigate,³⁹ and that concurrent use of a number of these shipyards would enable the construction of the frigate in a much shorter timeframe compared with using only one shipyard.⁴⁰ The report recommends that BAES is not appointed as the lead company for the delivery of the Type 31 general purpose frigate (whether as the overarching prime contractor for the programme or as part of an alliance) due

³⁹ Parker refers to this as the Type 31e. The 'e' means that export flexibility is an inbuilt feature of the ship design, not a variant. This is consistent with his recommendation that the Type 31 general purpose frigate should be 'a modern...design on a standard platform which should provide a menu of choices to support exports and beat the competition'. See [Parker Report](#), p11.

⁴⁰ [Parker Report](#), p13.

to the heightened risks associated with building Type 26 frigates and Type 31 general purpose frigates in the same BAES shipyards.⁴¹

7.25 BAES considers it has the capacity to be the prime contractor for both these programmes even if they are run simultaneously. It said that it has capacity for the design and engineering of a new warship programme and provision of CS, because it is coming to the end of the engineering programme for the Type 26 frigate. If these two programmes were to run simultaneously, BAES' capacity to build both would be limited by the physical capacity of its facilities. BAES would therefore choose to outsource a significant amount of the construction (manufacturing blocks of distinct parts of the ship) to other shipyards [✂]⁴²

- *Assessment*

7.26 In order to determine whether there is a realistic prospect of the Undertakings being used in the foreseeable future in a competitive procurement process, we first look at whether competition among prime contractors is likely. We do this by assessing the MOD's approach to procurement; whether there are credible alternative prime contractors and whether the MOD would be able to revoke the TOBA.

7.27 We then analyse whether the Undertakings are needed to prevent foreclosure of other prime contractors by BAES. We do this by assessing whether BAES is likely to have the ability and incentive to foreclose.

- *Likelihood of competition for the Type 26 and Type 31 programmes*

- *MOD policy*

7.28 [✂]

7.29 The MOD is considering its future procurement policy generally and the recommendations of the Parker Report. The Parker Report recommends that BAES continues to build the Type 26 frigate, so does not recommend any change in the procurement approach for this programme, which reflects the current exclusive single source agreement (the TOBA).⁴³ The Parker Report recommends that an alternative prime contractor (not BAES) or alliance is chosen for the Type 31 general purpose frigate.⁴⁴

⁴¹ [Parker Report](#), pp15–16.

⁴² [✂]

⁴³ [Parker Report](#), p15.

⁴⁴ [Parker Report](#), pp15–16.

- 7.30 BAES' view is that the Parker Report does not depart from what it sees as the current MOD practice of using either single source or alliance models for the delivery of warship programmes. [✂]
- 7.31 We note that the MOD has not yet decided on its future procurement policy following the Parker Report.
- *Credible alternative prime contractors*
- 7.32 The information we received indicates that there are several credible potential alternative prime contractors to BAES. For the Type 31 general purpose frigate, we consider that there are several alternative prime contractors including Babcock International. It is not clear whether all these companies would have capability for the most complex warships, such as the Type 26 frigate series. However, as noted above, it is likely that BAES will, in any case, remain responsible for this programme.
- 7.33 Babcock International appears to be a credible prime contractor for complex warship programmes. [✂]. The Parker Report said that Babcock International possesses facilities (Rosyth shipyard) and has experience of building large naval ships. This suggests that Babcock International has capability across a number of areas, making it a credible prime contractor.
- 7.34 Thales appears to be a credible prime contractor for complex warship programmes. [✂]
- 7.35 [✂]
- 7.36 Cammell Laird said that it could potentially be a prime contractor for a MOD complex warship programme. [✂] submitted views in support of this assessment, noting this would be for a less complex warship programme. Cammell Laird has experience in block build for the aircraft carrier programme and has experience in integrating combat systems onto ships, although it has no experience of installing a major CS. Cammell Laird is the prime contractor for the Sir David Attenborough, a new-build vessel for the Natural Environment Research Council, which we were told has specifications (such as size, speed and system complexity) not dissimilar to those applicable to a frigate.
- 7.37 The Parker Report notes that Cammell Laird (Merseyside shipyard), A&P (Tyneside shipyard) and H&W (Belfast shipyard) possess facilities physically

capable of construction, but none has recent experience of building large naval ships.⁴⁵

- *Revoking long-term agreements*

- 7.38 We have considered whether the MOD might seek to revoke the exclusive long-term agreement with BAES (the TOBA).
- 7.39 The MOD and BAES told us that the MOD would be able to procure complex warships outside the TOBA, should BAES not be able to demonstrate to MOD's reasonable satisfaction that BAES' tendered prices represented value for money.
- 7.40 The MOD informed us that it does not always obtain comparator costings for value for money assessments against supplier cost estimates. The MOD said that its value for money assessment may be based on cost estimates from parameter-driven models using equipment characteristics (for example, size, power, weapons) to impute a cost and may also assess the outturn of previous projects against forecasted costs. We are not persuaded that this demonstrates that the MOD is likely to source outside the TOBA in the foreseeable future in relation to current warship programmes.

- *Conclusion on likelihood of competition*

- 7.41 BAES is the prime contractor for the Type 26 frigate programme under a contract that was awarded pursuant to the TOBA. We consider that it is unlikely that there will be competition for the role of prime contractor for the Type 26 frigate in the future because the MOD has not indicated that it has any intention of procuring outside the TOBA and the Parker Report does not recommend any change from the current position. Our conclusion takes into account the Parker Report and the government announcements in November 2016 on Type 26 frigate contracts to be issued to BAES for these frigates to be built at its shipyards on the Clyde.
- 7.42 For the Type 31 general purpose frigate programme, no decision has been taken by the MOD as to whether or not the procurement will be competitive. [§]. Should the MOD not continue to contract with BAES pursuant to TOBA, there appear to be several alternative prime contractors for the Type 31 general purpose frigate.

⁴⁵ [Parker Report](#), Annex (Figure 4).

- *Ability and incentive to foreclose*

7.43 In this section we set out the evidence on whether BAES is likely to have the ability and incentive to foreclose in the event (which we consider unlikely) that a major warship programme is put out to competitive tender. We assess the following aspects:

- (a) whether BAES has essential resources that alternative prime contractors would not be able to source from elsewhere (or would find it very costly to do so); and
- (b) what type of procurement models are likely to be chosen (prime contract, alliance models etc) and what this would likely mean for BAES' ability to foreclose.

- *Essential resources*

7.44 The MOD said that BAES possesses essential capabilities in 'higher end' engineering related to noise performance and some classified aspects which are relevant for the Type 26 frigate but not for the Type 31 general purpose frigate.

7.45 [✂]

7.46 BAES said that while it has capability in CS, there are other CS suppliers for less complex ships such as the Type 31 general purpose frigate (these ships require less complex CS than the Type 26 frigate). BAES therefore does not have essential resources in CS for less complex ships such as the Type 31 general purpose frigate. BAES said that Thales has a CS integration capability that it could make available onshore and that there are other large US suppliers.

7.47 Thales considered that the adoption of a non-BAES CS by the MOD would involve switching costs in terms of training and adaptation. Hence, it considered that potential prime contractors may require access to BAES' CS to bid for Type 31 general purpose frigates on a fair basis with BAES.

7.48 Cammell Laird told us that there are CS suppliers other than BAES that a prime contractor could use and that this capability could be obtained at an economic price. It said that Thales has strong CS capability internationally and acts as an alliance member for the current aircraft carrier programme. It also told us that there are a number of other CS suppliers available internationally that a UK prime contractor could use.

- 7.49 Rolls-Royce said that a prime contractor for an MOD complex warship programme could obtain CS from Lockheed Martin, Raytheon, Thales and BAES, depending on what type of capability would be needed, eg air warfare or anti-submarine warfare.
- 7.50 Leonardo told us that it has capabilities in naval CS and that it is interested in participating in UK naval programmes.
- 7.51 [REDACTED] Since the Undertakings were put in place, there have been significant investments by suppliers involved in the aircraft carrier programme. This investment has resulted in upgraded shipbuilding facilities at Cammell Laird, A&P Tyne, Appledore and Rosyth.
- 7.52 The report says that BAES could compete for the Type 31 general purpose frigate for specific components (eg CS, design support and manufacturing block build) if capacity is available.⁴⁶ We understand from this that, for the Type 31 general purpose frigate, there are options other than BAES for shipbuilding and CS. Evidence we have received from third parties supports this.
- 7.53 We consider that this evidence suggests that BAES does not have essential resources for less complex warships such as the Type 31 general purpose frigate but may have essential resources for more complex warships such as the Type 26 frigate. [REDACTED] Evidence from third parties shows that there are a number of CS suppliers, including Thales. The Parker Report appears to suggest that BAES is not critical for delivery of the Type 31 general purpose frigate programme.
- *Choice of procurement model*
- 7.54 [REDACTED]. We do not consider that BAES has the ability to foreclose under the alliance model, even if it had essential resources, for the following reasons.
- 7.55 Firstly, we do not consider that BAES could foreclose suppliers for parts of the product where there are alternatives to BAES. We have seen evidence that contracts for recent warship programmes have been issued by the MOD in a sequential process whereby the contract for design is issued first and subsequent contracts for build and CS are issued later. It is difficult to see how BAES could use any market power it has in relation to one lot (eg CS), to

⁴⁶ [Parker Report](#), pp15–16.

foreclose prime contractors in another lot (eg design), given that lots are likely to be issued separately and sequentially.⁴⁷

7.56 Secondly, we do not consider that BAES could foreclose alternative suppliers within a given lot as should the MOD consider some of BAES' resources to be essential ([X]), in our view, it is likely that it will divide the product and award a single source contract to BAES for the part of the product in respect of which BAES may have essential resources. If this is the case, the Undertakings will have no relevance. There would only be a cause for concern if the design of the alliance model was such that foreclosure could occur. However, as discussed previously, we are not persuaded that this situation will arise.

- *Conclusion – warships*

7.57 We consider it unlikely that the MOD will seek to involve other potential prime contractors in relation to the Type 26 frigate programme and, accordingly, we consider that the Undertakings are not relevant in respect of this programme.

7.58 As regards the Type 31 general purpose frigate, the Parker Report envisages the possibility of competitive procurement. The MOD has not told us whether it will use a competitive process and the current policy in relation to complex warships is single source procurement pursuant to the TOBA. Whether BAES has the ability to foreclose depends on whether it holds essential resources required by other potential prime contractors that cannot be procured elsewhere at a price that allows them to compete. The Parker Report appears to say that BAES is not critical for delivery of the Type 31 general purpose frigate and evidence from third parties corroborates this.

7.59 For the Type 31 general purpose frigate, therefore, we consider that BAES will not be in a position to foreclose competition.

7.60 Our finding is therefore that, in relation to the procurement of complex warships, by reason of the changes of circumstances described above and in Section 5, the Undertakings are no longer appropriate.

⁴⁷ Theoretically, the only way BAES could foreclose in this situation is within a lot. This could arise only if BAES had essential resources in only some aspects of the lot at the sub-contracting level, and there were other suppliers that would have the potential to be a prime contractor for that lot. However we received no evidence that, in practice this is likely to occur. We have not found that BAES has essential resources. Should BAES have essential resources then the MOD would be able to design the tender to separate out elements where BAES holds a monopoly from elements where it faces potential competition.

Submarines

- *Background*

- 7.61 As set out in Section 5, Submarine programmes are delivered by BAES, Rolls-Royce, Babcock International (Tier 1 companies) and the MOD, which collaborates in what is known as the Submarine Enterprise.
- 7.62 BAES told us that the Tier 1 companies pool their resources to work together to deliver the most cost-effective, sustainable solutions and to guarantee the UK's sovereign capability. It told us that this approach is underpinned by the Submarines PPEO and SEPP and that the MOD contracts with each Tier 1 company on a single source basis. BAES also told us that this approach addresses inefficiencies arising from lack of integration between the Tier 1 companies as well as a number of factors unique to the submarine sector, including a declining workload in an area of high fixed costs, and the challenges of commissioning and decommissioning nuclear submarines and handling and storing radioactive waste.
- 7.63 BAES told us that the MOD is funding the construction of BAES' facilities⁴⁸ to build the Dreadnought class submarine pursuant to the SEPP. BAES said that this agreement commits the MOD to funding BAES facilities provided that BAES achieves value for money.

- *Assessment*

- *Likelihood of competition*
 - *Co-operative agreements*

- 7.64 For as long as co-operative single source agreements apply in this sector, the Undertakings which relate to competition among prime contractors are not relevant. In this section, we explore the legislative and regulatory basis for the co-operative working agreements currently in place and the circumstances in which these have been agreed.
- 7.65 As set out in Section 5, the 2008 Public Policy Exclusion Order ('Submarine PPEO') disapplies the Chapter 1 prohibition of the Competition Act 1998 in relation to design, build and maintenance of nuclear submarines developed or manufactured for the Secretary of State. The Submarine PPEO means that,

⁴⁸ Facilities in Barrow-in-Furness

where there are exceptional and compelling reasons of public policy to do so, the Secretary of State may exclude agreements or descriptions of agreements from Competition Act prohibitions.⁴⁹ Thus the Submarine PPEO facilitates agreements like the SEPP. Accordingly, for as long as the Submarine PPEO remains in force, it will be possible for firms with core competences that meet the criteria set out in the Submarine PPEO to enter into agreements of this type.

7.66 The Submarine PPEO is not specific to the three companies currently part of the SEPP. The provisions of the Submarine PPEO can apply to other parties.

7.67 The Submarine PPEO does not require that the future provision of nuclear submarines is always carried out by way of such agreements but the Submarine PPEO was made because the Secretary of State was 'satisfied that there are exceptional and compelling reasons of public policy why the prohibition contained in Chapter 1 of CA98 ought not to apply to agreements of [this] description'.

- *Credible alternative prime contractors*

7.68 We consider that the prime contracting model is unlikely to be used in relation to submarines on a basis which would make the Undertakings relevant. BAES told us that each of the Tier 1 companies is the only supplier in the UK with the necessary competence in the relevant area. The MOD also said that BAES' capabilities in UK submarine design and manufacture can only be used for that purpose. This means that BAES could not leverage its market power in design and manufacture into other elements of submarine building.

7.69 Furthermore, BAES submitted that making such essential resources available to an overall prime contractor is not a model that has been used or works anywhere in the world (including the US, which has a large submarine-building programme).

7.70 The MOD said it is exploring the use of an alliance model for the Dreadnought programme. BAES told us that it recently concluded a non-legally binding agreement with the MOD and Rolls-Royce, based on the alliance model, for the design and manufacture of Dreadnought class submarines.⁵⁰ BAES said that work is ongoing to finalise the proposed alliance arrangements between

⁴⁹ Chapter I of the Competition Act 1998 prohibits agreements between Undertakings, decisions by associations or concerted practices which may affect trade within the UK, and have as their object or effect the prevention, restriction or distortion of competition within the UK.

⁵⁰ Announced in the BAES 2016 financial results

the parties to make these legally binding. The MOD said that it is not intending to replace BAES in relation to the Dreadnought programme.

7.71 Regarding procurement from offshore companies, the MOD said that this is not permitted under current policy and legislation. This was confirmed by BAES.

7.72 The submissions we have received indicate that there are no alternative credible prime contractors to BAES and the other Tier 1 suppliers in the UK for their respective roles in relation to submarines and it is unlikely that offshore prime contractors could supply the MOD given MOD policy regarding national security.

- *Ability and incentive to foreclose*

7.73 We consider that BAES does not have the ability to foreclose for two reasons. First, there are no other credible prime contractors in the UK which might need access to BAES' resources. Second, as set out in Section 3, current submarine programmes have been divided into three distinct capabilities (design and build, the nuclear reactor and support work). So, although BAES has essential resources in terms of submarine design and build (and therefore has a direct contract with the MOD in relation to the area in which it has competence), it cannot leverage this position into the other areas in which it does not have core competence.⁵¹

7.74 We note also that BAES said that the MOD has the ability to protect submarine programmes through contractual provisions where the company did not deliver certain key performance targets. [✂]

- *Conclusion – submarines*

7.75 We considered whether competition among prime contractors is likely. The evidence provided by the MOD shows that there are no other credible prime contractors in the UK in relation to the areas in which the Tier 1 suppliers have competence. We consider that it is very unlikely that the MOD would consider contracting with non-UK suppliers in relation to submarine programmes and the MOD has told us it is not intending to replace BAES in relation to the existing submarine programmes. We therefore consider that competition among prime contractors is unlikely for the foreseeable future.

⁵¹ In addition, sub-contractors currently supplying BAES do not have capability to be a prime contractor / to have a direct contract with the MOD in areas where BAES has a direct contract so foreclosure is not possible.

- 7.76 We also considered whether BAES would have the ability to foreclose. We note, first, that the change of circumstances set out in Section 5 (for example the 2011 SEPP agreement) indicate a common view by the MOD and BAES that direct contracts between the MOD and Tier 1 companies for their distinct capabilities are a more effective and efficient model for delivery of the submarine programme.
- 7.77 Secondly, we note that BAES and the other two Tier 1 companies have distinct capabilities in submarine building and each company has a direct contract with the MOD in relation to the area in which it has competence. We find, therefore, that the structure of the contract means that BAES cannot leverage its position into the other areas in which it does not have core competence. Accordingly, we find that BAES does not have the ability to foreclose under the alliance model.
- 7.78 Our finding is therefore that, by reason of the changes of circumstances described above and in Section 5, the Undertakings are no longer appropriate in relation to the procurement of submarines.

Combat aircraft

Fixed-wing combat aircraft

- 7.79 BAES told us that the MOD's equipment programme over the next ten years does not include a commitment to any new manned or fixed wing aircraft programmes that would require access to either the capabilities or production capacity of BAES. [REDACTED]. Hence, the possibility that there would be scope for the Undertakings to be used to facilitate competition among prime contractors is speculative and, in any case, could only arise a long time into the future.

- *Assessment*

- 7.80 Nevertheless, we have assessed the likelihood of future competition in combat air, including whether there are credible alternative prime contractors. We have also assessed BAES' ability and incentive to foreclose other potential prime contractors, before concluding on whether the Undertakings remain appropriate in this sector.

- *Likelihood of competition*

- *MOD future procurement policy*

- 7.81 The market for fixed-wing combat aircraft is characterised by large and infrequent contracts.

- 7.82 The long-term future for combat air is centred on the Future Combat Air System (FCAS). FCAS will be the successor to Typhoon ([✂]) and may include unmanned aircraft. The UK and French governments have funded a joint project to develop unmanned prototype combat aircraft.⁵² However, the MOD told us that consideration of options for FCAS is at a very early stage, [✂].
- 7.83 In the next SDSR, due in 2020, the UK government may take decisions on what kind of combat air capability will succeed the present capability, and how that should be sourced (onshore or offshore). The SDSR will consider how to retain UK skills and manufacturing capability in the context that combat air programmes are generally reducing in number and also tending to be delivered through models involving other governments, such as the US government (Lockheed Martin is the lead contractor for the F-35 with BAES taking about a 10-15% share of the work by value as a sub-contractor).
- 7.84 Given the uncertainty about what model it will use for future procurement of combat aircraft, MOD would prefer the Undertakings to be retained in relation to this area.
- 7.85 [✂].
- 7.86 BAES said that, in recent years, the MOD has procured unmanned aircraft from companies outside the UK, and competing prime contractors can and do obtain capabilities from suppliers outside the UK, such as Watchkeeper (Thales) and Reaper (General Atomics).
- *Credible alternative prime contractors*
- 7.87 Currently, BAES has the sole onshore UK production capability for combat aircraft, including unmanned aircraft, and is the only UK systems integrator and prime contractor. This was the case prior to the merger and remains the case today. Accordingly, while the merger created a vertical link (with the acquisition of MES' avionics business), it did not increase BAES' (horizontal) market position as a prime contractor.
- 7.88 The MOD acknowledged that, in the combat air sector, there has been offshore procurement, in particular through the F-35 programme where the UK MOD has been involved at an early stage of development and invested in that development. The F-35 collaborative programme demonstrates the MOD's willingness to procure through an offshore (US) prime contractor with BAES

⁵² [News article](#)

taking on a subcontractor role. We note that this new arrangement has not relied on the use of the Undertakings.

- 7.89 The MOD's willingness to use offshore prime contractors suggests that this sector is increasingly open to competition from international suppliers. Potential competing prime contractors include Lockheed Martin and Leonardo.⁵³
- 7.90 The MOD noted nonetheless that 'it has clearly been a priority for past UK governments to maintain 'a degree of' onshore industrial capability'. For example, BAES played a leading role in the conception of Tornado and Typhoon, even though the subsequent development and production were contracted through an international consortium.
- 7.91 Historically, combat air programmes have been run internationally but participants have generally allocated the manufacturing to onshore manufacturers within the partner countries, with BAES being the manufacturer in the UK. This has been the case for the Tornado, Typhoon and now the F-35.
- 7.92 [REDACTED]. It is possible that, for reasons of industrial policy and/or national security, onshore design and manufacture may be required.
- 7.93 [REDACTED].
- 7.94 [REDACTED].
- 7.95 [REDACTED]. In the MOD's view, the Undertakings allow options to be considered that would otherwise not be available.
- 7.96 If the MOD did, in the future, seek to develop and manufacture combat aircraft onshore without recourse to international partners, there is a possibility that the Undertakings could be used to facilitate entry by a competing prime contractor (if there was one). However, this outcome appears speculative and we have seen no evidence that it might arise. Indeed, the UK/French joint FCAS project suggests that the international approach will continue in respect of the next generation of combat aircraft. The MOD has not provided any examples of firms which might choose to enter this sector as onshore prime contractors and we have not seen evidence of such entry to date. Barriers to entry appear significant and BAES has substantial incumbency advantages in terms of factors including expertise, engineering capability, production and testing facilities.

⁵³ Leonardo could bid using its aircraft design capabilities from Italy (it is part of the Eurofighter programme) Leonardo is also already teamed with BAES on FCAS .

- *Ability and incentive to foreclose*

7.97 BAES has onshore production facilities, engineering capabilities (facilities and people) and test facilities. The MOD described BAES as a key player, supplying just over 40% of MOD's procurement in the combat air sector. The remainder of the MOD's direct contracts in combat air are split across a large number of different suppliers, with the next largest suppliers being Rolls-Royce ([REDACTED]), Ascent ([REDACTED]), Thales ([REDACTED]) and Airbus ([REDACTED]).

7.98 [REDACTED].

7.99 [REDACTED].

7.100 [REDACTED] However, this would only be the case if future MOD policy were to be that manufacturing should be onshore, and potential competitors existed. As noted earlier, decisions on how manned/unmanned aircraft might be procured are a long way off.

7.101 There are other defence firms (outside the UK) operating in all the areas relevant for the manufacture of combat aircraft. [REDACTED]

7.102 Given the range of potential suppliers internationally, it seems unlikely that BAES would have the ability to foreclose other prime contractors, unless the MOD were to restrict itself to onshore contractors at both prime and sub-contracting levels for the next generation of combat aircraft and there were credible alternative prime contractors.

7.103 We asked the MOD to clarify which sectors are subject to national security interests such that the MOD is limited to UK suppliers and also to specify which, if any, essential resources BAES holds in the combat air sector that cannot be procured from other suppliers.

7.104 The MOD told us that there may be components in an aircraft that need to be manufactured in the UK, for example defence aid suites for aircraft and military communications systems. However, combat aircraft platforms were not referred to by the MOD in the same way as warships, and submarines in terms of the need for these to be manufactured onshore.

7.105 [REDACTED]

- *Conclusion – fixed-wing combat aircraft*

7.106 The current programme, the F-35, is US-led and will last until [REDACTED]. Hence there is no prospect of the Undertakings being used until a successor

programme starts, the nature of which is uncertain and, in any event, is likely to be decades away.

- 7.107 We note the continued use of international procurement through alliances or lead contractors (such as Lockheed Martin in the case of the F-35). We have seen no evidence to suggest that this procurement policy would be changed for the next generation of combat aircraft (manned or unmanned), particularly given funding pressures and the significantly higher development costs involved in 'going it alone'. A European collaboration or a US alliance (or lead contractor) are more likely scenarios.
- 7.108 Although there may be a question around future MOD policy in the combat air sector, and whether it will require new combat aircraft to be designed and manufactured in the UK, we have not seen evidence of credible alternative onshore competitors. Hence it is unlikely that the Undertakings would be used to facilitate entry by onshore prime contractors.
- 7.109 In any case, BAES does not appear to have essential resources in this sector that could not be procured from international competitors. [REDACTED]. This points in the direction of continued reliance on international procurement.
- 7.110 We consider it unlikely that MOD policy will shift towards onshore procurement in the combat air sector in the foreseeable future, or that it could run a competitive procurement process among credible onshore prime contractors. BAES is unlikely, therefore, to have the ability or incentive to foreclose and the probability of the Undertakings being relevant is very low. Our finding is therefore that, in relation to the procurement of combat aircraft, by reason of the changes of circumstances described above and in Section 5, the Undertakings are no longer appropriate.

Support services

- 7.111 The remainder of BAES' business in the combat air sector consists of the provision of support services.
- 7.112 [REDACTED]
- 7.113 In terms of current support activities, the MOD recently (in July 2016) signed a ten-year support arrangement with BAES in respect of the RAF's Typhoon aircraft.⁵⁴ This is a single source arrangement (ie not competitively tendered) that addresses future support of the Typhoon aircraft. [REDACTED]

⁵⁴ [MOD press notice: Typhoon support.](#)

7.114 [REDACTED].

7.115 [REDACTED].

- *Assessment*
 - *Likelihood of competition*

7.116 We have not seen evidence of combat air support work being competitively tendered among prime contractors. The most recently signed support contract is for the Typhoon and is a ten-year sole supply arrangement with BAES (the original manufacturer).

7.117 Nonetheless, the MOD told us that, in the support area, the Undertakings are important. The MOD's arguments appear to be based upon what might theoretically happen in the future.

7.118 [REDACTED]

- *Credible alternative prime contractors*

7.119 BAES said that it faces competition from a number of other providers including Babcock International and Marshalls. [REDACTED]. BAES described the support services sector as highly fragmented and competitive. It said that competitors in the UK could bid for MOD work without recourse to BAES.

7.120 However, we note that, while it appears to be the case that another party could bid for elements of support work eg where that party is the original equipment manufacturer of a subsystem that is integrated on the aircraft, it is unlikely that any party other than BAES could fulfil the bulk of support work needed for the Typhoon, given that it holds the design authority (ie the intellectual property) for the aircraft. It seems unlikely, therefore, that there could be a credible alternative prime contractor for Typhoon support work.

7.121 BAES' view was that the MOD could opt for a European solution, given that the Typhoon is a European programme, or take the work in-house. Third party evidence that we have obtained indicates, however, that it would be difficult for another supplier to take over the support work. BAES acknowledged that it would be difficult for another contractor to step in at a later stage of an established programme when another company has the design authority and a thorough understanding of how the platform operates.

- *Ability and incentive to foreclose*

7.122 In the case of Typhoon, where BAES is the design authority for the aircraft, it seems unlikely that there would be any credible alternative prime contractors. Furthermore, the MOD has recently signed a ten-year contract with BAES for the support of the Typhoon.

7.123 It is possible that, if the MOD divided the support contract into smaller elements, there could be competition for some elements of the support work. It does not appear that the Undertakings would be required to facilitate this.

7.124 For the support of the F-35s, there appears to be a range of possibilities being considered, including participating in a global support programme. There is no evidence that BAES has any ability to foreclose in this area.

- *Conclusion – combat air support*

7.125 For the Typhoon, it is unlikely that any other prime contractor could fulfil the support contract, given that BAES has the design authority for the aircraft. Moreover, the MOD recently signed a ten-year sole supply agreement for Typhoon support. Therefore, we consider that the Undertakings will not be relevant in the foreseeable future.

7.126 For the support of the F-35, the options appear to be wider, including [✂]. There is no evidence to suggest BAES has any ability to foreclose competitors.

7.127 Our finding is therefore that because of the changes of circumstances described in Section 5 and circumstances described above the Undertakings are no longer appropriate in relation to the procurement of combat air support.

Munitions

7.128 Our assessment focuses on munitions covered by the MASS partnering agreement. For munitions not covered by the MASS partnering agreement, the MOD told us that onshore provision is not a requirement and there are alternatives to BAES internationally.^{55,56} The MOD has not raised concerns about munitions not covered by the MASS partnering agreement.

⁵⁵ See Section 3.

⁵⁶ BAES submitted that competing prime contractors can obtain capabilities from a wide range of other suppliers, so access to BAES capabilities is not required.

Background

7.129 In order to provide background for our assessment, we first summarise the findings of the 2005 Defence Industrial Strategy, which described key aspects of the MOD's munitions requirements and informed the MOD's MASS partnering agreement with BAES. We then consider the MOD's review, called Project Abel, which is assessing its future procurement strategy for munitions.

- *2005 Defence Industrial Strategy*

7.130 The MOD told us that the 2005 Defence Industrial Strategy recognised that security of supply remained an important consideration in procuring general munitions. It identified the following key aspects:

- (a) need to retain an onshore Design Authority;
- (b) capability to develop munitions for specific purposes to match UK doctrines;
- (c) need to retain a substantive flexible fill, assembly and pack capability in the UK, together with specialist steel forging, subject to this providing value for money; and
- (d) to retain small arms ammunition manufacture in the UK, but not at any cost.

7.131 The MOD said that, in response to this strategy, the MOD and BAES entered into the long-term MASS partnering agreement.

7.132 Both the MOD and BAES told us that the MASS partnering agreement has had the effect of securing national supply in respect of munitions deemed important for national security as well as facilitating the modernisation of UK munitions capability and improving industrial efficiency. BAES said that MASS was agreed in response to the December 2005 Defence Industrial White Paper,⁵⁷ which recognised that there would be substantial overcapacity in UK munitions production facilities and so there was a need for consolidation and the creation of long-term partnerships to incentivise industry to reduce costs and increase efficiency.

⁵⁷ [December 2005 Defence Industrial White Paper \(December 2005\)](#)

- *Project Abel*

7.133 The MOD is currently conducting a review (Project Abel) to determine its future munitions procurement strategy. The MOD is in discussion with 15 companies to assess whether different segments of munitions currently supplied through the MASS partnering agreement could be supplied by other firms. The MOD told us that it does not yet know whether any potential competitors would rely on the Undertakings to bid for munitions programmes, should the MOD decide to procure through competitive tender. The MOD also told us that, following the assessment phase of Project Abel (expected to run to the end of 2018), the MOD will be in an informed position to understand whether the Undertakings would be required to support any competing prime contractors.

Assessment

- *Likelihood of competition*
 - *Credible alternative prime contractors*

7.134 For munitions covered by the MASS agreement, there appear to be no other credible onshore prime contractors.

7.135 The MOD told us that having onshore production facilities has traditionally been an important factor determining whether a firm is a credible prime contractor to the MOD for supply of munitions covered by the MASS agreement. The MOD said that BAES is currently the only supplier with onshore production capability and facilities.

7.136 Both BAES and the MOD told us that there are alternative suppliers operating in some segments covered by the MASS partnering agreement. BAES told us that a number of offshore companies (such as [REDACTED]) supply products in the areas in which BAES currently operates. BAES also said that, with investment, [REDACTED] may have the potential to act as a prime contractor. [REDACTED].

7.137 Pending the outcome of the Project Abel review, the MOD was unable to say whether an offshore supplier could be a credible alternative prime contractor.⁵⁸

⁵⁸ The MOD told us that BAES onshore production capability for a number of products was important for performing MOD prime contracts.

- *Ability and incentive to foreclose*

7.138 For munitions covered by the MASS partnering agreement, we do not consider that BAES has the ability to foreclose because there are no other credible prime contractors in the UK. We consider it unlikely that the prime contracting and subcontracting model would be applied in this area such that an alternative prime contractor would sub-contract relevant parts of the process to BAES. We set out the relevant evidence we received below.

7.139 MOD said that BAES has a number of capabilities and that no other company has the facilities in the UK necessary to produce munitions covered by the MASS partnering agreement. The MOD would like to retain the Undertakings so that potential alternative prime contractors from outside the UK could use BAES' facilities.

7.140 [REDACTED].

7.141 BAES said that, should the MOD change its requirement for onshore provision, the MOD could choose to procure bomb-filling capabilities in the international market.

7.142 BAES told us that prime contractor and subcontractor roles in munitions do not apply as they do in the maritime and combat air sectors. It told us that there are many suppliers that are able to meet elements of the MOD's overall requirements.

7.143 We therefore consider that the prime contractor / subcontractor model does not apply in munitions.

Conclusion – munitions

7.144 There is little or no possibility of the Undertakings being used in relation to munitions covered by the single source MASS partnering agreement in the period up to 2022. The MOD is carrying out Project Abel to inform its procurement strategy after the MASS partnering agreement ends.

7.145 Regarding the prospects for munitions procurement after 2022, we note that there appear to be no credible alternative UK onshore prime contractors. The absence of competitors is due (at least in part) to the single source approach MOD has taken to procurement. It is not clear to what extent the supply of these munitions would support a number of suppliers. We were told by both BAES and the MOD that there are potential offshore suppliers of the munitions BAES currently supplies but the MOD has not decided whether it would be willing to procure offshore.

7.146 Although BAES appears to have essential resources for the production of munitions covered by the MASS partnering agreement, we consider that it is unlikely that the prime contractor / subcontractor model would be applied for these products. [✂].

7.147 Our finding is that, by reason of the changes of circumstances described above and in Section 5, the Undertakings are no longer appropriate in relation to the procurement of munitions.

Other sectors

7.148 Finally, we considered whether there were other sectors where the Undertakings might be relevant but which had not been raised by the MOD or BAES and which the OFT had not identified as being potentially relevant.

7.149 In the land vehicle sector, the MOD procures from a wide range of sources and BAES has sold or closed most of its production capabilities for combat vehicles in the UK. We therefore consider that there is no case for retaining the Undertakings in relation to this sector.

7.150 In the cyber-security sector, BAES acquired Detica (now BAES Applied Intelligence Limited) in 2008. Although this business is covered by the Undertakings, this area was clearly not a concern at the time they were accepted. In addition, we understand that there are many other options open to the MOD in this area and so the Undertakings do not have a role in preserving the MOD's ability to secure competitive tenders.

8. Conclusion on advice to the Secretary of State

- 8.1 In the preceding sections we have set out our conclusions on the changes of circumstances (see paragraph 5.31) and our assessment in relation to each of the sectors where the Undertakings could be most relevant, and considered whether there were other sectors where the Undertakings might have a role:
- (a) Complex warships (see paragraphs 7.57 to 7.60).
 - (b) Submarines (see paragraphs 7.75 to 7.78).
 - (c) Combat aircraft (see paragraphs 7.125 to 7.127).
 - (d) Munitions (see paragraphs 7.144 to 7.147).
 - (e) Other sectors (see paragraphs 7.148 to 7.150).
- 8.2 For the reasons set out therein, we therefore advise the Secretary of State that there have been relevant changes of circumstances such that the Undertakings are no longer appropriate. Accordingly we advise that BAES should be released from the Undertakings.

Annex 1: Extracts from relevant legislation

Fair Trading Act 1973

Section 69 (sets out the statutory test originally applied)

Different kinds of merger reference

- (1) Subject to the following provisions of this Part of this Act, on a merger reference the Commission shall investigate and report on the questions: -
 - (a) whether a merger situation qualifying for investigation has been created, and
 - (b) if so, whether the creation of that situation operates, or may be expected to operate, against the public interest.

Section 75 G (sets out the process for acceptance of undertakings in lieu)

- (1) Where: -
 - (a) the Secretary of State has power to make a merger reference to the Commission under section 64 or 75 of this Act,
 - (b) the Director has made a recommendation to the Secretary of State under s76 of this Act that such a reference should be made, and
 - (c) the Director has (in making that recommendation or subsequently) given advice to the Secretary of State specifying particular effects adverse to the public interest which in his opinion the creation of the merger situation qualifying for investigation may have or might be expected to have,

the Secretary of State may, instead of making a merger reference to the Commission, accept from such of the parties concerned as he considers appropriate undertakings....to take specified action which the Secretary of State considers appropriate to remedy or prevent the effects adverse to the public interest specified in the advice.

Section 75J (sets out the review process)

Where an undertaking has been accepted by the Secretary of State under s75G of this Act, it shall be the duty of the Director: -

- (a) to keep under review the carrying out of the undertaking, and from time to time consider whether, by reason of any change of circumstances, the undertaking is no longer appropriate and either: -

- (i) one or more of the parties to it can be released from it, or
 - (ii) it needs to be varied or to be superseded by a new undertaking,
and
- (b) if it appears to him that ...any person can be so released or that the undertaking needs to be varied or superseded, to give such advice to the Secretary of State as he may think proper in the circumstances.

Section 76 (sets out the role of the DGFT re mergers)

(1) It shall be the duty of the Director: -

- (a) to take all such steps as are reasonably practicable for keeping himself informed about actual or prospective arrangements or transactions which may constitute or result in the creation of merger situations qualifying for investigation, and
- (b) to make recommendations to the Secretary of State as to any action under this Part of the Act which in the opinion of the Director it would be expedient for the Secretary of State to take in relation to any such arrangements or transactions.

Enterprise Act 2002

Schedule 24 (Transitional and transitory provisions and savings)

Para 13

Merger references

13(1) Subject to paragraphs 15 to 18, the old law shall continue to apply where—

- (a) two or more enterprises have ceased to be distinct enterprises (within the meaning of Part 5 of the 1973 Act); and
- (b) the cessation has occurred before the appointed day.

(2) Subject to sub-paragraphs (3), (4) and (5) and paragraphs 15 to 18, the old law shall continue to apply in relation to any relevant arrangements which were in progress or in contemplation before the appointed day and are in progress or in

contemplation on that day and (if events so require) the actual results of those arrangements where, before the appointed day—

(a) a merger notice was given, and not rejected under section 75B(7) of the 1973 Act or withdrawn, in relation to the arrangements;

(b) no merger notice was so given but, in relation to the arrangements—

(i) a reference was made under section 75 of the 1973 Act;

(ii) undertakings were accepted under section 75G of that Act; or

(iii) a decision was made by the Secretary of State neither to make a reference under section 75 of that Act nor to accept undertakings under section 75G of that Act; or

(c) a merger notice was so given, was rejected under section 75B(7) of the 1973 Act or withdrawn, paragraph (a) does not apply in relation to a different merger notice given in relation to the arrangements and, in relation to the arrangements, paragraph (b)(i), (ii) or (iii) applies.

(3) Subject to sub-paragraph (8), the new law shall, in a case of the kind mentioned in sub-paragraph (2)(a), apply in relation to any relevant arrangements and (if events so require) the actual results of those arrangements if, on or after the appointed day, a merger notice is rejected under section 75B(7) of the 1973 Act or withdrawn in relation to the arrangements.

(4) Subject to sub-paragraph (8), the new law shall, in a case of the kind mentioned in sub-paragraph (2)(a), apply in relation to any relevant arrangements and (if events so require) the actual results of those arrangements if—

(a) the making of a reference under section 64 or 75 of the 1973 Act in relation to those arrangements and (if events so require) the actual results of those arrangements was, immediately before the appointed day and by virtue of section 75C(1)(c), (e) or (g) of that Act, not prevented;

(b) the period for considering the merger notice has expired (whether before, on or after the appointed day); and

(c) no reference has been made under section 64 or 75 of the 1973 Act and no undertakings have been accepted under section 75G of that Act.

(5) Subject to sub-paragraph (8), the new law shall, in a case of the kind mentioned in sub-paragraph (2)(a), apply in relation to any relevant arrangements and (if events so require) the actual results of those arrangements if—

(a) the making of a reference under section 64 or 75 of the 1973 Act in relation to those arrangements and (if events so require) the actual results of those arrangements becomes, on or after the appointed day and by virtue of section 75C(1)(b), (c), (d), (e) or (g) of that Act, not prevented;

(b) the period for considering the merger notice has expired (whether before, on or after the appointed day); and

(c) no reference has been made under section 64 or 75 of the 1973 Act and no undertakings have been accepted under section 75G of that Act.

(6) Subject to sub-paragraph (8), the new law shall apply in relation to relevant arrangements and (if events so require) the actual results of those arrangements if—

(a) the arrangements were in progress or in contemplation before the appointed day and are in progress or in contemplation on that day;

(b) before the appointed day and in relation to the arrangements—

(i) no reference was made under section 75 of the 1973 Act;

(ii) no undertakings were accepted under section 75G of that Act; and

(iii) a decision neither to make a reference under section 75 of that Act nor to accept undertakings under section 75G of that Act was not made by the Secretary of State; and

(c) no merger notice was given to the Director or the OFT before that day in relation to the arrangements.

(7) Subject to sub-paragraph (8), the new law shall, in a case of the kind mentioned in sub-paragraph (2)(c) (excluding the words from “and” to the end), apply in relation to any relevant arrangements and (if events so require) the actual results of those arrangements if, in relation to the arrangements, sub-paragraph (2)(b)(i), (ii) and (iii) do not apply.

(8) Subject to paragraphs 15 to 18, the old law shall continue to apply in relation to concentrations with a Community dimension (within the meaning of the European Merger Regulations) notified before the appointed day to the European Commission under article 4 of those Regulations.

(9) In this paragraph references to relevant arrangements which are in progress or in contemplation on the appointed day include references to the actual results of those arrangements if the arrangements were in progress or in contemplation immediately before the appointed day and have, at the beginning of the appointed day, resulted

in two or more enterprises ceasing to be distinct enterprises (within the meaning of Part 5 of the 1973 Act).

(10) In this paragraph—

- “the European Merger Regulations” has the meaning given by section 129(1);
- “merger notice” means a notice under section 75A(1) of the 1973 Act;
- “the new law” means Part 3 of this Act and any related provision of law (including, in particular, any modification made under section 276(2) to that Part or any such provision);
- “the old law” means sections 64 to 75K of the 1973 Act and any related provision of law (including, in particular, any modification made under section 276(2) to those sections or any such provision); and
- “relevant arrangements” means arrangements which might result in two or more enterprises ceasing to be distinct enterprises (within the meaning of Part 5 of the 1973 Act).

Para. 16

(1) Sub-paragraph (2) applies to any undertaking—

(a) accepted (whether before, on or after the appointed day) by a Minister of the Crown—

(i) in pursuance of a proposal under section 56A of the 1973 Act;
or

(ii) under section 56F, 75G or 88 of that Act; and

(b) of a description specified in an order made by the Secretary of State under this paragraph.

(2) An undertaking to which this sub-paragraph applies may be—

(a) superseded by a new undertaking accepted by the [CMA] ¹ under this paragraph;

(b) varied by an undertaking accepted by the [CMA] ¹ under this paragraph; or

(c) released by the [CMA] ¹.

- (3) Subject to sub-paragraph (4) and any provision made under section 276(2) , the power of the [CMA] ¹ under this paragraph to supersede, vary or release an undertaking is exercisable in the same circumstances, and on the same terms and conditions, as the power of the Minister concerned to supersede, vary or release the undertaking would be exercisable under the 1973 Act.
- (4) The duty under section 75J(b) of the 1973 Act to give advice shall be a duty of the [CMA] ² to consider what action (if any) it should take.
- (5) Where the [CMA] ³ has the power by virtue of this paragraph to supersede, vary or release an undertaking accepted by a Minister of the Crown—
- (a) in pursuance of a proposal under section 56A of the 1973 Act; or
 - (b) under section 56F, 75G or 88 of that Act;
- the Minister concerned shall accordingly cease to have the power under that Act to supersede, vary or release the undertaking.
- [(6) The functions of the CMA under this paragraph are to be carried out on its behalf—
- (a) in the case of an undertaking accepted in pursuance of a proposal under section 56A of the 1973 Act or an undertaking under section 56F or 75G of that Act, by the CMA Board (within the meaning of Schedule 4 to the Enterprise and Regulatory Reform Act 2013), and
 - (b) in the case of an undertaking accepted under section 88 of that Act, by a group constituted for the purpose by the chair of the CMA under Schedule 4 to the Enterprise and Regulatory Reform Act 2013. ⁴

Annotations:

Amendments (Textual)

1. Words substituted by Enterprise and Regulatory Reform Act 2013 (Competition) (Consequential, Transitional and Saving Provisions) Order 2014/892 Sch.1(1) para. 18(4)(a) (April 1, 2014)
2. Word substituted by Enterprise and Regulatory Reform Act 2013 (Competition) (Consequential, Transitional and Saving Provisions) Order 2014/892 Sch.1(1) para. 18(4)(b) (April 1, 2014)

3. Words substituted by Enterprise and Regulatory Reform Act 2013 (Competition) (Consequential, Transitional and Saving Provisions) Order 2014/892 Sch.1(1) para. 18(4)(c) (April 1, 2014)

4. Substituted by Enterprise and Regulatory Reform Act 2013 (Competition) (Consequential, Transitional and Saving Provisions) Order 2014/892 Sch.1(1) para. 18(4)(d) (April 1, 2014)

Annex 2: Third party views

1. The CMA published its Decision Document explaining the reasons for launching this review at the end of July 2016. That document also summarised the changes of circumstances that BAES had put forward, allowing stakeholders to reflect on these representations. At the same time a Call for Evidence document was published, which invited comments from stakeholders. A CMA press release was issued to accompany this material.
2. The CMA contacted around 20 suppliers in the UK defence sector, including those that had made the most access requests to BAES. Both the MOD and BAES assisted the CMA by providing relevant contact details.
3. The respondents to the Call for Evidence were:
 - Leonardo
 - Single Source Regulations Office (SSRO)
 - An individual
 - Ministry of Defence (MOD)
 - BAES
4. The response from Leonardo supported retention of the Undertakings, expressing a view that these acted as an important safeguard. An individual also expressed support for the Undertakings to continue. However, neither response provided any evidence of previous or future use of the Undertakings.
5. The SSRO response clarified its responsibilities and their relevance to our review, rather than expressing a view on whether the Undertaking should be retained or removed.
6. During the course of this review, the CMA made contact with Babcock International, Thales, Leonardo, Rolls-Royce and Cammell Laird to discuss their capabilities and ability to act as prime contractors. Thales told us that the Parker Report had suggested there would be an increased likelihood of competition for shipbuilding.
7. The MOD provided the only substantive response to the CMA's consultation on the provisional advice. This is attached as Annex 3.

Annex 3: MOD response to consultation on Provisional Advice

[✂]

Annex 4: Historical use of the Undertakings

1. This annex provides details of the access requests BAES received in the period 2007 to 2016 that related to contracts with a value greater than £10 million.
2. We asked BAES to clarify the nature of the ten access requests over the last ten years where contract values exceeded £10 million. BAES said that it provided bids in each of these cases.
3. BAES told us that, over the last decade, there have been ten requests involving amounts exceeding £10 million and (a) in seven of the cases there were alternative suppliers to BAES; (b) in two of the cases, there might have been alternative suppliers to BAES; and (c) in one case, there were no alternative suppliers to BAES as it was a prototype.
4. In relation to these, we note the following points.
 - (a) Two of the access requests related to support for warships that BAES had built. The MOD initiated the procurement process but this has not yet resulted in the award of a contract in either case.
 - (b) One of the access requests was by [redacted] (a joint venture that included BAES). This prime contractor had already been selected by the MOD to perform the contract. BAES told us that the work subcontracted to BAES pertained to a prototype for a new combat air missile system to replace the MOD's Brimstone missile system but only a very small proportion has been awarded so far.
5. We also considered the seven access requests where BAES told us that there were alternatives to BAES and hence the Undertakings were not required.
 - (a) We note that, in four of these cases, the prime contractor solicited a number of bids from other potential subcontractors and in three the BAES bid was not accepted by the prime contractor and in the fourth it was partially successful but at a significantly reduced scope and value.
 - (b) In relation to the remaining three of the seven cases, we note the following. One access request did not result in the award of a contract. Another related to a request by [redacted] to BAES on the new Air Traffic Control System used to identify and track military aircraft (IFF) but [redacted] was unsuccessful in its bid to the MOD. Another contract related to munitions qualification activity by a prime contractor which asked BAES to supply the ammunition for the prime contractor's qualification activity.

BAES told us that another supplier could have supplied the products concerned.

Annex 5: Glossary

Term	Definition
ACA	Aircraft Carrier Alliance
Bae	British Aerospace
BAES	BAE Systems
BEIS	UK Government Department - Business, Enterprise and Industrial Strategy (formerly BIS)
CA98	Competition Act 1998
CMA	Competition and Markets Authority
CS	Combat systems
Essential resources	Resources to which another potential prime contractor would need access in order to bid for an MOD contract. See Section 7 under 'Essential resources' for further clarification.
FCAS	Future Combat Air System
Freedom of action	Being able to operate, maintain, and refresh certain capabilities effectively, without being dependent on others.
GPFF	General Purpose Frigate
MASS	Munitions Acquisition, the Supply Solution (MASS). A long term contractual partnering agreement between the MOD and BAES, signed August 2008, to cover provision for 15 years (to December 2022).
MES	Marconi Electronic Systems, a former business of the General Electric Company
MOD	The Ministry of Defence is the UK Government Department responsible for the implementation of Government defence policy. The MOD manages day to day running of the armed forces, contingency planning and defence procurement.
NETMA	NATO Eurofighter and Tornado Management Agency
PPEO	Public Policy Exclusion Order
Prime contractor	The main contractor with the MOD. It acts as the single point of contact for the MOD and may sub-contract with other parties involved in delivering the programme. The

	main responsibilities of a prime contractor include managing the supply chain and being a single point of responsibility for the management and delivery of a MOD programme.
Project Abel	Review of procurement strategies for delivering general munitions to the UK armed forces from 2023 onwards.
OFT	Office of Fair Trading, now part of the CMA.
Offshore	Outside of the UK
Onshore	A presence in the UK
Operational advantage	The recognition that we often need superior technology and other forms of battle-winning edge
SEPP	Submarine Enterprise Performance Programme (SEPP)
SofS	Secretary of State, which for this report refers to the SofS at BEIS
SDSR	Strategic Defence and Security Review that the Government refreshes every five years. The last publication was the 2015 SDSR.
SSRO	Single Source Regulations Office
TOBA	Terms of Business Agreement, signed in 2009 for a 15-year period to provide BAE Systems the right to exclusivity for UK warship design, build and elements of support.
TyTAN	Typhoon Total Availability Enterprise contract