

Summary: Intervention & Options

Department /Agency: Ministry of Defence	Title: Impact Assessment of a Public Policy Exclusion Order to support a Submarine Enterprise Collaborative Agreement	
Stage: Consultation	Version: Final	Date:
Related Publications: Defence Industrial Strategy (DIS) dated 15 December 2005		

Available to view or download at:

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What is the problem under consideration? Why is government intervention necessary?

With the UK Government's decision on the future deterrent there is an enduring long-term requirement for nuclear submarines. The Defence Industrial Strategy (DIS) explains the intent to build and maintain the Royal Navy's submarine flotilla on a through-life basis achieving best value for money whilst protecting vital UK industrial capabilities. To achieve this MOD want to fully explore the potential benefits of collaboration with the main Industry players - the submarine divisions of BAE Systems , Rolls-Royce and Babcock Marine. This requires the exchange confidential information. To ensure there is no infringement of UK competition laws a Public Policy Exclusion Order excluding the arrangements from the Competition Act 1998 is required.

What are the policy objectives and the intended effects?

The UK MoD is seeking to sustain unique skills and resources within the UK submarine industrial base and to establish a sustainable and affordable Submarine Enterprise to deliver, design, build, support and dispose of nuclear submarine platforms. In order to achieve these objectives it is necessary to establish an open commercial environment through collaboration that will build trust and jointly identify opportunities that will assist the Submarine Enterprise as a whole to meet its objectives and the required levels of military capability.

What policy options have been considered? Please justify any preferred option.

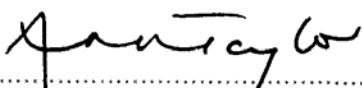
Three options have been considered as follows: 1) The creation of a single industrial entity (as envisaged by DIS); 2) Optimising the existing commercial approach through improved bilateral arrangements with the three main players and; 3) Forming a collaboration between MOD and the three main industrial players. Option 3) is the preferred option because collaboration has the most potential to deliver the required outputs at best value for money by assigning clear roles and responsibilities that enables an efficient approach to the design, build and support of nuclear submarines. This will assist in minimising duplication and maximising the utilisation of skills and facilities.

When will the policy be reviewed to establish the actual costs and benefits and the achievement of the desired effects? The Public Policy Exclusion Order would be formally reviewed after 3 years. The Submarine Enterprise Collaborative Agreement will be reviewed annually against jointly agreed cost and benefit performance targets.

Ministerial Sign-off For consultation stage Impact Assessments:

I have read the Impact Assessment and I am satisfied that, given the available evidence, it represents a reasonable view of the likely costs, benefits and impact of the leading options.

Signed by the responsible Minister:



Date:

07/02/08.

Summary: Analysis & Evidence

Policy Option:

Description: Public Policy Exclusion Order to support Submarine Enterprise Collaborative Agreement

ANNUAL COSTS		Description and scale of key monetised costs by 'main affected groups' Business: TBC
One-off (Transition)	Yrs	
£ 30,000*	1	
Average Annual Cost (excluding one-off)		
£ TBC		Total Cost (PV) £
Other key non-monetised costs by 'main affected groups' *These costs will be limited to the direct legal, administrative and management costs of the PPEO on Business. These costs are not expected to be prohibitive.		

ANNUAL BENEFITS		Description and scale of key monetised benefits by 'main affected groups' Business: TBC*
One-off	Yrs	
£ TBC*		
Average Annual Benefit (excluding one-off)		
£		Total Benefit (PV) £
Other key non-monetised benefits by 'main affected groups' *The MoD believes that there will be benefits for Business from Collaboration enabled by the PPEO including maximising the value of expertise, resource and facilities across MoD and Industry.		

Key Assumptions/Sensitivities/Risks

The PPEO is the enabler that will provide the means to quantify Collaboration benefit. A formal MoD business case will be required to be approved before Collaboration is formalised.

Price Base Year 2005	Time Period Years 0	Net Benefit Range (NPV) £ TBC	NET BENEFIT (NPV Best estimate) £ TBC
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What is the geographic coverage of the policy/option?	United Kingdom			
On what date will the policy be implemented?	June 2008			
Which organisation(s) will enforce the policy?	Ministry of Defence			
What is the total annual cost of enforcement for these organisations?	£ TBC			
Does enforcement comply with Hampton principles?	Yes/No			
Will implementation go beyond minimum EU requirements?	No			
What is the value of the proposed offsetting measure per year?	£ 0			
What is the value of changes in greenhouse gas emissions?	£ Negligible			
Will the proposal have a significant impact on competition?	Yes			
Annual cost (£-£) per organisation (excluding one-off)	Micro £0	Small £0	Medium £0	Large £0
Are any of these organisations exempt?	Yes/No	Yes/No	N/A	N/A

Impact on Admin Burdens Baseline (2005 Prices)				(Increase - Decrease)	
Increase	£ N/A	Decrease	£ N/A	Net	£ N/A

Key: Annual costs and benefits: Constant Prices (Net) Present Value

Evidence Base (for summary sheets)

[Use this space (with a recommended maximum of 30 pages) to set out the evidence, analysis and detailed narrative from which you have generated your policy options or proposal. Ensure that the information is organised in such a way as to explain clearly the summary information on the preceding pages of this form.]

IMPACT ASSESSMENT

COMPETITION ACT 1998 (PUBLIC POLICY EXCLUSION) ORDER [XXX]

1 INTRODUCTION

1.1 The UK Ministry of Defence (MoD) is in the process of improving the way in which it procures, maintains and disposes of nuclear submarines. It is proposed that the MoD will enter into a Submarine Enterprise Collaborative Agreement (“Collaborative Agreement”) with the Tier 1 suppliers: The submarine divisions of BAE Systems, Rolls-Royce and Babcock Marine. The Agreement is intended to cover the entirety of the Submarine Enterprise, which can be described as: the totality of MoD and Industry that delivers designs, builds, supports and disposes of the nuclear submarine platform, its systems and equipments. It also includes materials management¹ and facilities management² as supporting activities. The Collaboration members will be required to work together very closely in order for the Collaboration to operate optimally and this will require the parties to share commercially confidential information about their businesses and the supply chain. In order for the Collaboration to operate in this way without infringing UK competition laws it will require an order excluding the arrangements from the Competition Act 1998 in the form of a statutory instrument (called a Public Policy Exclusion Order (PPEO)). It is the making of this statutory instrument that requires this Impact Assessment.

1.2 This Impact Assessment is structured as follows:

- Section 1 provides the background and rationale for government intervention including the case for change, an overview of the submarine market and the need for Industry restructuring.
- Section 2 provides a brief review of the nature and extent of current and proposed future engagement and consultation with Industry.
- Section 3 contains a cost and benefits analysis of the options being considered by MoD based on the available evidence and qualitative assessments.
- Section 4 contains Specific Impact Tests with special attention paid to the impact on Competition and Small Firms.
- Section 5 presents an assessment of the affected groups and sectors.
- Section 6 provides an overview of how the MoD anticipates implementing, delivering and monitoring both a PPEO and a Collaborative Agreement.

¹ Materials management is intended to cover all the materials used to build and support nuclear submarines. Categories of materials include Structural; Mechanical systems and equipments; Electrical systems and equipments, and; Outfit and furnishing.

² Facilities management is intended to cover all those facilities, or parts of facilities, that are required to design, build, support and dispose of nuclear submarines.

- Section 7 sets out the Summary and Recommendation.

Background and Rationale for Government Intervention

1.3 The MoD's Defence Industrial Strategy (DIS), published in December 2005, affirmed the need to retain an indigenous capacity to deliver, operate and maintain nuclear submarines. While this provided a clear statement of intent, the DIS also recognised the need for a significant reduction in through-life costs otherwise the Royal Navy's submarine programme would become increasingly unaffordable as hull numbers reduce and the relative cost of the fixed overhead increases. Given the recent commitment to a successor for the Vanguard Class submarines to maintain the nation's nuclear deterrent, this is clearly unacceptable. This is the basis for Government intervention.

1.4 Key issues currently facing the UK submarine market can be summarised as follows:

- Force levels for the UK nuclear submarine flotilla will have declined from 21 hulls in 1990 to 12 by 2008. HMS ASTUTE, rolled out for launch in June 2007, was the first UK submarine launched since HMS VENGEANCE in 1998, and the first Fleet submarine since HMS TRIUMPH in 1990. Despite the reducing number of submarines there has not been a proportionate reduction in overheads because complex and costly build and support facilities must be maintained.
- The British submarine market is dominated by three monopoly suppliers each with responsibility for different aspects of the business, who historically have not worked together to reduce the overall cost of the Enterprise. There is inherent inefficiency in this lack of integration and separation of responsibilities.
- The new Astute class contains a reactor core that will last the full 25 year life of the submarine thus significantly reducing the workload for the support facilities at Devonport which conducts the refuelling of the current flotilla.
- The renewed emphasis on through-life cost and capability management has forced a dramatic shift in industry and MoD behaviour in order to secure both industrial sustainability and the future of the submarine as a key sovereign defence capability.
- The challenges arising from dismantling of submarines which have left naval service and determining a solution for the storage of Intermediate Level Waste.

National Security and Retaining UK Sovereign Capability

1.5 Nuclear submarines form a key part of the UK's defence. Submarines (currently the Vanguard Class) host the Trident missile system, which is the independent strategic nuclear deterrent. Fleet submarines (currently Swiftsure and Trafalgar Classes, to be replaced by Astute Class) provide protection to Trident; undertake strike operations using cruise missiles; and provide force protection for the other maritime assets. They also conduct intelligence gathering operations and special forces insertion. The nuclear power plant enables these military capabilities to be hosted on a platform that can operate unsupported globally and can remain submerged for extended periods. The capability provided by nuclear submarines is therefore unique and of vital importance to national defence.

1.6 It is essential to national security that the UK has absolute confidence in the capability, performance and safety of its submarines. The DIS specifically identified the need to retain UK capability in this area. In particular it states:

“... for the foreseeable future the UK will retain all of those capabilities unique to submarines and their Nuclear Steam Raising Plant (NSRP), to enable their design, development, build, support, operation and decommissioning” (paragraph B2.18)

“The UK’s fleet of nuclear powered submarines requires a specialist subset of skills within the maritime industry.....it is essential that the UK retains the capability safely to deliver, operate and maintain these platforms, without significant reliance on unpredictable offshore expertise. This delivery spans from conceptual design through to disposal” (paragraph B2.26)

“The ability to manage Nuclear Steam Raising Plant throughout its life-cycle (...) is a strategic capability that must be retained on-shore. (...) An irreducible minimum level of associated facilities, intellectual resource and supporting technologies must be provided within the UK or under arrangements that guarantee UK control and safe ownership” (paragraph B2.28)

1.7 The complexity of operation and support associated with nuclear submarines means that it is not possible to simply buy from abroad and then operate nationally. An indigenous sovereign industrial capability must be maintained across all key aspects of the submarine Enterprise. Not to do so would result in the loss of operational independence demanded by current UK Defence policy and would undermine UK national security.

The Nuclear Submarine Market

1.8 The submarine market can be sub-divided into three “tiers” as follows:

1.8.1 Tier 1: BAES Submarines; Babcock Marine; Rolls-Royce Submarines

At Tier 1 the market is characterised by monopoly-monopsony relationships between MoD and these three suppliers. Each of these parties has unique capabilities and facilities that are critical to the delivery of submarine capability:

- BAES Submarines, an operating division of BAE Systems, is responsible for design and build of nuclear submarines. Based in Barrow-in-Furness, the yard, owned by BAES, is the only facility in the UK capable of building nuclear submarines.
- Babcock Marine is primarily responsible for delivering support of nuclear submarines. They own and operate Devonport Royal Dockyard managing many of the services provided by the Naval Base, such as engineering support to ships and submarines, facilities management and berthing. Devonport contains the only facilities in the UK able to conduct de-fuel and refuel operations for nuclear submarines. Due to nuclear safety considerations, Babcock Marine is likely to have a lead role in disposal.³
- Rolls-Royce Submarines designs, part builds and supports the Nuclear Steam Raising Plant (NSRP), (the reactor, which is the most significant system within the submarine in terms of cost). For reasons of investment, security and practicality Rolls-Royce Submarines, based in Derby, is the sole contractor for the design, equipment procurement, ongoing technical support and author of NSRP Safety Justifications. Rolls-Royce Submarines’ role is articulated in the 1958 US-UK Mutual Defence Agreement which is a unique UK/US treaty that places clear obligations on the UK.

³ Disposal encompasses removal of nuclear fuel and the eventual break-up of the hull and components for final disposal.

1.8.2 Tier 2: Critical suppliers of sovereign capability and key suppliers

Tier 2 is broadly defined as those suppliers identified as essential to the delivery of submarine capability, including those required to maintain an indigenous UK industrial capability. This includes members of the BAES-led ASTUTE Key Suppliers Forum (Alstom; L3 Communications; McTaggart Scott; Sheffield Forgemasters Engineering; Thales; Ultra Electronics; Weir, Strachan and Henshaw; Wellman Defence; York), who together with MoD and the prime contractor (BAES Submarines) are responsible for the majority (in excess of 80%) of ASTUTE's materiel spend, and who exert considerable influence on through-life cost. Tier 2 also includes suppliers (such as Qinetiq and BMT) who have a significant part to play in current and future submarines and are crucial to providing innovation and challenge.

1.8.3 Tier 3: The wider supply base

Tier 3 covers a wide-ranging supplier base that includes markets within, and related to, the submarine market. Tier 3 comprises a wide-range of suppliers that directly support Tier 1, Tier 2 and MoD across the totality of the Submarine Enterprise.

1.8.4 The need for Industry restructuring

Current trends indicate that the cost of the current planned submarine programme will become unaffordable without action by MoD and Industry. The declining order rate and piecemeal approach to ordering is detrimentally affecting industrial sustainability. There is also the challenge of maintaining a broadly static level of availability from a reducing number of hulls and the need to continue to satisfy the demands of necessary, but exacting, safety and regulatory standards.

These factors contribute to an assessment of the current situation as unsustainable and in view of the huge pressure on the future programme the DIS concluded that "*industry restructuring and consolidation is likely to be a key feature of any improvement programme and fundamental to creating a viable and sustainable business to meet anticipated steady-state demand*" (DIS, paragraph B2.48).

The DIS also identified the need to work with Industry in order to be able to deliver an effective, sustainable and affordable submarine programme, which retains key sovereign capabilities. In particular, paragraph B2.47 of the DIS states that:

The UK will need to buy (...) submarines for the foreseeable future, but the clear trend is for fewer, more capable platforms, with longer operational lives and increased opportunity for regular upgrades in response to new technologies and threats. The ability to do so will depend upon us working together with industry to address the fundamental issues of affordability and productivity.

DIS stated that a "*single industrial entity for the full lifecycle of the submarine flotilla*" provided the best solution for the Submarine Enterprise.

2 **CONSULTATION**

2.1 The MoD's work to determine the most effective solution to deliver the Government's DIS intentions is already underway. A dedicated SECA Team has been established by the MoD to assess the options for success within the Submarine Enterprise, particularly to develop the concepts that would underpin any Collaborative Agreement.

Within Government

2.2 This team has already consulted widely within the MoD and with key stakeholders in the Department for Business, Enterprise and Regulatory Reform (DBERR), Office of Fair Trading (OFT) and HM Treasury (HMT).

Wider Consultation

2.3 The next step for the MoD SECA team is to undertake formal wider consultation with the industrial base.

2.4 Tier 1

The SECA team is in ongoing contact with the Tier 1 companies who have agreed the principles that would enable collaborative working and the potential benefits.

2.5 Tier 2

Tier 2 companies will be engaged primarily through the ASTUTE Key Supplier Forum, with other companies being engaged on an individual basis as required. Each supplier will be sent a copy of the Impact Assessment (Consultation Draft), followed by a presentation from the MoD SECA team.

2.6 Tier 3

In view of the larger number of Tier 3 companies, engagement will be conducted through the relevant Trade Association. The MoD SECA team is in dialogue with the Defence Manufacturers' Association (DMA), as the principal Trade Association for the Submarine industry, to arrange an Industry Day to which Tier 3s will be invited as part of the consultation process. The MoD SECA team is also in dialogue with another Trade Association, the British Naval Equipment Association (BNEA).

3 OPTIONS REVIEW

Background

3.1 Prior to the publication of the DIS, the MoD worked with companies in the submarine sector (including Tier 1s) under the umbrella of a project known as Submarine Acquisition Modernisation (SAM). The aim of SAM was to explore ways to reduce cost of ownership, improve platform availability and industrial sustainability. SAM undertook cost/benefit and options analysis that looked at the most suitable and practicable industrial construct to deliver an affordable, sustainable and efficient submarine industrial base. This study represents the most recent comprehensive analysis that looked across the totality of the Submarine Enterprise and its core assumptions on potential savings have been used to inform this Impact Assessment. These in turn have been reviewed and updated in light of Industry engagement, lessons learnt on key contracts and initiatives in the submarine sector. The results of this initial analysis are summarised below.

3.2 The costs and benefits discussed in this section are presented principally based on qualitative analysis and assessments undertaken primarily by the MoD.

3.3 Three options have been analysed to determine which commercial construct provides the best solution:

- Option 1: Creation of a single industrial entity as envisaged by DIS, through a significant level of Industry transformation;

- Option 2 (Do Minimum): Optimising the existing commercial approach. This would involve the development of improved bilateral arrangements between MoD with the Tier 1 companies; and
- Option 3: Collaboration between MoD and the Tier 1 companies to jointly manage the Submarine Enterprise.

Section 1 of this Impact Assessment presents the case for change from which the implications are clear if the MoD does not act to address the challenges of affordability, sustainability and efficiency. Option 2, “Do Minimum”, represents the intent of the MoD’s Director General Submarines’ current change programme and therefore “doing nothing” is not an option. Also, in view of the monopoly nature of the Tier 1 suppliers, and the barriers to entry into the market in terms of acquiring the necessary technology and expertise, full and open competition is not regarded as a viable option.

3.4 All options have been subjected to an initial analysis against broad criteria that are seen to be critical determinants for the Enterprise:

- Achievement of Military Capability
- Sustainment of UK Industrial Capability
- Affordability and Value for Money (VfM)
- Through-Life Capability Management
- Market Impact
- Relationships and Behaviours

The summary below highlights the key differentiating factors and issues that the MoD have identified as key to determining the preferred way forward.

Option 1 - A single industrial entity through a Joint Venture or a Joint Management Company

Description

3.5 This option is considered to directly address the challenge set by DIS of creating a single industrial entity. It was also the preferred option from the SAM study and would involve the creation of a new company by the three main Industry players that would include assets from all parties. The SAM study regarded this option as potentially offering greatest efficiencies with fewer organisational interfaces, and barriers to change. It would also avoid conflicting business strategies, practices and ethos.

Costs and Benefits

3.6 Concerns with this approach focused on having a single dominant entity in the submarine market and its potential impact on the relationships and behaviours at all levels as well as the risk of vertical integration pushing key suppliers out of the market. The view taken was that a single entity should be more efficient in engaging the wider supplier base, since it would facilitate transparency and exploitation of Enterprise data. This option would make it easier to separate out MoD’s customer role, but more difficult to integrate outputs that are currently provided by MoD.

3.7 However all these issues remain theoretical because the circumstances do not currently exist to enable this option to be realised. The unique areas of expertise of each of the Tier 1

companies are sufficiently distinct and of such strategic importance that MoD does not consider creation of a single industrial entity is likely to happen within the current market climate.

3.8 In view of the above Option 1 is considered non-viable and is not considered further.

Option 2 - The Bilateral approach (The Do Minimum Option)

Description

3.9 This option is based on optimising the existing commercial landscape where MoD has individual contracts with each Tier 1 supplier for discrete elements of submarine support (e.g. BAES Submarines for new build; Babcock Marine for in-service support; Rolls-Royce Submarines for NSRP support). Under this approach each Tier 1 supplier is effectively a monopoly supplier with each contract negotiated separately with its own terms and conditions.

3.10 Historically the commercial focus for Industry has been to seek profit through increasing turnover and contract volume. Each company's level of industrial capacity and capability has been driven by the need to meet their own contractual commitments. More recently there have been moves in a number of areas of the Submarine Enterprise to take a more commercially progressive approach to how these bilateral arrangements are managed. This has involved joint working between MoD and Industry to look at the potential to take a more whole-life view and to have Industry's contract performance more directly linked to risk and reward.

3.11 These initiatives include:

- A contract between MoD and Rolls-Royce Submarines for Flotilla Reactor Plant Support (FRPS) that includes incentives for Rolls-Royce Submarines to identify opportunities that will reduce cost in the wider Submarine Enterprise.
- A joint MoD and Industry team looking at the rationalisation of Nuclear Facilities.
- The development of an Enterprise model for the Combat Systems that integrate with the Submarine Platform.
- A joint MoD and Industry team looking at the Concept Design of the new class of nuclear submarines.
- The development of the Key Supplier Forum within the Astute programme to realise Enterprise-wide benefits from more effective supply chain management.

Costs and Benefits

3.12 The MoD recognises the potential from continuing to pursue these initiatives and optimising the bilateral approach to improve the health of the Submarine Enterprise. However despite the many positive benefits the MoD considers it is not as efficient as Option 3 because it would perpetuate an Industry model where the commercial focus of Tier 1 companies is to work independently to maximise return from their element of the Enterprise providing little incentive to collaborate.

3.13 The costs of this approach are considered to be :

- Inherent duplication and lack of integration across the Enterprise.
- MoD having to carry the risk of integrating Industry outputs to provide submarine capability

- A sub-optimised supply chain as each Tier 1 company focuses on the suppliers that support their area of business rather than efficient management of the whole Submarine Enterprise supply chain.

3.14 Therefore while it is possible to make improvements by negotiating the terms of each bilateral contract to support the delivery of benefits across the Enterprise, (as has happened on FRPS) this alone does not allow access to full collaborative benefit. This would still leave MoD in sole charge of designing, managing and delivering commercial coherence across the Enterprise and therefore this option is considered more difficult for MoD to manage effectively than Option 3.

3.15 Option 2 is therefore judged to be sub-optimal when compared to Option 3 but a more viable approach when compared to Option 1.

Option 3 – Collaboration

Description

3.16 This option looks at enhancing and adding to the benefits achievable through Option 2 through a Collaborative Agreement between the customer (MoD) and the Tier 1 companies, as the parties who collectively manage the Submarine Enterprise and who can directly influence its strategic direction. Collaboration is therefore seen as building on existing and future bilateral contracts through an over-arching collaborative framework which enables optimisation across the Enterprise. The intent is to enable development of the most efficient and integrated industrial construct for the Submarine Enterprise capable of delivering value for money on a through-life basis.

3.17 The MoD envisages developing a Collaborative Agreement that will link the performance of the Collaboration parties to key Enterprise targets similar to the criteria at paragraph 3.4 above. This will incentivise Industry to work together across all aspects of the Submarine Enterprise to provide more effective delivery of the programme. This Collaborative Agreement will set out the commercial and contractual mechanism to “knit” all submarine commercial activity (both pre and post contract, current and future) together to optimise the savings potential from collaborative working. Whilst the commercial framework has yet to be developed, the key principles⁴ that would underpin it have been agreed between MoD and the Tier 1 suppliers.

Costs and Benefits

3.18 To support the cost/benefit analysis the MoD have already identified a range of potential benefit opportunities that can only be either delivered, or optimised, by adopting a truly collaborative approach enabled by the sharing of commercially confidential information. They include the following:

- The rationalisation and optimisation of common facilities and personnel across the Submarine Enterprise.
- A holistic approach to design, build and support - ensuring, for example, that new design takes account of in-service experience.
- Regulatory process rationalisation through the adoption of commercial standards and common processes.

⁴ The agreed principles include, for example: Roles and Responsibilities clearly defined; Profit will be driven by Key Performance Indicator (KPI) performance not volume; and Delivery through-life – best value for money.

- The establishment of a more strategic approach to managing the supply chain through the implementation of Category Management techniques across the Submarine Enterprise to ensure a self sustaining and innovative supply chain capable of meeting new build and through-life support needs.
- Joint buying so there is a single, more effective, Submarine Enterprise customer for the supply chain to engage with, thereby reducing inventory and gaining economies of scale.
- A mechanism to facilitate collaborative implementation of the cost reduction opportunities identified through the FRPS contract.
- Encouraging innovation and adoption of new technologies to reduce cost and reliance on expensive bespoke solutions.

3.19 At this juncture, and recognising that the MoD has still to put forward a formal case for Collaboration as part of its approvals process, the MoD believes that Collaboration is the option most likely to deliver the strategic intent of the DIS. In comparison to the bilateral approach, the MoD judges that Collaboration is more likely to produce an optimal outcome of delivering an affordable and sustainable Submarine Enterprise on the grounds that it is the most coherent, integrated and efficient means of maximising the value of expertise, resource and facilities across MoD and Industry. Collaboration is also likely to reduce through-life costs with less commercial and programme risk exposure to MoD leading to better support for front line operations. It has the best potential to achieve a healthier, viable and self-sustaining submarine market through a more co-ordinated and effective supply chain strategy.

3.20 However it is recognised that Collaboration is not an easy solution for MoD or Industrial parties that have previously focused on their individual elements of the Enterprise and have each maintained the capability to underpin this. A successful collaborative agreement will need to provide a solution in which reduced cost and sustained performance for MoD also sees increased shareholder value for Industry. Design of an appropriate incentivisation arrangement will be key, as will the development of an environment in which MoD and Industry are able to work together for mutual benefit, potentially giving up capability and placing greater reliance on each other.

3.21 In addition, by opting for Collaboration through a PPEO from Chapter I of the Competition Act 1998 the Tier 1 companies are protected from the threat of competition. In most sectors the view is taken that competition, or the threat of competition, is the most effective way of incentivising firms to operate efficiently and to innovate. MoD is of the view that the risk of excluding Tier 1 firms from competitive pressure is low as there is limited competition between these firms at present.

3.22 In conclusion the MoD considers that Option 3 has the potential to provide the optimal through-life solution that will deliver a sustainable, affordable and efficient Submarine Enterprise.

4 SPECIFIC IMPACT TESTS

Competition Assessment

4.1 The MoD has consulted the OFT's guidelines "*Completing competition assessments in impact assessments*". According to these guidelines, the purpose of conducting an impact assessment from a competition law viewpoint is to consider whether the proposed regulation prevents, restricts or distorts competition (OFT876, page 7). The MoD requires a PPEO from Chapter I of the Competition Act 1998 because it recognises that the proposed Collaboration would prevent, restrict or distort competition. However, the MoD believes that there are

exceptional and compelling reasons of public policy which justify the suspension of the application of the competition regime.

Parties to the Collaboration

4.2 The proposed Collaboration would be put into place through a collaboration agreement between the MoD and the three Tier 1 contractors, namely BAES Submarines, Babcock Marine (Submarine Division) and Rolls-Royce Submarines.

4.3 Details of the Tier 1, Tier 2 and Tier 3 markets are set out above at paragraph 1.9. It is also worth noting that BAES Submarines, Babcock Marine (Submarine Division) and Rolls-Royce Submarines are the only Tier 1 players in the submarine market. The MoD believes that these Tier 1 players do not face any competition (outside of this group) in the UK in respect of the services that they provide in relation to nuclear submarines. The MoD is the only customer for the Tier 1 players for nuclear submarines.

4.4 When considering related markets and the potential for spill-over effect, it is worth noting the specialist and distinct nature of the submarine market. Initial research demonstrates that “nuclear submarines” is a distinct product market and that the geographic market is national as nuclear submarines are not exported or purchased from abroad for political reasons. The primary related markets are those of Surface Warship Build and Surface Ship Support. BAE Systems participates in the UK market for building Surface Warships. Surface Warships are only built in the UK i.e. not off-shore. Babcock Marine (Submarine Division) participates in the market for supporting Surface Ships. An Exclusion Order was granted in relation to Surface Ship Support in 2006. There is some overlap of skills required to build a Surface Warship but many of the skills (e.g. design and specialist welding) are specific to submarines or warships.

4.5 The other main military and non military markets that are engaged with and related to the submarine market include: electrical systems, machinery equipment, electronic systems, combat systems and facilities management. Other markets potentially affected are those that relate to materials and facilities under the materials and facilities management part of the Submarine Enterprise.

The Infringements

The Chapter I Prohibition

4.6 Section 2 of the Competition Act 1998 states that:

“...agreements between undertakings, decisions by associations of undertakings or concerted practices which

(a) may affect trade within the United Kingdom, and

(b) have as their object or effect the prevention, restriction or distortion of competition within the United Kingdom,

are prohibited unless they are exempt in accordance with the provisions of this Part.”

4.7 In order to implement DIS the proposed Collaboration intends to achieve the following:

- Reduce costs by cutting out unnecessary duplication of facilities and resources;
- Develop innovation and incorporate new technologies;

- Foster joint profit and risk sharing to ensure all parties have an interest in the overall performance of the Collaboration;
- Engage in joint buying; and
- Ensure that the UK industrial and skills base is sufficient to sustain all components of the life cycle of nuclear submarines.

4.8 To allow the Collaboration to achieve the aims set out above and get optimum results, it must engage in practices which will infringe Section 2 of the Competition Act 1998. Further details are set out below. For the sake of completeness, details about information exchange between non competitors which does not infringe competition law are included.

Information Exchange

4.9 In the majority of areas covered by the proposed Collaboration, the parties are not in competition with each other and their areas of activity are complementary. In those areas the Collaboration is unlikely to prevent, restrict or distort competition between the parties as the exchange of information between non-competitors does not raise competition concerns.

4.10 It is proposed that there will be information sharing between the collaboration parties across each area of the Submarine Enterprise that represent the key stages in the life of a nuclear submarine as follows: concept design; the build of new submarines; post design services; waterfront support (i.e. maintenance and repair work); support to the reactor plant (a key part of the submarine), combat systems work and the disposal of submarines. Each area is regarded as presenting a separate market but there may be various distinct markets within an area, for example in relation to short-term and long-term maintenance within waterfront support.

4.11 The MoD regards the exchange of information as fundamental to ensuring that there is genuine collaboration between the parties. It is necessary to enable the parties jointly to identify costs and to deliver collaborative opportunities to the MoD. It also operates to build trust between the parties. The exchange of information will include commercially sensitive information such as the parties' internal costs, planning, strategy and skills. The exchange of commercially sensitive information falls within the Chapter 1 Prohibition where it is liable to restrict competition between the parties. This applies in those areas of the Collaboration where BAE Submarines and Babcock Marine (Submarine Division) are actual or potential competitors, i.e. within design services and waterfront support as outlined above. The MoD is of the view that such infringements should be excluded from the application of the Competition Act under paragraph 7 of Schedule 3 of the Act.

Elimination of Potential Competition

4.12 There is scope for potential competition between BAE Submarines and Babcock Marine in some areas of activity within the design services and waterfront support. Within these areas the effect of the Collaboration will be to eliminate that competition because the purpose of the Collaboration is to ensure that the Collaboration parties' pool resources and work together. This results in an infringement of the Chapter 1 Prohibition of the Competition Act 1998. The MoD is of the view that such infringements should be excluded from the application of the Competition Act 1998 under paragraph 7 of Schedule 3 of the Act.

The Chapter II Prohibition

4.13 Section 18 of the Competition Act 1998 states that:

“(1) ... any conduct on the part of one or more undertakings which amounts to the abuse of a dominant position in a market is prohibited if it may affect trade within the United Kingdom.

(2) Conduct may, in particular, constitute such an abuse if it consists in –

(a) directly or indirectly imposing unfair purchase or selling prices or other unfair trading conditions”

4.14 MOD has carefully considered whether there is a need for an exclusion from Chapter II of the Competition Act 1998 in conjunction with the OFT. It is intended that, the Collaboration will seek to engage in joint buying arrangements to enable the collaboration parties to procure goods and services more cost effectively and assist in achieving the Collaboration’s aims. Chapter II of the Competition Act 1998 prohibits one or more undertaking(s) in a dominant position from imposing unfair trading conditions, or discriminating between suppliers. It would not be the intention of the collaboration parties to impose unfair conditions or for the parties to the Collaboration to abuse their dominant positions either individually or jointly. On the basis that the continued applicability of the Chapter II prohibition will operate to ensure that there are protections in place to guard against the possibility of an abuse of dominance, the MOD is not seeking an exclusion from Chapter II of the Competition Act 1998.

Public Policy Exclusion for Chapter I

4.15 Paragraph 7 of Schedule 3 of the Competition Act 1998 provides that:

“(1) If the Secretary of State is satisfied that there are exceptional and compelling reasons of public policy why the Chapter I prohibition ought not to apply to –

*(a) a particular agreement, or
(b) any agreement of a particular description,*

he may by order exclude the agreement, or agreements of that description, from the Chapter I prohibition.

4.16 It is the MoD’s understanding that the need to protect national security has in the past been considered an “*exceptional and compelling reason of public policy*” as required by paragraph 7 of Schedule 3 (see the Competition Act 1998 (Public Policy Exclusion) Order 2006, SI 605 and the Competition Act 1998 (Public Policy Exclusion) Order 2007, SI 1896. On this point, it may also be of relevance to refer to Section 42 of the Enterprise Act, which deals with the intervention of the Secretary of State in certain public interest cases. Section 42(3) provides that a public interest consideration is a consideration which is specified in Section 58. This section specifies “*the interests of national security*” as a public interest consideration and goes on to say that national security includes “*public security*”, as defined in Article 21(4) of the EC Merger Regulation. Article 21(4) states that public security shall be regarded as a “*legitimate interest*” which Member States may take appropriate measures to protect.

4.17 The MoD is of the view that the anti-competitive practices identified above in relation to the Chapter I Prohibition qualify for a public policy exclusion on the grounds of national security. The relevant essential security interest here is the maintenance of an independent nuclear submarine fleet. Nuclear submarines are connected with the production of or trade in arms, munitions and war material and that the Collaboration is a measure necessary for the protection of the essential interests of UK security because without it there will not be the necessary cost savings, which would mean that there would need to be cut backs in the planned current submarine programme. It is likely that this would result in the UK no longer having an indigenous industrial and skills base to design and build nuclear submarines. The need to preserve UK sovereign capabilities and technologies is considered essential for the protection of national security. This objective was highlighted in the Ministerial Foreword to the DIS which states: *“In this Strategy, we consider carefully which industrial capabilities we need to retain in the UK to ensure that we can continue to operate our equipment in the way we choose to maintain appropriate sovereignty and thereby protect our national security”* (emphasis added).

Small Firms Impact Tests

4.18 There are a large number of Small Medium Enterprises (SMEs) providing support to the Submarine Enterprise either direct to MoD; direct to a Tier 1 Supplier; or as part of the wider supply chain.

4.19 In broad terms suppliers will be either:

- Specialist or niche within a specific market segment managed as a key supplier so as to maintain a sustainable indigenous UK industrial capability; or
- part of a more competitive aspect of the submarine market; or
- part of a related competitive market that also provides support to the delivery of submarine capability.

4.20 The Collaboration recognises that the primary source of successful innovation lies within the supply chain which can often expose the best new technologies; innovative ways of delivering capabilities and business processes (including how to address business cultural issues). SMEs who wish to enter the market will be provided with sufficient information about the nature and timing of current and future opportunities so they can assess whether they wish to seek to compete for them. The mechanism to achieve this objective is not yet in place and will be worked up as part of the Collaborative process.

4.21 The MoD's intention is for the Collaboration to be open with the wider Industrial Base about the shape of the future submarine programme including future opportunities to bid for work, including the potential for introducing new technology and innovation. The aim is to compete as many requirements as possible taking into consideration the demands of IPR and the need to retain and support key sovereign capabilities. Where an agreed or preferred supplier is essential to ensure security of supply this will be clearly identified. Otherwise open competition will be sought.

4.22 The provision of an Exclusion Order will enable this future commercial landscape to be presented within the context of how it will support the delivery of military capability across the whole of the Enterprise over the long-term. The success of the Collaboration will be measured in part by the health of the submarine supply chain - how it secures indigenous UK industrial capability; encourages, identifies and exploits innovation; and provides a fair deal for SMEs as it seeks best value.

4.23 The MoD believes that the Collaboration will result in greater competition between suppliers of products and services to the first tier. In part this is due to an intention during the Concept and Design phases to reduce the current heavy reliance on bespoke inputs and to have far greater scope for use of Commercial off the Shelf (COTS) and Military Off the Shelf (MOTS) equipment and materials. This will support adopting a through-life approach on an Enterprise-wide basis where innovation is encouraged and managed through the effective insertion of new technology to improve the performance and value of submarine capability.

Legal Aid

4.24 There will be no impact on Legal Aid

Sustainable Development, Carbon Assessment, Other Environments

4.25 It is not believed there will be any impacts on these areas. Review of the initial tests indicates that they do not apply.

Health Impact Assessment

4.26 It is not believed there will be any impacts on these areas. Review of the initial tests indicates that they do not apply.

Race, Disability, Gender and Other Equality

4.27 It is not believed there will be any impacts on these areas. Review of the initial tests indicates that they do not apply.

Human Rights

4.28 It is not believed there will be any impacts on these areas. Review of the initial tests indicates that they do not apply.

Rural Proofing

4.29 It is not believed there will be any impacts on these areas. Review of the initial tests indicates that they do not apply.

5 AFFECTED SECTORS AND GROUPS

5.1 In addition the costs and benefits outlined above this section considers the impact on the Sectors and Groups affected by Collaboration (the preferred option.)

Customers

5.2 The sole customer for Nuclear Submarines in the UK is the MoD. As discussed at option 3 the MoD's procurement activity in this sector is dominated by the three Tier 1 companies as essentially monopoly suppliers who contract bilaterally with MoD, supported by a range of smaller contracts for systems, sub-systems, equipments and materials. As the customer the MoD is anticipating a more coherent and effective engagement with the Industrial Base that takes a more strategic, long-term view of the Submarine Enterprise.

Tier 1 Contractors

5.3 Subject to the demonstration of VfM the use of the preferred option will mean that Tier 1 companies will work in Collaboration with MoD for the long-term benefit of the Submarine

Enterprise. This will provide them with increased understanding of the MoD's future requirements in this sector enabling more effective strategic planning.

Supply Chain

5.4 As already identified the supply chain consists of a wide grouping across Tiers 2 and 3 covering sub-system suppliers to material suppliers. The MoD recognises that Collaboration will have a more significant effect on those Industry parties involved in the supply of nuclear submarines. However an overriding effect of the implementation of Collaboration is to ensure a self sustaining and viable supply chain capable of supporting both new build and through-life support demands of the Submarine Enterprise. Greater certainty over the future of the Enterprise, the use of category management techniques and increased transparency will combine to support this objective. The bilateral approach would be able to develop a strategy but would not create the commercial environment capable of optimising it. The impact of this approach will be quantified during the implementation phase at which time further information will be available following the sharing of data between the Collaboration parties.

6 IMPLEMENTATION AND DELIVERY

Introduction

6.1 This Section provides an overview of how the MoD anticipates monitoring both the PPEO and Collaboration.

Monitoring

6.2 Any Collaborative Agreement between MoD and the Tier 1 companies will be monitored against a range of criteria that will focus on VfM through assessing delivery of operational capability, sustainability, programme affordability and industry viability, including the sustainment of indigenous industrial capabilities in the submarine sector.

6.3 Prior to the signing of any Collaborative Agreement the MoD and Industry's willingness and ability to work on a collaborative basis will be rigorously assessed, primarily through a set of Confidence Building Measures (CBM). These will be a combination of hard programme deliverables (Business Case approvals; Contracts signed; etc) and behavioural issues that will assess the effectiveness and enduring potential of the joint working of the Industrial partners, and MoD, as well as internal organisational coherence for all Collaboration parties. It is envisaged that these CBMs, and their evolution, will form the basis of any Collaborative Agreement's Performance Measurement regime.

6.4 **VfM.** The MoD is aware that any procurement route it wishes to use must provide demonstrable VfM through the life of any arrangement agreed with Industry. While the specific mechanisms will need to be developed the MoD recognises the need for a suite of incentives that will drive transformation and efficiency at the Enterprise/Sector level and also for individual initiatives, contracts and projects.

6.5 **Military Capability.** Delivery against this objective will be measured at both project and sector level. Each project or initiative will be subject to rigorous scrutiny under the terms of the Collaborative Agreement consistent with the highest standards demanded by the MoD scrutiny process, including post project evaluation.

6.6 **Industrial Capabilities.** The MoD will periodically review the requirements for UK sovereignty through the DIS and Defence Technology Strategy (DTS) and, in conjunction with its overarching view of UK Submarine capability, will actively manage any changes (through mechanisms on the Collaborative Agreement).

Implementation and delivery plan

6.7 Information Exchange. Once a PPEO is in place exchange of commercially sensitive data can take place, but this data will be restricted to that necessary for the objectives of the Collaboration. Furthermore, the exchange of information will be ring fenced to the entities within each party that work on nuclear submarines. Prior to the securing of a PPEO, Confidentiality Agreements will be signed by each of the Industry players on a bilateral basis with MoD. This will allow them to share sufficient information to test the jointly agreed CBMs that will enable an assessment to be made on the extent of the progress of each party.

6.8 MoD Internal Approvals. A Collaborative Agreement will be subject to internal MoD approval and agreement by the respective boards of the Industry partners. It will clearly articulate the means by which the Agreement parties will work collaboratively across the totality of the Submarine Enterprise programme articulating how this will be achieved commercially. The Collaboration parties will agree the precise measures and mechanisms that will drive the Collaborative Agreement including a programme of targets/milestones and a review process, which is envisaged will include a comprehensive annual review covering all key business, programme and commercial drivers within the Submarine Enterprise. It is envisaged that the Collaboration Parties will agree Annual Targets based on the key outputs of the Submarine Enterprise and this will be directly linked to the Collaborative Agreement incentivisation mechanism.

6.9 Exit strategy. In the event that the MoD is not granted a PPEO it will still have to address the industrial issues described in DIS. In this context the MoD would adopt Option 2 to take sole lead negotiating bilaterally with the Tier 1 suppliers to attempt to drive through transformation and rationalisation at the sector level and across the totality of the Submarine Enterprise. Similarly should the collaborative approach not deliver the anticipated benefits the MoD would fall back to optimised bilateral arrangements, having ensured that any information sharing under the auspices of Collaboration does not preclude this as a fallback option.

7 SUMMARY AND RECOMMENDATION

7.1 In addressing the needs of the Submarine Enterprise the DIS identified the need to address the challenges of affordability and sustainability. In seeking to address these challenges the MoD has considered three options:

Option 1: Creation of a single industrial entity as envisaged by DIS, through a significant level of industrial transformation

7.2 This option has many potential benefits of coherence and transparency that could make this the preferred option, including directly meeting the demands of DIS. However these remain theoretical due to the prevailing market conditions of three Tier 1 companies who wish to maintain their unique market status within the Submarine Enterprise. On this basis this option is not being taken forward.

Option 2: Optimising the existing commercial approach. Development of improved bilateral arrangements between MoD with the Tier 1 companies

7.3 This option would require the MoD to continue to negotiate and contract bilaterally with the three Tier 1 companies. It is considered a very positive option with the potential for the delivery of significant benefit but is regarded as sub-optimal compared to Option 3 as it would not provide a balanced or commercially coherent solution for the Submarine Enterprise because it would result in a series of separate but necessarily linked arrangements the MoD would find particularly difficult to manage. On this basis the option is judged to be sub-optimal, but as noted at paragraph 6.9 above it represents the MoD's fall-back position should Option 3 fail.

Option 3: Collaboration between MoD and the Tier 1 companies to jointly manage the Submarine Enterprise

7.4 This approach has the potential to deliver the most coherent and effective working arrangements between MoD and Industry by implementing a Collaborative Arrangement that enables access to benefit across the Enterprise over and above that that can be achieved under Option 2. The preferred option has the most potential to deliver the required outputs at best value for money by assigning clear roles and responsibilities thus enabling a holistic support to design, build and support, minimising duplication and maximising utilisation of skills and facilities.

7.5 In order to deliver the MoD's recommended option (Collaboration) it is judged that an exclusion from Chapters I of the Competition Act 1998 is required. It is MoD's view that there are public policy reasons, namely national security, for such an exclusion to be granted.

Recommendation

7.6 The DIS specifically identified the need to retain UK capability in relation to nuclear submarines and that it is nature of the relationship with Industry that will help guarantee this capability.

7.7 Subject to a formal MoD business case being submitted, the MoD judges that Collaboration with the three Tier 1 companies offers the potential for the most cost effective, sustainable and affordable solution for the Submarine Enterprise.

Specific Impact Tests: Checklist

Use the table below to demonstrate how broadly you have considered the potential impacts of your policy options.

Ensure that the results of any tests that impact on the cost-benefit analysis are contained within the main evidence base; other results may be annexed.

Type of testing undertaken	<i>Results in Evidence Base?</i>	<i>Results annexed?</i>
Competition Assessment	Yes	No
Small Firms Impact Test	Yes	No
Legal Aid	Yes	No
Sustainable Development	Yes	No
Carbon Assessment	Yes	No
Other Environment	Yes	No
Health Impact Assessment	Yes	No
Race Equality	Yes	No
Disability Equality	Yes	No
Gender Equality	Yes	No
Human Rights	Yes	No
Rural Proofing	Yes	No

Annexes

No Annexes are attached to this Impact Assessment