MoD response to the

Submarine Enterprise Collaborative Agreement (SECA)

Consultation

June 2008

Defence Equipment & Support

MINISTRY OF DEFENCE

CONTENTS

1. INTRODUCTION

1.1 The UK Ministry of Defence (MoD) believes that, for reasons of national security, the UK must retain sovereign capability in relation to nuclear submarines, which in turn requires a sustainable UK industrial and skills base. The current fragility of the industrial and skills base was recognised by the House of Commons Defence Committee Report on the Future of the UK's Strategic Nuclear Deterrent: the Manufacturing and Skills Base (December 2006). The MoD is proposing to enter into a Collaborative Agreement with the submarine divisions of BAES, Babcock Marine and Rolls-Royce (the Tier 1 suppliers[1]). The key objective of the Collaboration will be to reduce the overall cost of the nuclear Submarine Enterprise, which will ensure that MoD can continue to place orders with UK industry thus sustaining the UK industrial and skills base and therefore long term sovereign capability.

1.2 The DE&S has established a dedicated Submarine Enterprise Collaborative Agreement (SECA) Team to assess the options for success within the Submarine Enterprise, particularly to develop the concepts that would underpin any Collaborative Agreement.

1.3 The Collaboration will require the Tier 1 suppliers to enter into a multi-party agreement under which they will be required to work together and exchange information (including commercially sensitive information) about their businesses and the supply chain (subject to other confidentiality agreements). The Tier 1 suppliers will also need to enter into bilateral arrangements with other suppliers and between themselves to implement aspects of the Collaboration, for example, to facilitate joint buying.

1.4. For the collaboration to operate in this way without infringing UK competition laws, the MoD is seeking an order in the form of a Statutory Instrument excluding the arrangements from Chapter I of the Competition Act 1998 on the basis that there are exceptional and compelling reasons of public policy, namely that such a measure is in the essential interests of national security. This is known as a Public Policy Exclusion Order (PPEO).

1.5 In support of the PPEO, Minister (Defence Equipment and Support) approved a 12-week public consultation process, seeking responses to the MoD's proposals and targeted at those most likely to be affected. To this end, MoD's proposals were published in a Consultation Document and Impact Assessment on 12 February 2008. The Consultation was conducted between 12 February and 6 May 2008, against a broad definition of the scope of collaboration to ensure all potential views were gathered. In particular, views on the costs and benefits that cover the impact of both the PPEO and the Collaboration on the submarine, and related, markets were sought. MoD was also interested to determine if anything more, or anything different, should be included before laying the Statutory Instrument before Parliament for approval.

1.6 To help elicit information a set of more detailed questions against specific aspects of the costs and benefits case were posed, and these are listed below:

[1] As defined in the Consultation Document Tier 1 suppliers are those "who have unique capabilities and facilities that are critical to the delivery of the submarine capability".

- What impact do you envisage a PPEO having on:
  - Your company
  - The markets you trade in and your relationship within these markets
  - The related markets that you and the Tier 1 suppliers (BAES, Rolls-Royce and Babcock Marine) trade in

- Taking the range of potential benefits listed in the Consultation Document and Impact Assessment, your views are sought on the impact in cost/benefit terms (focusing on profitability and future involvement in the submarine market) on your company with regard to:
  - The scope for future competition within both the submarine and related markets
  - The potential opportunities to develop innovative ideas and introduce new technologies

- A general assessment on the nature of the relationship between the different tiers of the market, including the role of Small and Medium Enterprises (SMEs) within the Submarine and related markets.

1.7 In responding to the questions above, organisations were asked to refer to Section 4 of the Impact Assessment (dated February 2008), which contains the MoD's initial assessment of the impact of the PPEO on Small Firms, and Section 5, which addresses the Supply Chain.

1.8 Comments and views on the Consultation Document and Impact Assessment were invited from all companies and organisations within the submarine market, and related markets, some of whom would be directly impacted by the adoption of a PPEO and Collaboration; trade associations; and other relevant stakeholders and interested parties in academia.

1.9 To alert these potential interested parties to the Consultation Document and Impact Assessment that had been posted on the MoD Consultation web site, the MoD:

- Ran an advert in the Defence Contracts Bulletin (on line and hard copy versions) for the duration of the consultation period (12 February to 6 May); and

- Wrote to the Tier 2[2] suppliers in the Submarine Enterprise.

Both of the above stated where to obtain further information, and offered one-to-one meetings with all interested parties upon request.

1.10 During the consultation period an Industry Day was held on 18 March 2008. This was aimed at Tier 2 and Tier 3[3] suppliers, and was organised on MoD's behalf by the Defence Manufacturers Association (DMA). This Industry Day was promoted by:

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[2] Tier 2 refers to those companies in the Submarine market who are critical suppliers of sovereign capability and key suppliers (including members of the Astute Key Suppliers Forum) and are not Tier 1 suppliers.

[3] Tier 3 refers to the wider supply base, ie those companies which are suppliers to the Submarine Enterprise but are not classed as Tiers 1 or 2.

- Advertisement in the Defence Contracts Bulletin (on line and hard copy versions);

- Advertising fliers (despatched to over 600 members of the DMA).

Industry were given the opportunity at the Industry Day to seek clarification from the MoD/SECA Team, and were invited to fill in a questionnaire for issues that they wanted to raise. This could be done anonymously via the DMA if preferred.

1.11 Follow-up letters dated 3 April 2008, enclosing the Consultation Document questionnaire, were sent to 7 in number Tier 2 suppliers from whom no contact had been received.

1.12 During Consultation the MoD received the following responses:

- 49 DMA members attended the Industry Day (representing 38 companies, as listed at Annex A hereto);
- 13 companies/organisations requested one to one meetings; of these, 8 were Tier 2 suppliers; and 8 were represented at the Industry Day;
- 7 companies/organisations completed the questionnaire annexed to the Consultation Document. The questions within that questionnaire were also posed to the audience of the Industry Day;
- 14 letters were received;
- 6 questions were received anonymously via the DMA.

1.13 Of the companies approached as Tier 2s only one did not make any contact, nor attend the Industry Day, although it is acknowledged that this company may have responded anonymously to the Consultation via the DMA.

1.14 MoD is in dialogue with the Tier 1 suppliers to develop collaborative working concepts, but for completeness their views were also sought during the Consultation process. No issues were raised by the Tier 1 suppliers.

1.15 The Consultation was successful in that it:

- Demonstrated broad support for SECA's proposals;
- Elicited views from across all areas of the Submarine Enterprise and enabled identification and confirmation of key areas of concern
- Will enable the implementation of a PPEO which will allow MOD to achieve its policy aims (of effective collaboration), whilst applying effective mechanisms to address concerns that were identified.

1.16 Copies of this report, and further information, can be obtained from:

DGSM SECA Secretariat
DESSMDST-SECA-SEC@mod.uk
Telephone: 0117 9133442

Or on MOD's Consultation web page:
http://www.mod.uk/DefenceInternet/AboutDefence/CorporatePublications/ConsultationsandCommunications/PublicConsultations

2. KEY ISSUES

2.1 The MoD's 'Defence Industrial Strategy' (DIS) Defence White Paper 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 could become unaffordable as hull numbers reduce and the relative cost of the fixed overhead increases.

2.2 It is essential to national security that the UK has confidence in the capability, performance and safety of its submarines. The DIS specifically identified the need to retain UK capability in this area. 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.

2.3 With the UK Government's decision on the future deterrent there is an enduring long-term requirement for nuclear submarines. The 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 BAES, Rolls-Royce and Babcock Marine. This requires the exchange of commercially sensitive 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.

2.4 MoD's rationale behind the SECA initiative, and why its proposed strategy is to work with the Tier 1 companies to improve the cost effectiveness of the Submarine Enterprise, was explained in the Impact Assessment and reiterated at the SECA Industry Day.

2.5 Many of the respondents to the Consultation accepted and agreed with MoD's strategy as a logical way to implement improvements. However some expressed concern, and for ease of response those key issues have been grouped under the following common headings:

Ensuring Competition and Sustainability (security of supply) within the Supply Chain

- MoD's ability to ensure that Tier 1 suppliers would compete on a level playing field with Tier 2 and 3 players
- MoD's ability to ensure competition in the Supply Chain and negotiate appropriate arrangements with the Tier 1 suppliers
- Visibility and engagement of Tiers 2 and 3 within the Supply Chain
- Sustainability within the Supply Chain

Ensuring Innovation

- Ensuring innovation is encouraged within the Supply Chain
- Sustaining innovation within the Supply Chain

Scope

- Overlap with Surface Ships
- Combat Systems
- Disposals

Governance

- MoDs role in SECA (governance, policing arrangements etc)
- Maintaining a level playing field within Supply Chain
- Protection of information – misuse of commercially sensitive data

2.6 Having considered all the responses received and the issues raised above, MoD comments as follows.

2.7 **Ensuring competition and Sustainability (security of supply) within the supply chain**

2.7.1 **Background**: The cornerstone of Government procurement policy is value for money through competition, thus ensuring that markets are shaped to encourage enterprise and efficiency through widening choice. However, the DIS specifically identified the need for the UK to retain the capabilities unique to submarines and their Nuclear Steam Raising Plant. This requires a specialist set of skills, associated facilities, intellectual resource and supporting technologies that must be provided within the UK (or under arrangements that guarantee UK control and safe ownership). The DIS requirement, coupled with the complex nature of the submarine enterprise, constrains MoD to a relatively small and highly specialised Industrial and skills base. Much more emphasis is therefore placed upon ensuring that a sustainable and viable UK Submarine Enterprise Supply Chain exists and this could be met through a combination of partnering and competitive approaches (short and long term) as appropriate. Regarding issues raised in the consultation exercise relating to ensuring competition and sustainability within the Supply Chain, MoD believes that through applying existing commercial process combined with the creation of a Submarine Enterprise Supply Chain Council those concerns will be addressed.

2.7.2 **MoD Commercial arrangements to ensure competition is retained:**

Current:, MoD already has in place commercial processes to enable visibility and transparency of Tier 1 Supply Chain decision making which cover both competitive and non-competitive procurement. Suppliers are encouraged to advertise in the MoD Defence Contracts Bulletin sub-contract opportunities valued at more than £40K. They are also required to declare in their responses to Invitations to Tender all sub-contracts they intend to place with a value of £1M or more. In non-competitive procurements in particular with a value of more than £1M, MoD has visibility of all make or buy decisions by the supplier on orders over £200,000. These Commercial processes will provide governance of the Tier 1 suppliers sourcing proposals (make or buy plans) regarding whether key inputs will be manufactured in house or purchased, and if purchased, MoD will have visibility of the competition being run or the reasons why a competition is not being undertaken. MoD also sits on one of the Tier 1 suppliers Tender Assessment Panel process and has full visibility of large Request for Quotations (RFQ). MoD therefore has the ability to challenge “make or buy” proposals and ultimately has the right to veto. This transparency should avoid the potential for Tier 1 suppliers to take work normally contracted to others and for example will highlight if Tier 1 suppliers apply profit on sub-contractor costs with the effect of making the Tier 2 and 3 suppliers look more expensive. **Future:** It is MoDs intention to review and enhance current commercial processes within its new Standardised Contracting Framework (SCF) and key aspects of SCF will be embodied from the outset in the SECA governance arrangements

2.7.3 **Sustaining the Supply Chain:** To ensure the retention of an indigenous and sustainable Supply Chain, and, as important, assure the PPEO will not dilute innovation or investment in new or alternative technologies, MoD will set the direction for a robust, cohesive, viable and sustainable high performing Supply Chain through the creation of a Submarine Enterprise Supply Chain Council (SESCC) which as a strategic body will aim to:

- Establish the through life Supply Chain strategic direction for the Submarine Enterprise,
- Ensure a self sustaining, viable and innovative Supply Chain capable of supporting both new build and through life support needs of the Royal Navy’s submarine flotilla.

2.7.4 The SESCC is seen as an enabler for SECA, comprising, a strong MoD role, BAE Systems, Rolls-Royce and Babcock Marine representation. It is also MoDs intention that an Independent member (i.e. not affiliated to the Tier 1 suppliers or MoD) from within a recognised industry body, should also be required to attend the SESCC to represent the interests of the lower tier suppliers. The presence of an Independent member will ensure visibility and transparency of SESCC decision making (fair play) and can also provide a conduit for Tier 2 and 3 issues and concerns that require SESCC visibility and attention.

2.7.5 It is intended that the SESCC will provide procurement and Supply Chain strategic direction and will adopt collaborative category management principles as one key tool to evaluate and develop smarter procurement solutions across the Supply Chain. The procurement levers available through a category management approach should for example, highlight duplication of purchasing activity, facilitate the consideration of joint buying to maximise opportunity in purchasing and allow for new technology options to be sought.

2.7.6 SESCC accountability will be established through the SECA governance structure when in place, with MoD DE&S Director General Submarines as the end customer.

2.7.7 In summary, once the PPEO is in place and through its linkage with the SESCC, MoD will have clear visibility of the Submarine Enterprise Supply Chain and will be able to challenge any actions that conflict with SECA principles.

2.8 Ensuring Innovation

2.8.1 To address concern about the sustainability of innovation within SMEs, SECA intends to promote the potential of SMEs to deliver significant benefits by improving the insertion of technology into the submarine programme, recognising that this will require care in the development of commercial arrangements with the Tier 1 suppliers combined with a willingness from them to be open with technology implementation planning. The enabler to drive these important behaviours is MoD's intention that the SECA Commercial Framework will appropriately incentivise Industry to drive out enterprise cost and this approach should naturally lead to securing access to innovation and retention of the necessary Suitably Qualified Experienced Personnel (SQEP) at Tier 2 level and below. MoD will therefore actively encourage Tier 1 suppliers to partner with key SMEs and nurture their innovative talents whilst delivering real and continuous improvement. An example of these behaviours operating successfully in practice has been in the area of Combat System design for the next Astute Class vessel (Boat 4) where a "Rainbow Team" of expertise from across the supply chain (including SMEs) was assembled through open invitation to industry to produce an innovative and lower cost combat system.

2.8.2 MoD is working to implement a defence supply network policy (APB(07)39) that will set out further an industrial strategy towards the supply network focusing on MoD's requirement to deliver greater value for money and innovation for Defence within a healthy and fair supply network. Separately, the MoD's Directorate of Supplier Relations has been actively seeking the views from Key Suppliers, SMEs and other Government departments on how innovation can be more effectively promoted and capitalised upon. Where appropriate, the output from this work will be taken into account as the SECA framework is constructed. More generally, the MoD's approach will be consistent with the Department's Innovation Strategy at http://www.science.mod.uk/Strategy/inno_strat.aspx

2.9 **Scope**

2.9.1 The initial view presented within the Consultation Document was that the Agreement was intended to cover: "the totality of MoD and Industry that delivers designs, builds, supports and disposes of a nuclear submarine platform, its systems and equipments". This definition was intentionally far reaching to encourage and maximise comment from across the whole submarine industrial base. The responses raised concerns about scope, and most enquiries related to how a PPEO may undermine areas of the Submarine Enterprise where healthy competition currently exists, such as combat systems equipment and disposals. Therefore it is helpful that the Consultation has informed and shaped MoD thinking as to what the SECA scope should be to ensure only unique Tier 1 capability and competence is included within the Order.

2.9.2 Building upon the consultation exercise and drawing on experience gained from Surface Ship Support (SSS), Astute acquisition and the BAE/VT Group Joint Venture, MoD have now been able to refine the **in scope** so that only the unique Tier 1 suppliers capability described as: "designing and building a nuclear submarine and integrating its equipment and systems; providing and managing repair, maintenance and support; designing and building the nuclear reactor; and managing the removal of the reactor, its fuel and other radioactive material" should describe the SECA scope within the Submarine Enterprise. The Collaboration members will also be required to work together very closely in order for the Collaboration to operate optimally and this will require the parties to share commercially sensitive information about their businesses and the Supply Chain (subject to confidentiality obligations). **Out of scope** would be: the disposal of submarines (other than managing the removal of the nuclear reactor, nuclear reactor fuel and other radioactive material), facilities not required for nuclear submarines and the provision of submarine equipment and systems, due to the nature of their markets and the healthy competition that MoD wishes to retain within them.

2.9.3 Combat Systems Scope. Particular concerns were raised in the Consultation over the potential stifling of innovation and competition in the combat systems area. The scope of the PPEO therefore makes no exception for combat systems in limiting its scope to integration at the platform level. The work of the Combat System Enterprise (CSE) initiative, which is entirely consistent with but separate from SECA, includes definition of the roles of all parties in the submarine combat systems business. A key principle underpinning its work is the preservation of a competitive and innovative Supply Chain; and amongst the key challenges it is addressing are the optimisation of structures and incentives for such an environment to endure. One construct being developed within the CSE is that of the Design Evolution Team (DET). The basis of this was the success of the "Rainbow Team" approach adopted to bring together the best available combat system designers to achieve cost reduction for the Astute Class, which has now been broadened from the Astute Class contracts and expanded as the vehicle to carry out all system level design work. A key principle of the governance MoD will apply to the DET is that participation is strictly on the basis of applying the most suitable parties to each task.

2.9.4 Combat Systems Supply Chain. The Supply Chain for combat systems includes a continuum of companies from key Tier 2 suppliers fulfilling the roles of sub-system integrators to Tier 3 suppliers bringing niche skills and new ideas to the Submarine Enterprise. This very innovation brings changes to this Supply Chain, which needs to evolve to match the changing products. The trend is for COTS hardware and open systems approaches to software and systems to open up the market to greater competition at equipment and lower level, and to allow new entrants in. This is welcomed and will be encouraged, alongside recognition that Tier 2 suppliers bring deep and concentrated expertise that is essential to the ongoing development and support of the submarine combat system.

2.10 **Governance**

2.10.1 Concern surrounding governance (how MoD's role within SECA would assure a level playing field; how SECA could result in an erosion of capability at Tier 2; reduction in innovation potential; and reduction in value for money if capability is allowed to grow within the Tier 1 suppliers and their partners or subsidiaries) has been addressed earlier in this document. To summarise, governance will be managed through the continued application of existing MoD commercial policy and processes (and reinforced with the SCF) complemented with new SECA governance arrangements which have yet to be finalised and agreed. MoD's position within the SESCC will ensure strategic direction is matched to the vision of a self-sustaining, viable and innovative Supply Chain capable of supporting both new build and through-life support needs of the Royal Navy's submarine flotilla. It is MoDs intention for an independent representative to reside on the SESCC and the role should provide a conduit to champion the issues and concerns of Tiers 2 and 3 suppliers and will provide visibility and transparency (fair play) to assure that Tier 1 supplier dominance will not ensue. It is also intended that the SESCC will encourage suppliers to sign up to SC21, an industry-led[4] initiative that seeks to raise the performance, efficiency and responsiveness of defence and aerospace industry supply chains, reducing costs and increasing competitiveness and sustainability

[4] The 21st Century Supply Chains or 'SC21' programme is an initiative launched by the Society of British Aerospace Companies (SBAC) in 2006. Some 400 companies have signed-up so far.

2.11 **Protection of Information**

2.11.1 The MoD regards the exchange of information by the Tier 1 suppliers as fundamental to ensuring that there is genuine collaboration and to enable them to jointly identify costs and to deliver collaborative opportunities to the MoD. It also operates to build trust. The exchange of information will include commercially sensitive information such as internal costs, planning, strategy and skills.

2.11.2 In the majority of areas covered by the proposed Collaboration, the Tier 1 suppliers 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 concerns. It is proposed that there will be information sharing between the Collaboration parties across the "in scope" areas of: designing and building a nuclear submarine and integrating its equipment and systems; providing and managing repair, maintenance and support; designing and building the nuclear reactor; and managing the removal of the reactor, its fuel and other radioactive material.

2.11.3 It is not anticipated that existing confidentiality arrangements will be impacted by SECA, in that disclosure of a supplier's commercially sensitive information to a third party, including other Tier 1 suppliers, will still require the prior consent of the supplier concerned. The risk that the Tier 1 suppliers may exploit that information for its own benefit will have to be taken into account by the supplier when deciding on what to impart.

2.11.4 The MoD recognises, however, that if it is to encourage the free flow of such information, it will have to put in place robust governance processes and procedures that minimise the risk of such behaviour occurring. MoD will investigate the feasibility of an Information Sharing Agreement stating the Do's and Don'ts being signed.

2.11.5 The SECA Commercial Framework will also consider how exchange of commercially sensitive information is catered for, recognizing that once information is exchanged by Tier 1 suppliers, the competitive picture is altered for both Tier 1 suppliers and Tier 2 suppliers. Information flowing from bilateral arrangements should not be affected and that further release could only be changed by agreement of the parties concerned.

2.11.6 With regard to the concern raised on potential distortion of civil nuclear market, the 1958 Mutual Defence Agreement[5] prevents Rolls-Royce from exploiting knowledge gained on Nuclear Steam Raising Plant (NSRP) within other markets.

[5] 1958 Agreement for Cooperation on the Uses of Atomic energy for UK-US Mutual Defence Purposes ("Mutual Defence Agreement").

3. SUMMARY OF QUESTIONNAIRE RESPONSES

3.1 A breakdown of responses to questions posed in the Consultation Document questionnaire follows. In addressing these questions companies were asked to refer to Section 4 of the Impact Assessment which contains the MoD's initial assessment of the impact of the PPEO on Small Firms and Section 5 that addresses the Supply Chain, and a summary of their responses follows.

3.2 Issues raised by companies/organisations other than by questionnaire have been grouped together and addressed in Section 2.

3.3 **Q1. What impact do you envisage a PPEO having on your company?**

Industry responses:

5 questionnaire responses received	- 1 positive - 3 neutral (impact difficult to assess) - 1 negative

Details of the responses are shown below:

Company A - (Positive): Positive, since it would allow my two main customers, to properly plan for equipments and deliveries in the most cost effective and timely way. [We have] partnering agreements in place with [Tier 1s] with affordability targets embedded in the agreements. Scarce resources are being focussed on delivering the capability for Astute and the Future Deterrent. The PPEO is a logical extension of the agreements that industry is putting in place.
Company B - (Neutral): Difficult to assess the impact a PPEO will have on [our] business until the detailed terms of a long term partnering agreement are known and in particular the nature and extent of the regulatory framework the MoD put in place to safeguard their long term interests and the interests of the wider supply chain. [We supply] a large number of the most complex electronic systems installed on submarines (sonar, electronic warfare, communications, satcom, satnav, optronics), some of these areas of technology are highly specialist (specific to submarines) and the relationship between these businesses and the PPEO will be a critical factor in the viability of their businesses.
Company C - (Negative): The Systems Integration business model we offer encourages UK small and medium enterprises (SMEs) to participate in submarine combat systems development whilst dramatically reducing through-life costs. This fulfills the objectives of Defence Industrial Strategy, December 2005 because it nurtures UK industry in a unique and rapidly evolving domain and provides an avenue for low risk implementation of cost saving ideas that affordably keep pace with the threat. The PPEO includes the Submarine Combat Systems Enterprise (SCSE) within the SECA which has high potential for limiting competition and innovation in this domain … It would potentially promote non-competitive vertical integration of [a Tier 1 subsidiary].
Company D - (Neutral): Difficult to say until Terms of Reference established. If desire is to leave Tier 1s alone then no effect.
Companies E and F did not respond to this question.
Company G – (Neutral): The creation of a collaborative framework for the UK submarine market will have very little impact on our company. Although we are part of the Tier 2 industry base, the potential business volume and impact is not considered significant.

MoD Comment on issues raised at Q1:

Company C raises a specific concern regarding the potential non-competitive vertical integration of subsidiaries of Tier 1 suppliers operating at Tier 2. However, MoD's intention is to limit the scope of the PPEO to unique capability, including systems and equipment integration but therefore excluding supply of systems and equipment, including Combat Systems. The PPEO therefore does not promote vertical integration and both SECA and CSE initiatives draw a clear distinction between the Tier 1 activities of Tier 1 suppliers and their other lower tiers business.

In summary, whilst Combat Systems Integration is an activity which will continue to require Tier 1 involvement, since MoD views this as an essential element of coherent submarine build activity, there is no intention to reduce the scope of competition in the field of Combat Systems nor to promote non-competitive vertical integration. Please see Section 2, paragraphs 2.7-2.9, which detail MoD's position in this area.

SECA will define the scope of Tier 1 boundaries based on unique capability. The intention is to exploit competition where it exists in the market place, subject to normal MoD constraints imposed by the need to manage risk in the submarine build and support process, and the need to maintain sovereign capability where appropriate.

3.4 **Q2. What impact do you envisage a PPEO having on the markets you trade in and your relationship within these markets:**

Industry responses:

5 questionnaire responses received - 0 positive
- 4 neutral
- 1 negative

Details of the responses are shown below:

Company A - (Neutral): [We] make 75% of [our] sales into the defence market of which the split is roughly 50:50 between the USA and UK. Since there is an alignment between the US and the UK on submarines and [we supply] to both navies, I do not foresee the PPEO having any impact. [We] also deliver capability into the surface naval, air and land market sectors. Exposure to the civil nuclear market is growing, there has been no read across so far, but it is being explored.
Company B - (Neutral): The UK submarine market is a highly specialist market which operates in an environment where national security issues can be paramount. It is not envisaged that a PPEO will have a major impact on our trade relationships with the broader international market.
Company C (Negative): Implementation of the SECA PPEO on its current trajectory will cause a contraction in an otherwise healthy UK submarine combat systems tier 2 and 3 supplier base. Such contraction will limit the UK's options to achieve commonality with such initiatives as the Surface Ship Support Alliance and the BAE/VT JV which are proceeding with a competitive implementation model for combat systems whilst addressing a similar array of industrial base issues. [We] have been informally notified by a number of its submarine combat systems suppliers and potential suppliers of their concern for viability under the terms of the PPEO. These

suppliers have expressed a preference for open competitions, where the best value for money ideas win, over the monopoly condition that will exist in submarine combat systems under the PPEO.
Company D - (Neutral): We are heavily involved in support of our equipment in service. Two thirds of our turnover is refit and in-service support. Any initiative which changes the current status quo will impact both relationships and markets.
Companies E and F did not respond to this question.
Company G – (Neutral): No significant impact.

<u>MoD Comment on responses to Q2:</u>

The scope of SECA is specific and this will ensure that the PPEO covers only those unique capabilities that can be provided by the Tier 1 suppliers. The provision of equipment and systems, including combat systems, are therefore excluded from the PPEO as it is clear to MoD that a sustainable and competitive market exists within the field of Combat Systems at Tier 2 and 3 level and there is no intention for this position to change once the PPEO is in place. MoD will encourage competition within the Supply Chain wherever and whenever practicable, but is mindful of the constraints on maintaining an indigenous capability for submarines within what is a very specialized maritime industry.

Whilst two of the respondents (Companies A and B) are active in the US and UK, they have not envisaged any impact. Company C raises concern about the PPEO restraining their ability to contribute to the UK programme, but this is not the MoD's intent. The MoD and BAE SYSTEMS have, as an example, lately cooperated in bringing together a "Rainbow Team" from across the combat systems industry to conduct part if the Design for Cost Reduction work on the Astute Class. Thus while overall design integration remained with the Astute prime contractor, the broader supply chain was actively exploited. This construct has new been taken forward under the CSE initiative as the DET (as described in the main body of this document) to maintain this productive relationship.

Please see Section 2 paragraphs 2.7-2.9 which address these issues.

3.5 **<u>Q3. What impact do you envisage a PPEO having on the related markets that you and the Tier 1 companies (BAES, Rolls-Royce and Babcock Marine) trade in?</u>**

<u>Industry responses:</u>

5 questionnaire responses received	- 1 positive/neutral - 3 neutral - 1 negative

Details of the responses are shown below:

Company A - (Positive/Neutral): In the related surface naval, land and air markets competition is the dominant way of conducting business and there are no indications of the arrangements for the submarine market impacting on this market … There is the potential positive benefit of read across in the civil nuclear market.
Company B - (Neutral): The UK submarine market is a highly specialist market which operates in an environment where national security issues can be paramount. It is not envisaged that a PPEO will have a major impact on our trade relationships with the broader international market.
Company C - (Negative): We support the notion that three monopoly tier 1 suppliers

dominate the business with responsibility for: • Submarine platform design and construction – BAES • In-service support and disposal – Babcock • Nuclear reactor supply and support– Rolls Royce However, [we] believe that the scope of SECA should be limited to these key areas. In particular, MoD's objectives regarding sovereign submarine combat systems capability are best preserved by fostering competition at the second and third tiers by excluding this domain from the PPEO.
Company D - (Neutral): Supply, refit and service support of submarine air purification equipment.
Companies E and F did not respond to this question.
Company G – (Neutral): No significant impact.

<u>MoD Comment on responses to Q3:</u>

The CSE initiative is separate from, but consistent with the SECA initiative. The totality of the combat systems business is not envisaged to be, and is certainly not necessarily, within SECA; and the element of that business which is covered by the PPEO is limited to that of overall system integration in common with most other elements of the submarine enterprise. Whilst Combat Systems Integration is an activity which will continue to require Tier 1 involvement, since MoD views this as an essential element of submarine build activity there is no intention to reduce the scope of competition in the in the field of Combat Systems. The intention is to exploit competition where it exists in the market place, subject to normal MoD constraints imposed by the need to manage risk in the submarine build and support process, and the need to maintain sovereign capability where appropriate.

Company C response also raises concerns regarding the potential distortion of wider markets, in particular surface ships, but again this relates to inclusion of combat system equipment as part of the PPEO scope, which is not MOD's intent.

Please see Section 2 paragraphs 2.7 – 2.9 which addresses the issues raised.

3.6 **<u>Q4. Taking the range of potential benefits listed in the Consultation and Impact Assessment Documents, your views are sought on the impact in cost/benefit terms (focusing on profitability and future involvement in the Submarine market) on your company with regard to the scope for future competition within both the Submarine and related markets?</u>**

<u>Industry responses:</u>

6 questionnaire responses received, each raising specific issues.

Details of the responses are shown below:

Company A: Competition has and continues to be used where applicable. Sole source is being used in the submarine sector where we are a single source for highly specialised deliveries, for example [provision of unique military systems]. Where [we are] sole source we have agreed to an open book arrangement that has required a high degree of trust and partnering. The partnerships are actively investigating cost down initiatives.
Company B: The creation of a PPEO is based on the premise that competition at the submarine platform build and support level is not sustainable and that a long term

partnership with the key companies concerned is likely to lead to a better/more cost effective outcome for the MoD… The nature of such a long term partnering agreement will require the MoD to have in place a strong regulatory framework. The scope for competition in the supply chain is not itself affected by the creation of a PPEO but the MoD needs to recognise that there are major issues of sustainability within the supply chain and the policies/behaviour of the PPEO is likely to have a major impact on the approach taken on these sustainability issues.
Company C: Invoking the pending PPEO, DG Submarines has already selected a combat system baseline for Astute boat 4 and beyond without the benefit of competition, despite the demonstrated benefits of such competition for [a sonar system]. This solution is based on a government funded spiral development of the existing Astute baseline by the incumbent tier 2 suppliers, including [a Tier 1 subsidiary]. The tier 1 supplier has declared that future submarine combat systems will be derivatives of this system. This approach will make it impossible for [us] to submit a competitive tender for an alternative approach effectively eliminating tier 2 competitions and creating a submarine combat systems monopoly at tier 1 and tier 2. This action also has significant implications for effective competition in surface ship combat systems by providing SECA participants and [a Tier 1 subsidiary] with a protected market from which their competitive efforts in surface ships can be leveraged. Given these implications, an independent review of this proposed acquisition strategy is recommended.
Company D: We see limited scope for future submarine markets.
Company E: A Tier 1 company in the proposed SECA may have an overriding influence with regard to the current future development and supply of a submarine main propulsion/turbine generator equipment.
Company F: The Submarine market is limited by the number of platforms built and as a consequence there is no effective economy of scale. Due to the time taken to build a platform and the short life of electronic components, all platforms in their weapons capability are in effect obsolete by the time they enter service. Consequently all platforms should be considered in the main as bespoke. With no competition in the build market there is little incentive for the main players to reduce their share of any profit. Cost reduction ideas we have previously submitted have been met with silence by the main players. Originators of ideas at the bid stage of the programme have no incentive as the idea(s) can be copied with no return. There is no specific incentive for the suppliers to support any future platform program. By removing the Prime bid stage, the drive to reduce costs is negated and adds the blanket protection that drives inefficiency. The burden to produce cost saving has been passed down to suppliers with the carrot that ‘this is the first batch of a larger program’ and the guise of working together and there will be future orders. Consequently contracts have been undertaken at a loss only to find the supplier further requested to reduce costs.
Company G gave a N/A response.

MoD Comment on responses to Q4:

Whilst none of the responses provided any indication of specific impact on their companies in cost/benefit terms, a number of concerns are raised. The responses recognise that MoD employs a range of sourcing strategies, exploiting competition where possible, but recognising that in some cases longer term partnering arrangements are more appropriate, particularly in this specialist market. This tailored approach will continue for future procurement, except that, through the alignment of MoD commercial policy and processes and the SESCC, MoD will work more closely with the Tier 1 companies to enable optimization across the Enterprise.

Several of the responses express concern about the level of control and influence that will be held by the Tier 1s. MoD recognizes these concerns and will be ensuring that arrangements are put in place that provide appropriate MoD involvement, and visibility of sourcing strategies. Please see Section 2 paragraph 2.7 which more fully addresses these issues.

The adoption of category management techniques as a key enabler within industry has been used successfully for the last 12-18 months by BAES in the Astute Programme, and is one of the areas being actively explored by the SESCC as a means to deliver a more efficient enterprise wide supply chain.

This process of driving for commonality has led to an affordable evolving combat systems design for future vessels based on an open architecture using commodity hardware. The industry questions are predicated on more of the same (stove piped bespoke and expensive designs) which by nature would be unaffordable in both acquisition and support. This emerging design will lead to a change in the role and scope of Tier 2 contracting and will encourage the emergence of Tier 3 SMEs (through lower level competition) as envisaged by the DIS.

Company C response also voices their concern about maintaining competition in the combat systems area. Whilst MoD's strategy is to exploit competition where appropriate (as evidenced by Company C winning a recent submarine sonar competition), this has to be balanced against the benefits of commonality when procuring follow on submarines. The Astute combat system is being incrementally evolved with BAE retained as the system integrator, not re-competed as a whole. This is consistent with the overall Astute procurement strategy and reflects a consistent and sensible policy of driving towards commonality and a single evolutionary system rather than costly redesign every three or four hulls with an unaffordable multiplicity of systems to support through life. At no point was it necessary, and nor would it have been possible to "invoke the pending PPEO". Nevertheless, the approach to the design evolution (which is described in response to previous questions and in the main body), has enabled innovations suggested by the supply chain to be incorporated. It is perhaps of note that the resulting design has transferred some scope of supply for hardware away from incumbent equipment suppliers, including a Tier 1 subsidiary, to other members of the Supply Chain.

3.7 **Q5. Taking the range of potential benefits listed in the Consultation and Impact Assessment Documents, your views are sought on the impact in cost/benefit terms (focusing on profitability and future involvement in the Submarine market) on your company with regard to the potential opportunities to develop innovative ideas and introduce new technologies?**

Industry responses:

6 questionnaire responses received - 6 did not respond to the specific question asked

Details of the responses are shown below:

Company A - (Positive): Board to Board meetings are held every three months [with a Tier 1 supplier]... At these forums a variety of issues and ideas are discussed and actions

agreed.
Company B - (Negative): Combat System Integration – There is a need to engage the skills of a broader community at all stages of the enterprise (ie from concept through platform acquisition to long term support). For combat systems, companies such as ourselves… have the skills and resources to contribute to the overall enterprise including design and support. We believe that the combat systems thinking for future submarines is likely to be influential on the overall design and could provide major cost benefits. Future Procurement options and the Use of Competition – We believe that an open mind needs to be maintained on the 'best' way to procure combat systems in the future. It may be that a combat systems expert company or association of companies, is best placed to specify and procure future equipments and deliver the most cost effective approach to the important issues such as technology refresh (spiral development) and innovative fleet wide support approaches. This will also need to take account of the difficult balance between the benefits of running competitions and the maintenance of UK capabilities (eg for key subsystems such as sonar).
Company C - (Negative): [We] strongly believe, as outlined above, that the PPEO implementation will effectively eliminate competition at Tier 2 significantly limiting the introduction of new technologies and innovative ideas, particularly those that might reduce the cost to the Ministry for procurement and sustainment including capability improvements. The primacy of SECA participants will likely stifle selection of the optimum approach for delivery of all future submarines including the Successor SSBN.
Company D - (Negative): This is important – if we perceive a threat on our submarine business from the Alliance, we will <u>not</u> self invest in new technology. Instead we will direct our limited investment resources into the non MoD overseas markets.
Company E did not respond to this question.
Company F - (Neutral): We are trying to understand how funding can be allocated to develop these ideas/new technologies. There are limited areas in the Submarine Communications market that are bespoke to this type of platform. Consequently, technology specific to the submarine is expensive or they are subsidised by the use of technology from other platform types (surface ships) …In addition, the adoption of commercial standards has been marred by the refusal to accept COTS equipment unless it has been further qualified to Military standards! Innovation – financial bodies see innovation as risk. We are struggling to understand how this impasse will be resolved.
Company G – (Neutral): It is our opinion that the UK MoD has derived considerable benefits from technology innovation without participating in funding the development. [We have] provided significant cost reduction and value engineering opportunities. We have over the past 24 months worked successfully as part of the BAE Key Supplier Forum to determined direct cost savings as well as developing a total ownership cost saving resulting from technology insertion initiatives.

<u>MoD Comment on responses to Q5:</u>

None of the responses provided specific impact in cost/benefit terms, but a number of comments are made. In one instance arrangements are in place which provide a forum for discussion of issues and exchange of ideas, but another respondent identifies difficulties in developing ideas and implementing them. Whilst limited, the responses indicate that there is some potential to exploit innovation and that there is a need for a closer engagement with suppliers in future. Please see Section 2 paragraphs 2.7 and 2.8 for a more detailed response on these issues.

Company B points out that combat systems thinking for future submarines is likely to be influential on the overall design and could provide major cost benefits. Whilst the purpose of SECA is to enable collaboration between the Tier 1s in their areas of unique capability, it is recognised that there is expertise in the Tiers 2 and 3 which could be brought to bear, particularly during the concept phase which MoD will continue to lead, to influence through life cost and performance. MoD's normal acquisition procedures will ensure appropriate involvement of third parties. It is the MoDs intent that closer collaboration between the Tier 1 suppliers will enable a better balance between up front and through life costs to be achieved. However, exploitation of the better understanding of the drivers for whole life costs of combat systems will still require the support and active engagement of the Supply Chain to realise the potential benefits across all Defence Lines of Development.

As covered previously, the concerns of Company C are not consistent with the SECA intent. Whilst Combat Systems Integration is an activity which will continue to require Tier 1 involvement, since MoD views this as an essential element of submarine build activity, there is no intention to eliminate competition at Tier 2. Please see Section 2 paragraphs 2.7 and 2.8 for a more detailed response on this issue.

3.8 **Q6. A general assessment on the nature of the relationship between the different tiers of the market, including the role of Small and Medium Enterprises (SMEs) within the Submarine and related markets?**

Industry responses:

4 questionnaire responses received - 1 positive
- 3 negative

Details of the responses are shown below:

Company A - (Positive): Partnering arrangements are now in place between [us] and [Tier 1s]. This is being driven by the need to satisfy the requirements of the Submarine Enterprise. Competition still exists where it can be conducted. There is [currently] no extension of these arrangements into related markets
Company B - (Negative): Some of the specialist SMEs involved in the submarine supply chain are fragile and the creation of a PPEO is based on the premise that competition at the submarine platform build and support level is not sustainable and that a long term partnership with the key companies concerned is likely to lead to a better/more cost effective outcome for the MoD. As previously mentioned the nature of such a long term partnering agreement will require the MoD to have in place a strong regulatory framework. The scope for competition in the supply chain is not itself affected by the creation of a PPEO but the MoD needs to recognise that there are major issues of sustainability within the supply chain and the policies/behaviour of the PPEO is likely to have a major impact on the approach taken on these sustainability issues.
Company C - (Negative): [We] strongly believe, as outlined above, that the PPEO implementation will work to the detriment of UK SMEs involved in submarine combat systems by the elimination of competition.
Companies D and E did not respond to this question.
Company F - (Negative): Small and Medium Enterprises work because they are efficient and function in a co-ordinated manner. It is a function that large organisations produce inefficiency …. The creation of this monopoly will increase process and procedure costs. The cost of the Boat built/cost of ownership will increase.

This program will only function correctly if the individual components are a manageable size and take responsibility for their own holistic approach to design, build and support. Due to Commercial pressures, the companies/suppliers owned or part owned by the Tier 1 will exploit their relationship and therefore expand the monopoly of Tier 1.
Company G gave a N/A response.

MoD Comment on responses to Q6:

The negative responses from Companies B and F raise concerns regarding supply chain/efficiency. These issues are discussed at Section 2 paragraph 2.7.

Company C response - There is no intention to eliminate competition in submarine combat systems. The intention is to exploit competition where it exists in the market place, subject to constraints on maintaining sovereignty, capability, etc. Please see Section 2 paragraphs 2.7 and 2.8.

Annex A - List of Companies and Organisations who responded to the Submarine Enterprise Collaborative Agreement (SECA) Consultation Document and Impact Assessment; attended SECA Industry Day; or both

Company/Organisation	Member of Key Supplier Forum?	Attended SECA Industry Day on 18 March 08?	One to one meeting requested and held?	Response received?
Aish Technologies Ltd		Yes		
Alstom Power Systems	Yes			Yes
Alter Technology UK		Yes		Yes
AMEC		Yes		Yes
Atkins Global		Yes		Yes
Atlas Elektronik UK Ltd			Yes (15 Apr 08)	Yes
AWE plc		Yes		
Babcock Marine		Yes		
BAE Systems		Yes		
BAE Systems Insyte		Yes		
BMT Defence Services Ltd		Yes	Yes (15 Apr 08)	Yes
British Naval Equipment Association			Yes (2 May 08)	Yes
Cranfield School of Management				Yes
Defence Manufacturers Association (DMA)		Event arranged by DMA		
Defence Solutions Ltd		Yes		Yes
Deliotte and Touche LLP		Yes		
Frazer-Nash Consultancy Ltd		Yes		
Imes Ltd		Yes		
J&S Marine Ltd		Yes		
Jackson, Roger (consultant)			Yes (with VT on 25 Mar 08)	
Jacobs UK Ltd		Yes	Yes (26 Mar 08)	
Johnson Controls/York Navy Systems	Yes			Yes
L-3 Communications Marine Systems UK Limited	Yes	Yes	Yes (25 Mar 08)	
Lloyd's Register		Yes		

Company/Organisation	Member of Key Supplier Forum?	Attended SECA Industry Day on 18 March 08?	One to one meeting requested and held?	Response received?
Lockheed Martin		Yes		
Lockheed Martin UK		Yes	Yes (15 Apr 08)	Yes
LSC Group Ltd		Yes		
MacTaggart Scott and Co Ltd	Yes	Yes		Yes
Mott MacDonald		Yes		
Northern Defence Industries Ltd		Yes		
Northrop Grumman Sperry Marine		Yes		
NUKEM Ltd		Yes		
Pennant International Group plc		Yes		
Qinetiq		Yes	Yes (3 Apr 08)	Yes
Rolls-Royce plc		Yes		
Same Day plc		Yes		
SEA (Group) Ltd		Yes		
Selsdon Filtration Ltd		Yes		
SERCO Assurance		Yes	Yes (7 Apr 08)	Yes
Thales Naval UK	Yes	Yes	Yes (6 May 08)	Yes
UKAEA (United Kingdom Atomic Energy Authority)		Yes		Yes
Ultra Electronics Datel		Yes		
Ultra Electronics Ltd	Yes	Yes		Yes
VT Nuclear Services			Yes (25 Apr 08)	
Wartsila UK Ltd		Yes		Yes
Weir Strachan and Henshaw	Yes	Yes	Yes (25 Mar 08)	
Wellman Defence Ltd	Yes		Yes (21 Apr 08)	Yes

Annex B – List of Companies/Organisations who attended SECA Industry Day on 18 March 2008 but who did not formally respond directly to SECA Team

Aish Technologies Ltd

AWE plc

Deloitte and Touche LLP

Frazer-Nash Consultancy Ltd

Imes Ltd

J&S Marine Ltd

Lloyds Register

LSC Group Ltd

Mott MacDonald

Northern Defence Industries Ltd

Northrop Grumman Sperry Marine

NUKEM Ltd

Pennant International Group plc

Same Day plc

SEA Group Ltd