

Joint QinetiQ and BMT submission to Senate Foreign Affairs, Defence and Trade Committee on Procurement procedures for Defence capital projects

Supplementary Submission to Senate Hearing on 12th August 2011

26 August 2011

Your ref Supplementary Submission to Senate Hearing on 12th August 2011

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Senate Standing Committees on Foreign Affairs, Defence & Trade

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Dear Jane

Thank you for your assistance and support in preparation for the Senate Hearing on Defence Procurement on 12th August 2011. QinetiQ and BMT were pleased to be invited to provide witness statements and welcome the opportunity to provide further assistance as the enquiry develops.

During the hearing our telephone connection was intermittent and Wendy Wates accepted a couple of questions on notice. With this in mind, we have provided supplementary information in this letter and would be delighted to answer any subsequent questions that the committee may have.

Does UK Government still hold a majority share and does QinetiQ have access to UK programs and resources through that share?

Whilst the UK Government no longer holds a majority share in QinetiQ, the UK government does hold a Special Share. A Special Share is the term used for government retained rights on privatised companies designed to protect the interests of government, in particular national security. In QinetiQ's case this was put in place when QinetiQ was privatised. In September 2008 the MOD disposed of its 18.8% equity stake in QinetiQ but retained a Special Share. The Special Share is not a share as such – it is a Special Share describing retained government rights on the holder as follows:

- a) to require the Group to implement and maintain the Compliance System (as defined in the Articles of Association) so as to make at all times effective its and each member of QinetiQ Controlled Group's application of the Compliance Principles, in a manner acceptable to the Special Shareholder;
- b) to refer matters to the Board or the Compliance Committee for its consideration in relation to the application of the Compliance Principles;
- c) to veto any contract, transaction, arrangement or activity which the Special Shareholder considers:



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- i) may result in circumstances which constitute unacceptable ownership, influence or control over QinetiQ or any other member of the QinetiQ consolidated Group contrary to the defence or security interests of the United Kingdom; or
 - ii) would not, or does not, ensure the effective application of the Compliance Principles to and/or by all members of the QinetiQ Controlled Group or would be or is otherwise contrary to the defence or security interests of the United Kingdom;
- d) to require the Board to take any action (including but not limited to amending the Compliance Principles), or rectify any omission in the application of the Compliance Principles, if the Special Shareholder is of the opinion that such steps are necessary to protect the defence or security interest of the United Kingdom;
- e) to exercise any of the powers contained in the Articles in relation to the Compliance Committee; and
- f) to demand a poll at any of QinetiQ's meetings (even though it may have no voting rights except those specifically set out in the Articles).

The Special Shareholder has an option to purchase defined Strategic Assets of the Group in certain circumstances. The Special Shareholder has, inter alia, the right to purchase any Strategic Assets which the Group wishes to sell. Strategic Assets are normally testing and research facilities.

The Special Share may only be issued to, held by and transferred to H.M. Government (or as it directs). At any time the Special Shareholder may require QinetiQ to redeem the Special Share at par. If QinetiQ is wound up the Special Shareholder will be entitled to be repaid the capital paid up on the Special Share before other shareholders receive any payment. The Special Shareholder has no other right to share in the capital or profits of QinetiQ.

The Special Shareholder must give consent to a general meeting held on short notice.

The Special Share entitles the Special Shareholder to require certain persons who hold (together with any person acting in concert with them) a material interest in QinetiQ to dispose of some or all of their Ordinary Shares in certain prescribed circumstances on the grounds of national security or conflict of interest.

The Directors must register any transfer of the Special Share within seven days.

In addition to QinetiQ's strong relationship with UK government and its Defence organisations, QinetiQ has a strong presence and capability in Australia where QinetiQ is committed to local delivery of its worldwide capability, drawing on the resources and expertise in the wider QinetiQ enterprise and QinetiQ's partnering organisations to deliver value for money solutions in Australia, developing in country capability to ensure long term sustainability.

QinetiQ is a leading international provider of independent technology-based services and solutions to the Defence, Aerospace and Security markets. QinetiQ's clients benefit from 300 specialist staff based in Australia and the ability to draw upon the expertise, experience and knowledge of over



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10,000 QinetiQ employees from across the globe. As Australia's largest independent provider of specialist technical advice services to Defence and a trusted provider of specialist advice to the Australian defence industry, QinetiQ exists to support our customers complete challenging missions safely and effectively - We deliver for Australia's soldiers, sailors and airmen.

Question 2: How much will the design phase cost?

The design of a submarine is an iterative process from concept and feasibility design activity, preliminary and detailed design with progressive levels of design definition and resources being required. Based on a design activity as outlined in Question 3 (below) typical engineering/technical resource loading for a conventional submarine design activity are approximated in table 1.

TABLE I. DESIGN PHASE PERSONNEL COSTS

Design Phase	Personnel Requirements	Indicative Cost*
Concept and Feasibility	15 personnel for 6 months	\$1.5M
Preliminary	150 personnel for 18 months	\$45M
Detailed	400 personnel for 30 months	\$180M

It should be noted that these represent the cost of the engineering/technical personnel only and do not include those specifically employed in project management or administration nor does it include the operational or R&D community.

The numbers are representative of a design organisation that has experience in the design activity, it is anticipated that an additional loading of up to 50% could be incurred in conducting the activity with an inexperienced design team.

Question 3: In your paper you recommend the separation of the design and production phase – can you please explain this further and how you see this working through delivery?

In traditional warship acquisition projects such as the Australian Air Warfare Destroyer project it is standard practice to have two elements to the acquisition activity ie Pre Contract Award and Post Contract Award.

Pre Contract award activity includes the concept/feasibility design phase followed by the preliminary design phase. The design effort in this phase is of a conceptual and high end development and integration nature involving professional engineers and technologists and engages the operational and R&D community.

Post Contract award activity includes the detailed design and build/production activity. The detailed design activity transforms the functional design and architecture of the ship and its' systems into the physical definition of the ship and its' systems such that it can be constructed. This type of work is performed by technical staff under direction from the engineers to ensure that the original design intent is achieved and in liaison with the shipyard production staff.



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The paper refers to Pre Contract award as Design phase and Post Contract award as Production phase.

In the UK and US the Design phase was conducted within the countries Defence Department with industry being requested to compete for the Production Phase. The cost of the Production Phase is an order of magnitude greater than the design phase and hence the benefit of competition on price control is achieved at this point.

The US & UK Defence Departments conducted the design activity in house as they needed to balance the capability required against the cost they were prepared to pay while considering integration of technologies specific to their own and allied Navies R&D activity and hence needed maximum flexibility to consider a range of options. This in house approach eliminates the commercial interests of organisations who have specific product solutions and concentrates solely on achieving balance of cost and capability.

It is proposed that an equivalent approach be taken for SEA 1000 in establishing a design entity that can perform the design activity and provide the engineering oversight during the Production Phase. The team would be established from an appropriate mix of Defence personnel, submarine operational community, representatives from R&D community, submarine platform and combat system design subject matter experts (drawn from national and international industry) and cost estimating. This team would form the kernel of the feasibility and concept design activity.

During the preliminary design activity the team would expand to include representatives from submarine system providers (eg weapon handling, battery, propulsion etc) and representatives from the production community (ASC) to consider design for production aspects.

Maintaining the integrity of the design baseline throughout the Production phase would be the responsibility of the design team in an oversight role. The detailed design would be completed by the technical staff of the production facility (ASC) under the direction of their representatives who participated in the design phase.

On completion of the detailed design activity of Batch 1 the design team would commence the concept/feasibility design activity for Batch 2.

Question 4: If the Commonwealth of Australia (CoA) were to issue a tender for Design of the Future Submarines today, is this something that Australian Industry would be able to respond to?

There are a number of companies in Australia and internationally who believe that they can respond to such a tender, however their ability to deliver will be significantly hampered by the availability of suitably qualified and experienced personnel available to support the Australian program. Australia is currently experiencing a skills shortage across the full range of designers, scientists, technicians, engineers, propulsion experts, platform developers, system integrators, production staff and specialist procurement experts in the field of Submarine Platforms and their systems. Additionally, Australia's natural allies are delivering their own submarine programs and despite a clear willing to support Australia in the design, development and delivery of its national submarine capability, no other country designs or builds submarines to cater for the capability requirements of the Australian



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Geography, and those country's own delivery requirements place limits on their ability to make resources available to Australia. Australia's submarine capability is driven by national security requirements and as such should be treated as a national capability rather than platform procurement. It is this identified skilling shortage, amongst other factors outlined in our report, that has led to QinetiQ and BMT's recommendation that the Australia's submarine capability is accepted as a national capability that is supported by the creation and implementation of a workforce campaign and action plan.

Further, where Defence is seeking Industry investment in the development of capability and resources available to the Commonwealth, the level and duration of commitment of such a tender needs to be at a level that incentives and encourages industry to invest in skills and capability to support the submarine program.

Life of Type Extensions

At the end of the hearing on 12th August there were a number of questions in relation to Life of Type expectations and extension options. In committing to a long term program the CoA should aim to optimise the Life of Type (LOT) and be in an informed position to modify or extend the life of type for platforms. If an Off The Shelf solution is determined, this modification and extension capability can only be achieved if the platforms are maintained in accordance with the maintenance philosophy and design intended. This would require local facilities, maintenance skills and knowledge to maintain the platform's mechanical integrity, minimise enterprise risk and optimise operational availability.

Thank you once again for the opportunity to support this Senate Estimate enquiry. QinetiQ and BMT would be pleased to provide any additional information in relation to proceedings to date and the information above.

Please do not hesitate to contact one of us directly if we can be of assistance,

Yours Sincerely,

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