

## **Submission to Defence Select Committee Inquiry**

### **The Navy: Purpose and Procurement**

*Rt Hon Philip Dunne MP*

My comments relate to the procurement questions set out in the Terms of Reference, numbered accordingly.

#### ***Part 2 – Are naval procurement and support plans delivering the capabilities required for this role?***

The introduction to the Inquiry is helpful in asking whether Export Led Growth and Exportability can make a meaningful contribution to successful procurement and sustainment of vessels for the Royal Navy.

It might be helpful for the Committee to be reminded of lessons learned from the Horizon programme, which has been extensively reported on, highlighting the challenges for naval procurement of whole platforms, from requirements setting and managing international collaborative programmes, with geopolitical, technological, industrial and economic issues influencing and delaying the decision-making process by participants. This Programme started out as a common frigate for NATO (NFR90) with 8 partner nations, before disagreement and establishment of two separate programmes, 'Horizon' proceeding with France, Italy and the UK, while Germany, Spain and Netherlands developing their own programme. Ultimately, Horizon fell apart with UK adopting its own Frigate Programme and France and Italy proceeding jointly with the FREMM Programme.

The challenges experienced then, still apply today in what has become an even more complex naval shipbuilding eco-system, with National Shipbuilding Strategies and national interests for sovereignty, freedom of action, economic prosperity and resilience. Many former customer navies amongst our allies and partners have either developed or have ambitions to develop their own indigenous shipyard(s), where they expect vessels to be built, or at the very least have final fit-out.

The days of building complete naval ships in UK shipyards for export to partner nations may be limited, the Republic of Ireland being our most recent whole vessel export customer for Offshore Patrol Vessels.

*6. Is the UK's domestic shipbuilding industry able to fulfil its role in delivering the country's naval capabilities? What has been the effect of the National Shipbuilding Strategy? Does the government's decision in the Defence Industrial Strategy to determine whether to invite foreign competition on a case-by-case basis (rather than just for warships) increase or decrease the opportunities for UK shipbuilding? What will industry need to see in the government's forthcoming update to the National Shipbuilding Strategy and 30-year plan for Naval and other government-owned vessels?*

The National Shipbuilding Strategy (September 2017) accepted recommendations from the Independent Report by Sir John Parker (November 2016) to provide a clarity, agility and consistency in the demand signal by the Royal Navy, backed by the MOD and wider Government interests, which would encourage the UK shipbuilding sector to modernise and provide cost effective construction capacity to meet naval procurement requirements.

The experience over the previous decade or more of the industrial challenge in marshalling shipbuilding capacity across the UK to construct the two Queen Elizabeth class aircraft carriers, after years of design changes and cost overruns, showed the pitfalls of widely fluctuating naval vessel demand on the capacity of shipyards to maintain skills. This 'green labour' challenge of recruiting and skilling sufficient shipyard construction engineers to design and build naval vessels in the UK will remain in the absence of a clear Master Plan.

This was envisaged as a core element of the National Shipbuilding Strategy:

*"Our vision is of a shipbuilding enterprise that, encouraged by a clearer grip by Defence, and with greater certainty about the Royal Navy's procurement plans."*

...with this commitment to cross-Government endorsement of a multi-year plan:

*"A cross-Government Sponsor Group which owns and refreshes the on-going National Shipbuilding Strategy and which will endorse the Naval Ship Acquisition Master Plan (this "Master Plan") for the next 30 years."*

There has been a Sponsor Group (within the MOD) and a Client Board (within the Royal Navy) established, but whether these have decision-making powers

to overcome previous naval procurement problems is something the Committee may wish to explore during this inquiry.

The challenge now is whether the National Shipbuilding Strategy has been fully supported by Government policy and commitment to long-term decision making and investment over the full life-cycle of concept, design, development, production and entry into service. There is an inherent conflict between the Parliamentary cycle for Spending Review duration within a parliament and the longer-term multi-year commitments of naval procurement.

The Equipment Plan exists as a 10-year rolling indication of expected MOD capital expenditure on equipment. Naval vessel procurement and planning for replacements at end of life typically have a longer cycle than this, hence the 30-year Master Plan. Ensuring that future programmes can be accommodated within the Equipment Plan should become part of routine long-term planning across Government.

In order to give confidence that the Master Plan has the necessary Government support to encourage industry to commit to the required investment in design and capacity as new programmes evolve, the coming refresh of National Shipbuilding Strategy should consider how to address allocating development stage funding into the Equipment Plan for programmes that have not yet passed the full suite of mature programme funding approvals. This should include reviewing the investment approval ceiling for the Chief Technology Officer in the Royal Navy responsible for driving innovation into service.

UK MOD as an 'anchor customer' in maritime and naval design, development and production in support of Global Britain requires continuity and commitment to secure long-term international relationships, investments and competitiveness. It will involve a thorough review of the Unique Selling Points for the UK Shipbuilding industry, in both domestic and international markets.

Exporting products designed and built in the UK or as a partner in international collaborative programmes will require improved market intelligence and data analysis of customers, supply chains and capabilities needed to sustain shipbuilding capacity in the UK.

Shipbuilding in and from the UK needs to be clear where it is fulfilling a bespoke MOD requirement, but more usually to have an export-led approach, to ensure most investments in platforms made to meet MOD requirements can also be exploited in the export market. This requires early identification of customer requirements, routes to market and early intervention by

government and industry to develop a competitive and compelling value proposition.

Implementation of the National Shipbuilding Strategy through award of the T26 contract to the BAES shipyard on the Clyde and the subsequent T31 contract to the Babcock shipyard at Rosyth has enabled the UK to maintain two frigate shipyards in production with separate design and build capabilities. Other yards have capacity and there are separate naval design houses also able to engage in future competitions. This is relevant for the Fleet Solid Support Ship (FSSS) competition, where the timing requirement coincides with deliveries of both T26 and T31, so given capacity constraints at both frigate yards, there is scope to provide a third UK yard with the FSSS contract.

The Defence Industrial Strategy has allowed for international firms to bid into design of future programmes on a case-by-case basis. This provides flexibility for the MOD, or other government customers for non-warship vessels, to be able to select designs from non-UK ship designers or contractors. For some less bespoke vessels, like the tanker fleet procured from South Korea, there are clear economies of scale from which the Royal Navy could, and in that case did, benefit. The requirement to integrate and complete full fit-out of sensitive capability in a UK shipyard is a positive step, as this will encourage investment into a UK shipyard, as happened with T26 and T31, whether the successful bidder for FSSS is UK or international. This should be of benefit to the UK economy in maintaining skills and jobs in the UK, especially in whichever coastal community where the yard is based secures the contract, but also for the wider UK supply chain.

The impact on UK jobs of the preliminary design activity for any new vessel type is likely to be less important in developing and maintaining shipbuilding skill levels than work involved in the production designs, detailed drawings for fabricators and integration and production of systems on board. These are some of the key skill sets required to be maintained and encouraged by the National Shipbuilding Strategy refresh. The more yards we have in production the more clarity is required over sequencing and scheduling of a programme of vessel upgrade and type replacement. This is why confirming a 30-year Master Plan is so important.

The National Shipbuilding Strategy refresh also needs to consider how best to ensure demand signals from other branches of Government which have shipbuilding requirements, such as the recent launch of the Sir David Attenborough survey vessel, or the very recent announcement of a new national flagship to promote Global Britain, are properly procured. The

potential exists to enable work to be competed for within UK shipyards and for a steady flow of work to be awarded to competing yards, both to maintain capability and competitive tension in pricing and delivery schedules. But this requires considerable cooperation across all relevant Government departments and decision-making powers clearly enunciated and enabled.

*7. How realistic are proposed exports of Type 26 and Type 31 frigate designs and what effect would they have on costs of the frigates for the UK? Since most foreign buyers will seek to produce ships domestically, how much value are these export deals likely to deliver to UK shipbuilding?*

The recent success of the Type 26 design exports to Australia and Canada are for the design and certain systems, with build in customer shipyards. But this does not detract from this significant achievement, as it has been some decades since complex British warship designs have been sold to allied navies. This has demonstrated the benefit of deploying a Team UK approach to defence exports across government, Royal Navy, MOD and industry. Programmes such as this need a long term and consistent approach to build up levels of trust and collaboration to succeed. This needs to be developed for the future, not just for naval exports but for all major defence export programmes.

This joint approach enabled not just the design of the ship to be sold to Australia and Canada, but also opened opportunities for the UK supply chain to work with international partners around systems and sub-system sales, of value to the UK economy.

But as these orders followed the Royal Navy order, they were not part of an aggregated programme, so it would be interesting to understand whether there is direct benefit to the Royal Navy customer from greater economies of scale after the first batch order of three vessels.

The benefits to the UK supply chain depend on the systems commissioned by the respective navies. The design adaptations by the navies of each of Australia and Canada are likely to add some pressure on the design capacity of the prime contractor. The combat systems by both Australia and Canada are from a US contractor, which reduces scope for UK benefit.

The importance of shipbuilding in terms of defence and economic prosperity must fully assess the industrial capability and capacity to build, support and upgrade ships over time. These platforms require capability at system, sub-

system and product level, and Government and Industry need to expand the partnership approach to sustain the industry, at a local, regional and national level.

UK Government and industry investment in future shipbuilding must embrace and embed exportability at the outset in design, production and support in terms of collaboration, technology transfer, training, services and sustainment.

Sale of naval ships demands international engagement with countries at the G2G level and establishing high level relationships early in the process. The ability to identify and combine capability requirements with those of the UK MOD will increase competitiveness. This requires regional, country and customer strategies as part of a clear campaign strategy and focus on realistic opportunities. Market Intelligence and analysis is a critical 'enabler' to be sustained and exploited, better to understand customer requirements, competitors and differentiators, to help improve Team UK success in the global market.

The UK shipbuilding sector has an important role to play as part of 'levelling up' the economic and social value of government procurement, given the location of shipyards in coastal communities, often in areas in need of industrial regeneration.

UK MOD as anchor customer for naval ships needs to be supported by information and data analysis from across government and industry participants. The development of the Joint Economic Data Hub (JEDHub) within the Defence Solutions Centre (supported by the Defence Growth Partnership) now provides a trusted and independent source of economic data, including information on export and exploitation potential for design and build of naval vessels. It also is developing accepted (Green Book) data on the UK economic prosperity contribution of defence contracts to help assess competing tenders for defence contracts.

*8. The government's Defence Industrial Strategy promises up to five Type 32 frigates and a new class Type 83 destroyer but no further details on these ships' designs and roles have been provided: how can the government learn from previous programs in designing and delivering these two ships ?*

At present there appears to be no funding line for future naval surface vessel procurement, other than FSSS, in the Equipment Plan. As noted in response to Q6, the MOD needs to develop a budget line for investigation into early

stage planning and requirement setting for replacement T32 frigates and T83 destroyers at an early stage. This can enable joint working with industry, maintaining competitive tension, to develop timely design and build options.

The experience with procurement of T31e can provide useful pointers, (despite some known hiccups), to managing the procurement of new programmes. The previous approval system, eg for T26, required a full set of sequential Business Case approvals through the MOD and cross-Government capital expenditure authorisation process. For T31e an accelerated approval process was used, with ring-fenced budgets approved for elements of spend on the tenders for the programme, which allowed for greater flexibility in managing the whole tender process, while maintaining competitive tension between industry bidders.

Government requirements for shipbuilding capability are more likely to be met with constructive industry responses if there is regular engagement and understanding of the mutual need to reflect the macro environment. So developing knowledge of future trends in modes of transport, the impact of environmental, defence and cross-over civilian technology advances and geo-political policy, whether in a national or international context are important.

There will be increasing relevance for future naval procurement of dual-use technology and applications developed within the civil market, with investment provided by commercial sources which will also require national security understanding. This will be particularly relevant in electrification, decarbonization and autonomy. Much of the innovation will emerge at a pace which will make existing decision-making for naval procurement extremely challenging. So the need for flexibility and modularity in ship design to enable upgrades at a software, system, or even capability level will become a standard requirement for new platforms. The design of T31 may also be instructive here.

A refreshed National Shipbuilding Strategy is an opportunity to provide signals about new how requirement setting and procurement of these new platforms will learn lessons from our recent naval procurement experience. It should reaffirm the importance of sustaining a sovereign capability to design and build ships in the UK, and the critical capacity and investment needed in the defence and civil sectors.

Specifically it should recommend:

- earmarking funding for development phase of each platform;

- provide more detail on the timing and demand signal for bringing each platform into service;
- clarify the modularity and simplicity of design principles, to avoid the complexity and challenges introduced into recent programmes (eg T45 propulsion).

Shipbuilding is widely seen in many countries as a 'national asset' to be protected and supported, with partnerships and alliances between nations and industry a key consideration in defence, foreign policy and market access. The opportunity new naval platforms provide for bi-lateral programmes, linked to military, regional and economic dependencies and partnerships, should be actively considered as part of the strategic assessment of each new platform. This may or may not lead to aggregation of orders at the outset, as vessels are increasingly likely to be sold as a design with critical systems and components to be assembled in a customer nation's own shipyard. But the more commonality of design and system onboard, the greater the interoperability, the potential for sustainment efficiencies and the training opportunities for partner navies become.

Rt Hon Philip Dunne MP

Former Minister for Defence Procurement (2012-16)

Author: Growing the contribution of defence to UK prosperity (July 2018)

Deputy Chairman, Defence Growth Partnership (2019-)

30<sup>th</sup> May 2021