



CSEU response to The House of Commons Defence Committees inquiry into the Navy's purpose and procurement.

This response is submitted by The Confederation of Shipbuilding and Engineering Unions (CSEU), which is a confederation of the four unions Unite, GMB, Prospect and Community, representing tens of thousands of highly skilled workers in the UK's shipbuilding and ship repair sectors.

1 Introductory comments

- 1.1 The CSEU and its affiliated unions welcome this inquiry as an opportunity to provide evidence building on its '[Keep Britain Afloat](#)' campaign, ensuring the Navy's ships are built in Britain using British [steel](#), in addition to our concerns already raised around the [FMSP](#)
- 1.2 Not only is it important that naval procurement and support plans deliver required capabilities and freedom of operation, but it is also important to note that such procurement directly impacts on the companies, our members as employees and the communities involved in the safety, security and defence of the British people. It is vital therefore that their voices are heard, such that policy not only ensures the UK remains secure, but also safeguards its critical defence sector, so that its highly skilled workers and the communities in which they live are sustained.

Questions

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

2 Q2

- 2.1 The CSEU unions believe that the Astute and the Dreadnought programmes are critical for the preservation of the UK's sovereign submarine manufacturing capabilities. The programmes are also important for the prosperity of Barrow-in-Furness and the wider economy.
- 2.2 Submarine construction is a highly specialised part of the shipbuilding sector. 8,000 people were estimated to be directly employed in shipbuilding in Barrow-in-Furness in 2019,¹ and in 2005 there were more than 1,200 UK-based companies in the submarine supply chain.²

¹ ONS, Business Register and Employment Survey (BRES)

² Keep Our Future Afloat, Britain's Submarine Supply Chain, 2005

https://web.archive.org/web/20160414182455/http://filesdown.esecure.co.uk/NavalShip2005/Supply_Chain_Brochure_v3.pdf

2.3 The greatest immediate threat to submarine-building capabilities is a repeat of the gap in orders that was last experienced in the late 1990s. Between the 1980s and this period, the Barrow shipbuilding workforce fell from around 13,000 to 3,000.³ As the NAO later concluded:

‘[The order gap] meant that key skills and submarine-building experience had been lost. The awarding of other ship-building work to the Barrow shipyard did not prove sufficient to maintain those skills specific to the design and construction of submarines.’⁴

2.4 The job losses and the gap in orders between the Vanguard and the Astute programmes had a devastating impact on the workforce and the community life of Barrow. The lack of apprentice recruitment during these years created a ‘generational gap’⁵ in skills that continues to cause problems to this day. Many younger and older workers had to move away to find work.

2.5 Like the wider shipbuilding and ship repair industry, submarine building is at its most efficient when it has a steady and predictable drumbeat of orders. Preventing a repeat of the Vanguard to Astute order gap, and ensuring a smooth transition between the Astute and Dreadnought programmes, should be a top priority for the Ministry of Defence, its agencies, and its contractors.

2.6 The Covid-19 outbreak posed significant workforce challenges. Collective representation has however made a positive difference, and the testing programme that was introduced on site early in the pandemic has been a significant factor in building confidence in safety measures.

2.7 While there have been delays to the Astute programme in the past, good progress has been made. HMS Audacious has been delivered; HMS Anson was launched in April and the boat is currently undergoing in-water testing. In light of the circumstances, strong progress on both the Astute and Dreadnought programmes has been achieved, and at the time of writing the belief is shared by management and workforce representatives that the agreed schedule can be met.

2.8 One area of concern for our affiliates is the impact of the pandemic on the training of apprentices, which was particularly interrupted during the early days of the pandemic. The skills gained through the Astute programme will have an important role to play in the delivery of Dreadnought, and addressing the delays in skills development during this period will be important for both programmes.

3 Q3

3.1 The problems with the propulsion engines have been extensively reported. The Power Improvement Project will rectify the engine fault by the mid-2020s. Work is underway

³ RAND National Defence Research Institute, Learning from Experience: Lessons from the United Kingdom’s Astute Submarine Program (Volume 3), 2011, page 41 https://www.rand.org/content/dam/rand/pubs/monographs/2011/RAND_MG1128.3.pdf

⁴ The NAO, The United Kingdom’s Future Nuclear Deterrent Capability, 05 November 2008, page 11 <https://www.nao.org.uk/wp-content/uploads/2008/11/07081115.pdf>

⁵ Lauren Twort & Gabriella Thompson, The Twenty-First Century Armoury: A Town Called Barrow, The RUSI Journal, 162:5: 2017, pp. 46 - 72

on HMS Dauntless, the first ship to enter the Type 45 Power Improvement Project. It is reported by the Procurement Minister that return to sea for trials in 2021⁶.

- 3.2 The Type 45 uses a pioneering system called Integrated Electric Propulsion (IEP). The engine was designed to improve fuel efficiency and reduce maintenance and manning requirement⁷. The problems with the Type 45 illustrate the importance of developing a consistent programme of work in pioneering mechanical engineering projects. This requires continuity of employment and experimentation in ship design.

4 Q4

- 4.1 The main concerns we have around the ‘frigate gap’ are that relevant UK companies need a steady and predictable drumbeat of work so that peaks and troughs can be eliminated, thus minimising the ongoing threat of ‘feast to famine’ that leads to workers being made redundant and critical skills to be lost. It is a source of great frustration to us that repeated reports, from the RAND report of 2005 through to the Parker Report, commissioned by the MoD have stressed the need for predictable and planned workloads for the shipbuilding industry to minimise these peaks and troughs and guarantee a steady flow of work that, in turn, allows companies to invest in facilities, apprentices and upskilling with confidence. Shareholder owned companies will not take the risk of investing unless they are confident that they will receive a reward. Our request is simple – that the MoD applies the lessons from these reports in the forthcoming refreshed National Shipbuilding Strategy.

5 Q6

5.1 Competition

The shipbuilding workforce has proven that it can produce vessels that are a match for any in world, from the Type 45 destroyers to the carrier programme. But the industry has been caught in a cycle of decline which has been hastened by successive policies that aim to expand the role of competition. Approximately 3,000 shipbuilding jobs have been lost in Great Britain over the last decade – a decline of 8%.⁸.

- 5.2 The risks to the public purse and national security of suppliers exiting the market – resulting in yard closures and job losses – has not been properly accounted for. The uncertainty associated with competition also inhibits investment and co-operation, and it forces UK yards to duplicate core functions instead of developing specialisations. The RAND Corporation warned as long ago as 2005 that the Government should ‘consider the feasibility of competition in light of the [UK’s] industrial base constraints’⁹.

- 5.3 Despite these strategic risks, the scope of competition has gradually been extended. CSEU unions have consistently argued that the policy of international competition under the 2017 National Shipbuilding Strategy was ill-conceived and damaging to the

⁶ <https://questions-statements.parliament.uk/written-questions/detail/2020-06-02/53460>

⁷ <https://www.navylookout.com/putting-the-type-45-propulsion-problems-in-perspective/>

⁸ The estimated number of people employed in Great Britain for SIC 301, Building of ships and boats, fell from 36,000 in 2009 to 33,000 in 2019. ONS, Business Registered and Employment Survey BRES (comparable figures are not available for Northern Ireland).

⁹ Mark Arena et al, The United Kingdom’s Naval Shipbuilding Industrial Base: The Next Fifteen Years, RAND Corporation, 2005, pp. 159 – 160
https://www.rand.org/content/dam/rand/pubs/monographs/2005/RAND_MG294.pdf

UK's industrial and security interests¹⁰. In our view, the assumption that exposure to international competition would lead to efficiencies was based on an unrealistic and naive view of alternative providers, who frequently operate in closed markets and benefit from hidden (and sometimes overt) subsidies.

5.4 The MoD has said recently that:

'A regular drumbeat of design and manufacturing work is needed to maintain the industrial capabilities critical for our national security and to drive efficiencies which will reduce longer-term costs in the shipbuilding portfolio'¹¹.

5.5 We agree – and it is disappointing that current policies continue to stand in the way of that predictable drum beat of orders. While the Government has rightly removed the artificial distinction between 'warships' and 'non-warships' as outlined in the 2017 National Shipbuilding Strategy, new problems have been introduced.

5.6 Our view is that orders could be better timed and co-ordinated between yards to avoid 'feast and famine' contract cycles and encourage investment in infrastructure and skills. In a more uncertain world, the MoD should aim to better utilise existing capacity and use the power of public procurement to reopen yards if current capacity is not sufficient to meet the Government's assessment of the strategic threats.

5.7 The Defence and Security Industrial Strategy

The 2021 Defence and Security Industrial Strategy ended the policy of 'global competition by default' which had previously covered all surface vessels apart from frigates, destroyers, and carriers. While this change represented a victory for campaigners, it was also a case of one step forward – and at least one step back.

5.8 By extending the possibility of international competition to all orders, the DSIS has introduced new uncertainty to the procurement pipeline. This uncertainty is extremely damaging in a capital-intensive sector like shipbuilding that works to thirty-year investment cycles. The cancellation of BAE System's £200 million 'frigate factory' at Scotstoun following a late downgrading of the Type 26 programme serves as a vivid example of the seriousness of the problem¹². CSEU affiliates' contacts in major shipbuilding employers have already indicated that it will be harder to secure approval for major new investment projects under the new policy.

5.9 The Fleet Solid Support competition

While the recent relaunch of the Fleet Solid Support competition was necessary, and the confirmation that all three ships would be built was welcome, the announcement raised more questions than answers. It is concerning that the timetable has slipped from the original target of delivery 'from the mid-2020s' to 'by 2032'¹³. Only one Fort

¹⁰ See GMB, Turning the Tide: Rebuilding the UK's defence shipbuilding industry and the Fleet Solid Support Order, April 2018

<https://www.gmb.org.uk/sites/default/files/turning-the-tide.pdf>; CSEU, Fleet Support Ships: Supporting the Royal Navy Supporting the United Kingdom, May 2018 <https://cseu.org.uk/wp-content/uploads/2020/06/CSEU-FSS-Report.pdf>

¹¹ Answer to Written Parliamentary Question 4612, on Shipbuilding, 25 May 2021 <https://questions-statements.parliament.uk/written-questions/detail/2021-05-20/4612>

¹² BBC News, 'MoD accused of 'betrayal' over frigates,' 06 September 2017 <https://www.bbc.co.uk/news/uk-scotland-scotland-politics-41174619>

¹³ MoD, National Shipbuilding Strategy, September 2017, page 24

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/643873/NationalShipbuildingStrategy_lowres.pdf; MoD, FSS Contract Notice, May 2021.

class solid support ship remains in service, and the vessel was only life extended up to the end of the 2020s. The FSS contract may not be awarded until 2022, or even later, and the ongoing delay is inhibiting workforce planning, investment, and the operational potential of the carrier fleet.

5.10 There is also considerable uncertainty over the share of the FSS order that will be reserved for UK suppliers. The MoD announced last year that:

‘The successful manufacturing team must be led by a British company ... [the] competition to build three Fleet Solid Support vessels ... will help revitalise British shipbuilding by requiring a significant proportion of the build and assembly work to be carried out in the UK’¹⁴.

5.11 It has never been clarified what percentage of volume or value would form the ‘significant proportion,’ nor whether the requirement for the bid to be led by a ‘British company’ would translate into a meaningful commitment to using domestic supply chains. It was deeply concerning that even these commitments were absent from the May 2021 Contract Notice. The MoD should urgently clarify its current policy.

5.12 National Shipbuilding Strategy – update

The Government has an opportunity to clarify and remedy these emerging problems in its forthcoming refresh of the National Shipbuilding Strategy. In order to better support UK shipbuilding and protect our sovereign defence manufacturing capabilities, the CSEU believes that the MoD should include the following changes:

- A policy of UK-builds for all Royal Navy and Royal Fleet Auxiliary vessels, with contracts timed to make sure that the required ships can be delivered via domestic yards.
- A collaborative approach based on modular builds and the development of specialisms within each yard.
- A much stronger focus on skills and apprenticeships, in recognition of the ageing workforce challenges that shipbuilding faces.
- A more confident approach to using the single source procurement regulations, in recognition of the longstanding concerns over the appropriateness of policies based on competition.
- The inclusion of heavy UK prosperity and taxation weightings in any contracts that are put out to international tender, including a proper accounting for state subsidies received by non-UK bidders.
- Clarity over whether it is the Government’s policy to tie future military aid support to UK shipbuilding orders, with reference to recent reports that aid to the Ukrainian Navy may be linked to the construction of Barzan class fast attack craft missile boats by the UK.¹⁵

6 Q8

6.1 To retain sovereign capability in warship design and manufacturing the UK needs a progressive forward looking shipbuilding programme of work. The decision to

¹⁴ MoD DE&S, Fleet Solid Support ships will be built with British involvement, 22 October 2020 <https://des.mod.uk/fleet-solid-support-british-built/>

¹⁵ Naval News, New Details Emerge On UK-Built FACM Vessels For Ukraine, 10 March 2021 <https://www.navalnews.com/naval-news/2021/03/new-details-emerge-on-uk-built-facm-vessels-for-ukraine/>

announce plans to build the Type 32 and Type 83 gives industry an outline of future plans but with very few details so far.

- 6.2 The shipbuilding strategy was intended to spur a renaissance in UK shipbuilding. However, rather than securing the existing skills base there have been a series of unnecessary delays and procurement processes which are not designed to provide certainty to the sector. There are now two UK-led shipbuilding companies that both have experience of leading multi-employer consortium do deliver first in class military vessels. The government needs to clearly signal that yards on the Clyde and Rosyth will lead the design and manufacture of the Type 32 and Type 83.
- 6.3 The Type 32 frigate appears to be a development of the approach modelled for the Type 31 procurement. The shipbuilding strategy in 2017 announced a design specification for a frigate with the cost capped at £250 million per vessel. To keep costs down the frigate would be based on an existing design, which reduced the risk of a prolonged period of development.
- 6.4 The initial competition for the Type 31 opened up bids to international competition. However, by 2018 the competition was suspended and in 2019 the Babcock consortium was selected as the preferred bidder.
- 6.5 The decision to adopt a UK consortium to lead the project should have been foreseen at the start of the procurement process. The emphasis on an existing design with a limited budget was intended to remove uncertainty from the procurement process. If a similar approach is adopted for the Type 32, rather than opening up for a costly international competition, a clear direction should be given that the design and manufacture of the frigate will be UK-led in both design and manufacturing.
- 6.6 There are benefits in considering a single source contract for this bid. The Type 31 was intended to be a frigate that could win export orders. The lessons learnt from the Type 31 build can be transferred to the Type 32, which will help deliver the economies of scale needed to compete in export markets. This would mean that discussions on Type 32 design can begin much earlier and potentially could bring forward the in-service date. It would also have the benefit of safeguarding the estimated 2,500 shipbuilding jobs associated with the Type 31 providing a steady stream of work into the middle of the next decade.
- 6.7 The Type 83 destroyer is intended to replace the Type 45 when they go out of service in the mid-2030s. It has been speculated that the Type 80 designation implies that the ship is likely to be a large destroyer.¹⁶ This would be an ambitious upgrade of existing naval capabilities which would reinforce the strategic direction signaled in the Integrated Review.
- 6.8 The timeline for the Type 26 design and build gives some indication of the likely in service date. The procurement process for the Type 26 was launched with the Strategic Defence Review in 1998, which was followed by a research phase which closed in 2005. The concept design phase identified different requirements, with a

¹⁶ <https://www.navylookout.com/the-type-83-destroyer-the-royal-navys-future-anti-air-warfare-combatant/>

decision reached in 2008 to build a global combat ship. The ship was included in SDSR in 2010, with a contract signed in 2017.

- 6.9 To achieve the ambition of delivering a Type 83 destroyer by the mid-2030s the government needs to progress to the concept phase of the project as soon as is practical. This will help to identify the requirements that can be delivered in the timeframe set by the government and ensure there is no loss of capability as the Type 45 ships are retired. To retain a highly skilled workforce with a steady stream of work following on from the Type 26 the government needs to provide a clear programme of work that links existing plans to future developments. This will allow the progressive development of skills and the upgrading of warship design to the next generation.
- 6.10 The next generation of ships will need to reduce emissions as part of the defence contribution to the UK's net zero by 2050 target. Defence accounts for 50% of the UK central Government's emissions. This will present some specific challenges. The design will harness novel technologies which further build resilience and further reduce emissions.
- 6.11 The challenge in the concept phase will be identifying what capabilities are required. The structure of the ship will need to accommodate different weapon designs such as, air defence, anti-ballistic capabilities and land attack missiles. A more ambitious design which uses Directed Energy Weapons, would require sufficient power generation capacity to deliver this capability. A key decision point in the procurement of the Type 83 will be reached in the second part of this decade. As the concept phase transitions to the design phase, the budget envelope for the Type 83 will become clearer.
- 6.12 Current shipbuilding plans assume eight Type 26 combat ships, five Type 31 frigates and a further five Type 32 frigates. The Type 83 will begin to replace the Type 45 in the mid-2030s, however it is not clear from the Integrated Review, whether this will be on a like for like basis.
- 6.13 Previous procurements have been hampered by underfunding, decision delays, the cancellation of previous plans and the shrinking of the naval fleet. There is a risk that these familiar patterns could re-emerge if future plans are not properly resourced. The concept phase should be used to clarify the class of ships that will replace the Type 45 with an assurance that the projected size of the Royal Navy will not be reduced to pay for the Type 83.

7 Conclusion

- 7.1 Up and down the country, communities depend on the defence industry and a steady drumbeat of work for their jobs, for a future for young people, for economic security and in some cases, their economic survival.
- 7.2 We hope that this inquiry will identify the critical need for greater clarity of plans and capability requirements from the Navy, greater commitment to the sovereign industrial base to deliver and support that capability and a recognition that a steady and sustained drumbeat of work is the best way to encourage investment from industry,

leading to greater efficiency, productivity and cost-effectiveness.

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