

MAKING IT

CAMPAIGNING FOR MANUFACTURING JOBS

Turning the Tide

Rebuilding the UK's defence shipbuilding industry and the Fleet Solid Support Order

GMB

U N I O N

MAKING IT

CAMPAIGNING FOR MANUFACTURING JOBS

A Making It Report

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Photographs on this page, page 10, 19 and 38 are published courtesy of BAE Systems.

The pictures depict the QE Carrier, Type 26 and River-class Offshore Patrol Vessel ships which were built by GMB members.

All other images used are our own. The picture opposite shows GMB shipbuilding reps meeting MPs and Shadow Ministers in Parliament to discuss this report.



Some images in this report are reproduced from a mural commissioned by the Amalgamated Society of Boilermakers, Shipwrights, Blacksmiths and Structural Workers. The mural commemorates GMB's proud history in shipbuilding and other engineering occupations. Artist: John Warren.



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FOREWORD

MAKING IT
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British shipbuilding is at a crossroads.

As the aircraft carrier programme winds down, there is real uncertainty over the future of the industry. The Government says that it wants to see a shipbuilding 'renaissance' but it has not introduced the policies that would achieve this aim.

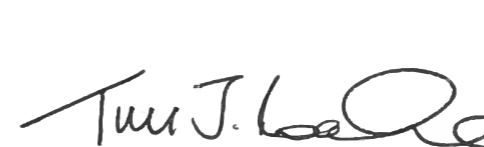
Shipbuilding manufacturing is as much a part of our sovereign defence capability as the warships and submarines that it produces. British yards can still build first class fighting and support ships: the Type 45 destroyer is the envy of the world. We are proud that it was made by GMB members. But as strategic threats mount, and old alliances suddenly seem uncertain, there is an imminent need to sustainably grow our defence industries.

The act of shipbuilding, not just its product, must serve the national interest. Every time a contract for a new ship goes overseas the opportunity for skilled job creation and higher economic growth in the UK is lost. Complex arguments about defence spending boil down to a choice between further cuts and international tendering or providing the investment needed to rebuild British shipbuilding. As we argue in this report, the Government's current policy of putting Royal Fleet Auxiliary ships out to international tender incurs significant costs to the UK economy to local communities.

The UK's shipbuilding industry remains orientated to military orders. Aspirations to increase commercial production will not succeed unless there is a steady drum beat of defence contracts that provides certainty for investment and innovation. The upcoming Fleet Solid Support ship order should serve as a catalyst to strengthen UK shipbuilding.

GMB is proud to represent shipyard and defence workers. We continue to support the campaigning and research work of the Confederation of Shipbuilding and Engineering Unions (CSEU) and the APPG on Shipbuilding and Ship Repair. This report forms part of the GMB's Making It campaign for investment in UK manufacturing.

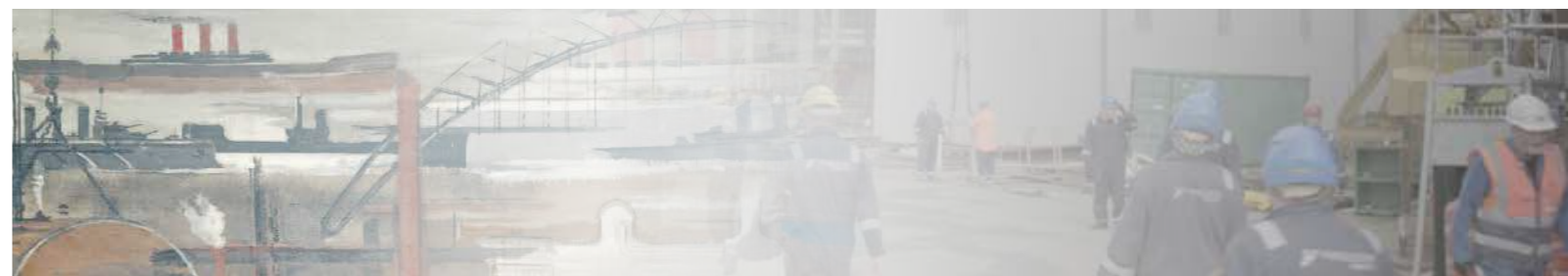
It is time that the UK gave its essential industries the support they need.



Tim Roache
GMB General Secretary



Ross Murdoch
GMB National Officer for Shipbuilding



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CAMPAIGNING FOR MANUFACTURING JOBS

GMB is proud of our manufacturing members, proud of our heritage and ambitious for the future of manufacturing in the UK.

We need to tackle the myth that Britain 'doesn't make things anymore.' That's why GMB has launched the Making It campaign.

GMB believes that practical policies to increase the UK's defence manufacturing capability must be at the heart of the Government's industrial strategy.

Find out more at our campaign website <https://www.making-it.org.uk/>

GMB's charter for UK manufacturing

- M** Invest in manufacturing - and create an environment that encourages manufacturing employers to invest
- M** Buy for Britain – we need a procurement strategy that supports UK industries
- M** Negotiate trade deals that deliver for workers and industry, avoiding damaging tariffs on British goods
- M** Build strong UK-based supply chains to support local communities
- M** Support equality and inclusion by tackling barriers to work wherever they exist
- M** Invest in skills, research and development, and the technologies of tomorrow
- M** Pursue a balanced energy policy that keeps the lights on and the production lines moving

Executive Summary

The UK has a proud history of shipbuilding but the extent of the industry's decline cannot be disguised. The Government will only achieve its stated aim of securing a 'renaissance in UK shipbuilding' by providing a steady and predictable supply of orders. The forthcoming Fleet Solid Support order will be the first test of the Government's commitment to this aim ([History](#)).

The Royal Navy depends on the support ships operated by the Royal Fleet Auxiliary (RFA). The UK has freedom under current European rules to place RFA orders with domestic shipyards. Building the FSS order in the UK would command overwhelming public support. The MoD should ensure that the reported £1 billion cost of the upcoming Fleet Solid Support (FSS) order is used to support employment and skills development in the UK ([The Royal Fleet Auxiliary and the Fleet Solid Support order](#)).

Many of the UK's international competitor shipyards are heavily subsidised, and independent observers have warned that the global market is characterised by 'unsustainable' levels of overcapacity, subsidies and bailouts. A number of competitor nations also impose local content build requirements that benefit shipyards in those countries. The MoD should account for these artificial price reductions when comparing bids from UK and foreign bidders ([International shipbuilding](#)).

Shipbuilding and ship repair is a £2 billion industry that directly employs nearly 32,000 people and supports a further 20,000 jobs, including in the wider supply chain ([The importance of shipbuilding to the UK economy](#)). Shipbuilders workers are highly skilled and are 45 per cent better paid than the average for all jobs. The Government should use contractual obligations to ensure that more shipbuilding apprentices are delivered to meet the industry's skill and workforce age gap ([Shipbuilding employment](#)).

A high proportion of the cost of placing orders with UK yards is returned to the Treasury through taxation, National Insurance contributions and lower welfare payments. Over a third of costs may be saved, but the Government does not account for this factor when procuring defence orders. The MoD should account for this returned revenue when it assesses UK bids for defence contracts ([Revenue returned to the Treasury](#)).

Recent research has stressed the wider socio-economic benefits of shipbuilding orders. New shipbuilding investment is associated with high levels of local apprenticeship creation, reduced unemployment and a transfer of employment from lower paid services roles to manufacturing jobs ([Socio-economic impacts](#)). Shipyard job losses and closures conversely lead to high levels of unemployment and significant decreases to the standard of living of former workers ([The consequences of job losses](#)).

GMB estimates that if the FSS order was placed with UK yards then up to 6,500 jobs could be created or secured, including 1,805 shipyard jobs. £285 million of the estimated cost of the order could be returned to taxpayers – money that would be lost should the order go overseas ([The economic impact of the Fleet Solid Support order](#)).

“ Shipbuilding and ship repair is a £2 billion industry that directly employs nearly 32,000 people and supports a further 20,000 jobs.”



History

Shipbuilding is at the heart of Britain's identity as a maritime nation.

For centuries the Royal Navy and the workers who built its ships have been the best guarantor of our national security. Strategic threats could only be defeated because the UK maintained a strong reserve of defence manufacturing capacity. In an increasingly uncertain world, the need to rebuild those capabilities must be at the heart of the Government's shipbuilding procurement strategy.



Our members today take great pride in their highly skilled work, but there can be no disguising the fact that British shipbuilding is a shadow of its former self. GMB believes that we must aspire to something better than merely maintaining the proud remnant of a once much greater industry.

The scale of Britain's decline as a shipbuilding and naval power is difficult to overstate. In the late 1940s the UK still built half of all new ships worldwide. By 2016 its global market share for commercial orders had fallen to 0.4 per cent and its production of global net tonnage was negligible.¹ Britain's falling global share cannot be explained by the increased shipbuilding capacity of competing nations. Total orders also fell sharply. Combined commercial and military orders to UK yards fell by 80 per cent in the period 1975 to 1999 compared to 1950 to 1974.² This fall in orders has had a devastating impact on highly skilled, well-paid shipbuilding jobs.

75,000 jobs were lost during the 1980s – reducing the industry to just over a third of its size over the course of that decade. This period saw the UK's withdrawal from the defence export market and its failure to establish itself as a producer of cruisers, tankers and containerised cargo vessels. Recent years have bought little respite as shipbuilding lost a third of its workforce between 1998 and 2008.

The collapse of commercial orders has tied shipbuilding's prospects to those of the Royal Navy, the strength of which has fallen sharply since the end of the Cold War. In 1997/98 the Royal Navy and the Royal Fleet Auxiliary still consisted of 141 active service ships: this combined force fell to 93 ships in 2017/18.

Capacity has been surrendered in haste for years. Yards decommissioned by the National Shipbuilders' Securities scheme in the 1930s had to be reactivated during the war. Upper Clyde yards – saved only through the heroic defiance of union leaders such as the Boilermakers' Sammy Barr – form an integral part of our sovereign defence manufacturing capability today. During privatisation Margaret Thatcher asserted that 'it was hardly conceivable that ... merchant shipbuilding capability should disappear completely'³ – but thirty years later the industry is reliant on military orders. These mistakes must not be repeated in the 21st century.

The causes of British shipbuilding's decline may be complex but the result was not inevitable. The end of shipbuilding at household names like John Brown and Swan Hunter could have been avoided. The recent end of shipbuilding work at BAE System's Portsmouth yard is a stark reminder of the threats that continue to face the industry.

GMB fully supports the Government's stated aim of securing a 'renaissance in UK shipbuilding.' This can only be achieved by providing a steady and predictable supply of orders for British yards. The forthcoming Fleet Solid Support order will be the first test of the Government's commitment to their policy of supporting shipbuilding in the UK.



“ Our members today take great pride in their highly skilled work, but there can be no disguising the fact that British shipbuilding is a shadow of its former self. GMB believes that we must aspire to something better than merely maintaining the proud remnant of a once much greater industry. ”

THE ROYAL FLEET AUXILIARY AND THE FLEET SOLID SUPPORT ORDER

The RFA

The Royal Navy's operations depend on its support ships. Although these ships are operated by the civilian Royal Fleet Auxiliary (RFA), their warlike nature and exposure to hostile risk should not be understated.

RFA ships carry NATO pennant numbers and they are equipped with protective light weapons. Fleet Solid Support (FSS) ships also carry munitions and sensitive communications equipment. The RFA was extensively deployed at critical danger to their crews during the Second World War and the Falklands War – during which one ship, RFA Sir Galahad, was destroyed with 48 lives lost.

The Royal Navy says that:

*'The Solid Support Ship is designed to carry a wide range of stores to support other ships with ammunition, food and explosives to replenish naval ships at sea.'*⁴

It has been known for some time that replacement FSS ships are required. Two of the current solid support ships that will be replaced – RFA Fort Austin and RFA Fort Rosalie – were ordered in the early 1970s. They will have been in service for almost fifty years by the time the new FSS ships are completed.

The Ministry of Defence (MoD) confirmed in the 2015 Strategic Defence and Security Review that three new FSS ships would be procured as part of the Military Afloat Reach and Sustainability (MARS) programme.⁵ They will join the MARS 37,000 tonne tankers constructed in South Korea.

Government shipbuilding procurement policy

The scope for the UK to recast its approach to public procurement after Brexit has attracted significant attention. However, the MoD already has freedom of action over military orders. Military shipbuilding and wider defence manufacturing procurement is not subject to the same EU competitive tendering requirements as other areas of the economy.

Under Article 346 of the Lisbon Treaty, Member States have almost unlimited freedom of action over defence procurement. Other EU nations have used this freedom to safeguard their own defence industries to a much greater extent than the UK.

In practice, the UK only applies these protections to the production of vessels that it defines as 'warships,' which are safeguarded for construction in the UK. This position was affirmed in the National Shipbuilding Strategy: *'We will continue to build Royal Navy warships only in the UK, while encouraging international collaboration, and harnessing open competition for other naval ships.'*⁶

“ Any Member State may take such measures as it considers necessary for the protection of essential interests of its security which are connected with the production of or trade in arms, munitions and war material. ”

Article 346 of the Lisbon Treaty

The Ministry of Defence has stated that:

*'We are clear – the exemption under the Treasury on the Functioning of the European Union (Article 346) which allows any member nation to reserve a procurement for reasons of national security does not apply to the design, construction and commissioning of FSS.'*⁷

However, the list of exempted products defined by the Council of Ministers in 1958, which is still in use today, makes it clear that 'warships of all kinds' are not subject to compulsory competitive tendering.⁸ In April 2017, Earl Howe, Minister of State at the MoD, described the FSS as a 'non-complex warship' (emphasis added)⁹. As discussed in the following pages, it is clear that RFA vessels satisfy all reasonable definitions of 'warships,' and that the only reason that they are being put out to competitive tendering is that the Government has made policy decision to do so.

The policy of securing of warship production for UK-only yards played a prominent role in the Scottish independence referendum campaign. At the time the Government's policy was to order thirteen Type 26 frigates to replace the existing Royal Navy's existing frigate fleet on a like for like basis. The 2015 Strategic Defence and Security Review downgraded the order to eight Type 26 vessels and five Type 31e General Purpose Frigates, which will be built to much lower specifications.

The MoD intends to cap the price of the five Type 31es at an average of £250 million per ship; this represents a substantial downgrade from the Type 26s which will cost around £1.2 billion per ship.¹⁰ It has even been suggested in Parliament that the Type 31e's capabilities will be so limited that the ship should be more properly classed as a corvette.¹¹ GMB has been sharply critical of the scaling back of the MoD's planned Type 26 order which led to the cancellation of BAE System's investment plan to construct a promised 'frigate factory' at Scotstoun.¹²

In contrast to the frigate orders, MARS is not classified as a warship programme by the Government and ships procured under it are therefore planned to be open to international tendering. This position was confirmed in the National Shipbuilding Strategy:

*'Our intent is to compete non-warships in order to maintain UK competitive edge for shipbuilding. By testing UK yards against foreign competition we will be able to ensure that the UK sector remains competitive. The Fleet Solid Support ships will therefore be subject to an international competition which is due to complete by early 2020, in order to deliver ships from the mid-2020s.'*¹³

This policy of procuring through the widest possible market hands an innate advantage to artificially subsidised, off-the-shelf designs that UK shipyards struggle to compete with. The MoD has maintained this stance in spite of these factors that hinder the UK's competitiveness and a lack of firm evidence that competitive tendering of shipbuilding orders is the best means of reducing costs.

A RAND study of the Type 45 destroyer procurement process was inconclusive on the question of whether competitive tendering or single source purchasing would yield the greatest cost efficiencies.¹⁴ Competitive tendering also imposes additional costs and risks that are exacerbated through international tendering: including bidding costs, the disincentive to invest in heavy machinery due to uncertainty over the future order book, and the risk of suppliers exiting the market if they fail to secure orders.

There are a number of examples of UK shipyards that have closed after failing to secure individual orders, thereby reducing the pool of potential domestic bidders for future procurement rounds. Similar concerns were raised in research commissioned from RAND by the MoD in 2005 which recommended that the Government should 'consider the feasibility of competition in light of the [UK's] industrial base constraints.'¹⁵

A traditional objection to non-competitive procurement was that the approach offered poor value for money and limited transparency. The 2014 Single Source Contract Regulations should address this concern. The National Audit Office has said that the new regulations offer ‘considerable opportunities to improve contract management’ and the MoD estimates that £1.7 billion will be saved during the lifetime of the 10-year Equipment Plan.¹⁶

There is also evidence that placing more defence orders in the UK would be a politically popular policy. New Survation polling, which was commissioned by the GMB, found that 53 per cent of respondents believe that defence orders should generally be placed in the UK – even if this policy was to lead to higher prices. Just 10 per cent believed that defence orders should generally be put out to international tender.

Strikingly, people who voted Leave in the 2016 referendum were significantly more likely to support retaining defence orders in the UK than Remain voters (by 64 per cent to 52 per cent). When asked specifically about the FSS order, 74 per cent of respondents said that the ships should be built in the UK. More detailed tables are available in the appendices to this report.

Shipbuilders thrive on certainty, and all sides accept that recent regulations have reduced traditional risks to value for money associated with limited tendering and direct procurement. As the defence industry analyst Francis Tusa has argued:

‘There is a good reason why the UK shipbuilding sector is the size and shape it is. It comes down to government policy and not spending enough. What drives ship costs down is certainty — knowing the orders will arrive every few months.’¹⁷

This report explores contract awards to foreign shipyards that deny the UK wider economic benefits including taxation returned to the Treasury, greater prosperity in the supply chain, and higher GDP growth.

As Professor Chris Bowes, an expert in public procurement, has recently argued:

‘The bottom line is preference. Are we brave enough to embrace preference? If you carefully study the European directives, any government in Europe can do what they want because they have full autonomy and freedom of action in anything that relates to defence and security, which are excluded from any competitive tendering. This gives you a tremendous amount of flexibility to design a system and mechanism for defence procurement that ensures shared risk while maintaining total control.’¹⁸

The Government should adopt a public procurement policy based on the principle of ‘buying for Britain.’ As part of this policy, RFA ships should be procured from British yards to encourage long-term investment and provide a steady drum beat of orders that will encourage innovation in other areas.

The Tide Class tanker order

In February 2012 the MARS tanker contract was awarded to South Korean shipbuilder Daewoo Shipbuilding and Marine Engineering (DSME) in an order worth £452 million, of which £150 million would be fulfilled by UK suppliers.¹⁹

The announcement triggered significant opposition, including from the GMB.²⁰ No UK shipbuilder submitted a final bid, with factors including the shipyards’ commitment to the Queen Elizabeth aircraft carrier project and South Korea’s currency exchange competitive advantage believed to have played a part.

The relative cheapness of the MARS tanker order appears to play a role in supporting the MoD’s view that cost reductions are best achieved through global competition. There are, however, strong reasons for disputing this stance. The relative weakness of the Won and the relative strength of Sterling have reversed since 2012. In practice, production has also been dogged by supply problems and cost overruns. The first of the MARS tankers was delivered a year late.²¹ Prices have also risen, with a recent MoD estimate putting the current cost at £550 million²² – an increase that cannot be explained by simple value of money inflation alone.

The Fleet Solid Support order

The Royal Navy’s £6.3 billion²³ Queen Elizabeth class aircraft carriers will rely on the RFA’s solid support ships. The centrality of the FSS fleet to the aircraft carrier programme has been described by the Defence Science and Technology Laboratory – an arm of the MoD – in the following terms:

‘During high-intensity operations, the UK’s new aircraft carriers and F-35 strike jets will rapidly consume the on-board stocks. It is critical that ammunition and other solid supplies can be replenished at sea to sustain the aircraft carriers during operations. Fleet Solid Support (FSS) will include new vessels to allow the UK to conduct sustained carrier operations worldwide.’²⁴

The specification of the FSS order is still being developed. It is, however, likely that the inclusion of technology from the Heavy Replenishment at Sea system (HRAS) and the Highly Mechanised Weapon Handling System (HMWHS) will significantly improve the RFA’s ability to swiftly replenish the Royal Navy’s aircraft carriers and F-35 strikeforce. Each FSS ship will carry more than 5 million items and nearly £1 billion worth of inventory.²⁵

The MoD is set to launch the full international competition on 30 April – leaving a small window in which to launch an alternative procurement process. Polling commissioned by GMB strongly suggests that allocating the order to a UK shipyard or yards would be popular: 74 per cent believed that the ships should be built in the UK, including a clear majority of supporters of each political party and a majority in each region (for tables see the appendices to this report).

FSS procurement timeline²⁶

Milestone/Headmark	Target Date
FSS Engineering & Project Support on contract	June 2017
Pre-Qualifying Questionnaire	Early 2018
Commence International Competition Phase	30 April 2018
Achieve Main Gate Approval	31 December 2019
Competition completion	Early 2020s
Enter service	From the mid-2020s

Unfortunately, information on the likely costs and specifications of the FSS is currently limited. The Government has declined to publish its current cost estimates for the FSS order²⁷ although media reports have put the cost at £1 billion.²⁸ Further information would enable a fuller analysis of the likely socio-economic benefits that would be realised if the FSS ship was to be placed with a UK shipyard or yards. There are however unresolved questions that require immediate clarification.

There is ambiguity over how many FSS ships will be ordered. The 2015 Strategic Defence and Security Review announced that the Government would 'buy three new Fleet Solid Support logistics ships.' A September 2017 MoD procurement notice stated that 'up to three' FSS ships would be procured.²⁹ The confusion comes against a backdrop of reportedly 'brutal' upcoming cuts to the Ministry of Defence's budget.³⁰ **We recommend that the MoD should end the uncertainty over its commitment to the MARS programme and pledge to ordering the full complement of three Fleet Solid Support ships.**

The MoD's view of the classification of the FSS order has at times also appeared to be confused. The Ministry recently said that 'all non-warships, which includes the Fleet Solid Support vessels, will be subject to international competition.'³¹ On another occasion, in 2017, a different MoD Minister described the FSS fleet as 'warships' – albeit 'non-complex' ones.³² **We recommend that the MoD should clarify its definitions of the terms 'warship,' 'complex,' 'war material,' and 'warlike' when they are used in relation to shipbuilding procurement.**

GMB believes that the FSS ships clearly qualify as 'warlike' vessels for procurement purposes, and the shipbuilding unions have consistently argued that the MARS programme should be seen as a military order for UK yards, and not civilian ships for global tender.³³



International Shipbuilding

The MoD believes that it can obtain lower costs – and force higher levels of efficiency from domestic shipbuilders – by tendering on the international market.

To test this view, it is reasonable to ask whether international competitors are offering fair market prices. There is strong evidence that suggests they are not. The OECD has recently warned that prices are artificially low and that 'the economic and financial situation of the shipbuilding industry has reached unsustainable levels, driven by the widening of market imbalances after the financial crisis and the weakening of vessel prices.'³⁴

Although European Union regulations prohibit Member States – including the UK – from offering most direct subsidies, within the industry it is widely believed that a number of European shipyards continue to benefit from tacit government financial support: a view reflected in recent research commissioned by BEIS.³⁵ Spanish shipbuilders were accused of receiving illegal subsidies as recently as 2013.³⁶ 'Innovation aid' is permitted within the EU to help bring prototypes to market, and although the UK does not make use of this facility, shipbuilders in France, Germany, Spain, the Netherlands and Finland have all benefited from innovation aid over the last ten years.³⁷

The Chinese market – which now dominates worldwide production – is of greater concern. It is estimated that China subsidised shipbuilding orders by between 13 per cent and 20 per cent between 2012 and 2015.³⁸ Although East Asian shipbuilding economies have embarked on a series of capacity reduction measures, there are cases of the companies themselves being seen as entities that are 'too big to fail.' South Korea's Daewoo – which won the contract to construct the MARS Tide Class order – received a £2 billion bailout in 2017.³⁹

This exceptional degree of moral hazard means that the UK's international competitors can engage in expensive tendering processes without running the existential risk that failure can represent for domestic suppliers. South Korean shipbuilders also benefit from ongoing subsidies. In 2015, the Korean Development Bank launched the 'KDB Ocean Value-Up Fund' worth \$847 million and a \$1.2 billion ship investment fund to assist Korean shipbuilding.⁴⁰

International shipbuilders – especially those based outside the EU – can also benefit from local content purchasing rules that provide a high degree of certainty over future orders. The United States' Jones Acts requires domestic cargo routes to be operated by American built ships, while Brazilian, Nigerian and Indonesian shipyards benefit from similar local content requirements that retain at least some of the value from domestic orders within the home shipbuilding market.⁴¹ Canadian military shipbuilding orders have been brought 'in-house' under a National Shipbuilding Strategy that the Canadian Government estimates will support almost 7,350 jobs a year until 2022.⁴²

Globally, and in sharp contrast to the UK's experience, the shipbuilding market is characterised by overcapacity, depressed orders and artificially low prices sustained through direct government subsidies. The OECD recently warned that 'such imbalances are not sustainable in the near future.'⁴³

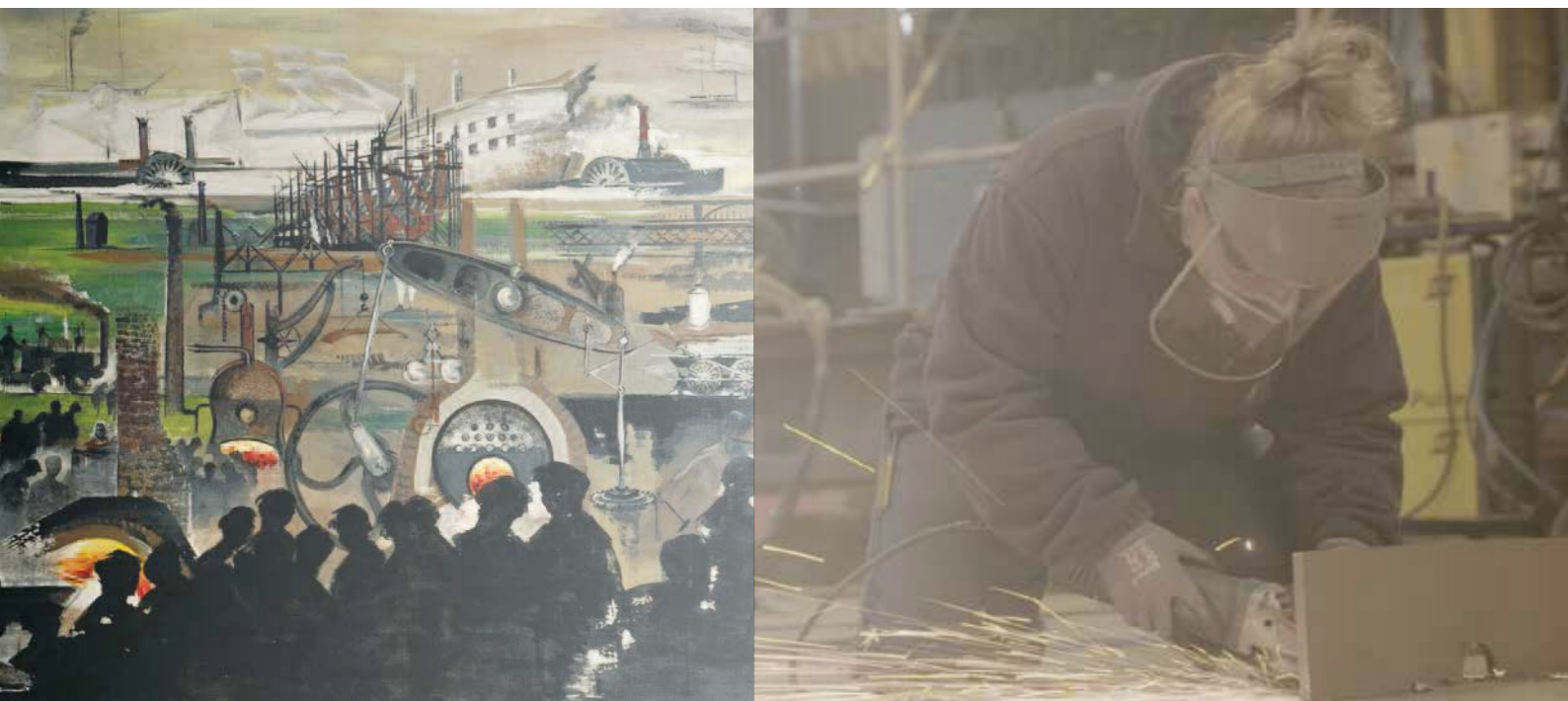
Information obtained by the GMB under the Freedom of Information Act gives an indication of the shipbuilders without a UK manufacturing presence that may bid for the FSS.

Two of South Korea’s ‘big three’ shipbuilding firms – Daewoo and Hyundai – were represented at an MoD industry day held in September 2017. Of the five European groups represented, two – Fincantieri and Navantia – are state owned (see the appendices to this report for the full list of companies represented).

Overseas shipbuilders represented at the September 2017 MoD FSS industry day

Company	Nation
Daewoo Shipbuilding & Marine Engineering	South Korea
Damen	Netherlands
Fincantieri	Italy
German Naval Yards	Germany
Hyundai Heavy Industries	South Korea
Navantia	Spain
Remontowa	Poland

The apparent savings that can be obtained through international tendering reflect, to a significant degree, subsidies, overcapacity, and insulation from full commercial risk. We recommend that the MoD should account for these artificial price differences when comparing domestic and foreign bids for shipbuilding and defence contracts.



The importance of shipbuilding to the UK economy

Shipbuilding is an industry of national significance. The sector directly employed around **23,000 people** and contributed **£1.7 billion** to the UK’s economy in 2017 – while ship repair contributed a further 9,000 jobs and £339 million in Gross Value Added.⁴⁴

GMB estimates that the combined shipbuilding and ship repair workforces are paid £1 billion annually, of which £238 million is returned to the Treasury through Income Tax and National Insurance contributions.⁴⁵

The industry has a wider economic significance that extends beyond these headline estimates. Shipbuilding’s skills profile means that the sector is comparable to aerospace and other advanced engineering industries that play a foundational role in improving productivity, building supply chains, and training the next generation of skilled workers.

This section explores the employment and economic benefits that shipbuilding brings to the UK, as well as the long-term negative consequences of closures and job losses.

Shipbuilding employment

Workers in the sector tend to be highly skilled and well paid. It can take six to eight years to fully train a shipyard worker⁴⁶, and measured by hourly wages shipbuilding jobs are on average 45 per cent better paid than all jobs and a third better paid than general manufacturing jobs.

The below figures are not disaggregated between military and civilian shipbuilding roles, and research suggests that workers in defence shipbuilding enjoy a further wage premium of around 18 per cent compared to those employed in commercial vessel construction.⁴⁷

Median wages comparisons, 2017 (£)⁴⁸

	Hourly (gross)	Annual (gross)
All employment	12.49	23,474
Manufacturing	13.55	27,727
SIC 3315 – ‘repair and maintenance of ships and boats’	13.96	30,643
SIC 3011 – ‘building of ships and floating structures’	18.15	35,698

Shipbuilding (not including ship repair) employs an estimated 22,000 people in Great Britain, and a further estimated 695 people in Northern Ireland – most of whom are based at the historic Harland and Wolff company.⁴⁹ Shipbuilding also supports a number of apprentices: IPSOS MORI research commissioned by the Government suggests that between 25 and 36 apprentices may be created for every 100 shipbuilding jobs that are supported through new investment, although official apprenticeship data suggests that employers are currently falling short of this rate.

Although shipbuilding only makes up 1.3 per cent of manufacturing employment, these jobs tend to be geographically concentrated (Plymouth alone accounts for over a fifth of UK shipbuilding employment). Shipbuilding workers also tend to be significantly better paid than those employed in service jobs in the local labour market. This geographic employment profile helps explain why closures have such a damaging effect on local communities.

Shipbuilding employment in Great Britain – not including ship repair (SIC 3011) ⁵⁰

Parliamentary constituency	Employment	As share of manufacturing jobs	As share of all jobs
	n	%	%
Barrow and Furness	6,000	60	15.8
Plymouth, Sutton and Devonport	5,000	84.6	8.6
Dunfermline and West Fife	2,000	41	4.8
Glasgow North West	2,000	67.3	6.7
Birkenhead	900	36	2.6
Glasgow South West	600	20	1.4
Great Britain	22,000	1.3	0.1

The UK shipbuilding workforce has an older age profile than the European average and one of the highest annual requirements for skilled shipbuilding labour in the EU. The UK industry also employs a higher proportion of staff in design roles than comparator nations. It is likely that these characteristics reflect the ‘feast and famine’ nature of UK workbooks, which locks employers into a cycle of rapid fluctuations in workforce numbers and pushes up design costs.⁵¹

The reliance of UK shipyards on European labour to fulfil specialised tasks has been the source of national and local controversy.⁵² It is important to note that although UK shipbuilding employers have sourced some labour from overseas, the flow of migration is not exclusively one-way. A number of shipbuilders formerly employed in UK yards subsequently found work in Europe, although this outflow was also a symptom of the UK industry’s decline.

Nevertheless, it is clear that, post-Brexit, employers will not be able to rely on the skilled European labour pool to the extent that they do today. More proactive policies are likely to be required to build and sustain the UK’s shipbuilding skills base. One option would be to develop shipbuilding centres of skills excellence that provide salaried training when order books are fallow, as put into practice in Japan and the Netherlands in the early 2000s.⁵³

To meet the skills gap, and in exchange for a guarantee that all RFA and Royal Navy vessels will be built in the UK, the Government should work with trade unions to set contractual targets for high-quality apprenticeship employment for all publicly funded shipbuilding orders and explore options for more proactively supporting the skills development of the existing workforce.

The shipbuilding supply chain

The supply chain is a critical part of the shipbuilding industry. Approximately 70 per cent of a shipbuilding contract’s value is spent in the supply chain, and the sector procured £2.8 billion worth of goods and services in 2015.⁵⁴ Military orders continue to dominate the order books of the UK’s two biggest shipbuilding employers – BAE Systems and Babcock Marine. Although

Babcock fulfils some commercial orders, in 2017 military orders continued to account for 87 per cent of its marine division’s customer base.⁵⁵

Rubber, electronics, and metals are all important components of the shipbuilding supply chain – half of the steel used in first tranche of Type 26s by value will be sourced from the UK.⁵⁶ This share of value for UK steel products should be targeted for improvement in future procurement exercises. However, it is clear that additional shipbuilding demand for UK steel is unlikely to be realised if RFA orders are placed overseas, thereby contradicting the Government’s pledge that ‘we will do everything we can to support our steel industry’.⁵⁷

In 2005 there were over 1,200 companies in the submarine supply chain alone, including fifty in Barrow-in-Furness.⁵⁸ Some 57 companies with a UK presence – including BAE Systems, Babcock Marine and many SMEs – were represented at an FSS industry day hosted by the MoD in September 2017 (for the full list see the appendices to this report).

Standard ONS employment multipliers suggest that around 20,000 additional jobs are supported by the civil and military shipbuilding industry – although the MoD’s own analysis suggests that this figure may be higher. The MoD’s internal research suggests that the combined direct and indirect contributions of the Royal Navy’s shipbuilding programme alone is worth at least **£1.5 billion** annually and supports up to **25,000 jobs**.⁵⁹

The local economic benefits of shipbuilding are also likely to be greater than conventional analyses suggest. A study of defence-related employers in the South West found that defence manufacturers were more likely to place orders with other local companies than the manufacturing average.⁶⁰

Shipbuilding employment estimates by 2007 SIC codes – GB BRES 2016 and NI BRES 2015

Region	30110: Building of ships and floating structures		33150: Repair and maintenance of ships and boats		Total		
	Direct	Supported	Direct	Supported	Direct	Supported	Grand total
North East	175	119	350	181	525	300	825
North West	8,000	5,426	150	78	8,150	5,504	13,654
Yorkshire and The Humber	45	31	350	181	395	212	607
East Midlands	75	51	75	39	150	90	240
West Midlands	75	51	75	39	150	90	240
East	500	339	600	311	1,100	650	1,750
London	100	68	175	91	275	159	434
South East	400	271	4,000	2,073	4,400	2,345	6,745
South West	6,000	4,070	2,250	1,166	8,250	5,236	13,486
Wales	400	271	250	130	650	401	1,051
Scotland	6,000	4,070	700	363	6,700	4,432	11,132
Northern Ireland	695	471	35	18	730	490	1,220
UK	22,695	15,393	9,035	4,683	31,730	20,077	51,807

It is important to note that these figures may not reflect the higher output that is achieved by military orders compared to commercial shipbuilding. Alternative methodologies have suggested that in these cases the multiplier may be higher – especially when military shipbuilding jobs are examined in isolation. Research commissioned by GMB Scotland from the Fraser of Allander Institute in 2016 found that BAE’s Glasgow yards directly employed 2,723 people FTE and supported an additional 3,220 FTE jobs in Scotland.⁶¹

The negative consequences to the supply chain of orders being lost to the UK were stressed in the Parker Report:⁶²

‘Overseas build brings its own challenges including potential denial of opportunities for the UK supply chain, higher costs of overseas supervision and potential foreign exchange risks. Nor does the foreign build of ships make the direct prosperity contribution to the UK economy that an onshore build would achieve.’

Those costs are explored in more detail in the following sections.

Revenue returned to the Treasury

A significant portion of expenditure on orders placed with UK manufacturers is effectively ‘recycled’ to the taxpayer in the form of taxation and National Insurance contributions. Other fiscal benefits include lower welfare payments and higher spending in the wider economy. Taxation of public sector spending effectively represents a discount to the nation state as purchaser. This principle was recognised for the first time in the March 2018 update to the Treasury Green Book, which states that:

‘Payments of tax and national insurance made from an employee’s gross earnings are part of the output or value produced by the workforce. They are therefore not a transfer payment and should be included where relevant in calculations of social value.’⁶³

Recycled revenues are an underexplored aspect of the debate on the future of shipbuilding policy, despite the size of the potential savings in the national accounts. Answers to recent Parliamentary Questions reveal that the MoD has not assessed the taxation returned from its aircraft carrier, Type 45 and Astute submarine orders.⁶⁴ GMB cautiously estimates that around **£285 million** out of £800 million shipbuilding spend in the UK would be returned to the Exchequer.

A 2009 Oxford Economics report estimated that **11.5 per cent** of defence investment would be recycled to taxpayers, which would represent a significant effective discount rate from UK suppliers.⁶⁵ Other studies suggest that this figure may be too low. A 2012 RUSI study estimated that between **34 and 36 per cent** of spending on defence contracts was returned to the Treasury.⁶⁶ A recent IPPR report on the separate policy area of public sector pay, which took into account welfare savings and the fiscal benefits of greater GDP growth, found that the return rate from a proposed investment in pay rises was over 40 per cent.⁶⁷

The latest Treasury guidelines acknowledge the importance of this factor. The MoD should account for the effective discount rate to domestic orders that income taxation and National Insurance contributions represent.

We recommend that, when scoring bids between domestic suppliers and foreign competitors, public bodies should factor in the revenue that would be returned to the Treasury in the form of taxation and lower welfare payments. The MoD and the Treasury should consult on and produce a model that provides an agreed methodology for doing so in respect of defence contracts that also accounts for likely corporation tax receipts. When placing shipbuilding orders, the MoD should proactively publish an estimate of the tax benefits of orders going to domestic suppliers.

Socio-economic impacts

It is clear that shipbuilding provides a greater contribution to local and national economies than headline employment and GVA estimates capture. Evidence from existing shipyards, and communities that lose them, suggest that modern shipbuilders are happier, better-paid and more likely to spend money in their local communities than if they were forced to seek alternative employment.

According to the IPSOS MORI research that informed the National Shipbuilding Strategy, the creation of 100 shipbuilding jobs is likely to result in the creation of a further 32 manufacturing jobs within 60km of the shipyard. These benefits are partially offset by the loss (or ‘crowding out’) of 113 jobs in the service sector. A significant number of people are also lifted out of local unemployment. GMB believes that the transfer of workers from lower paid and often insecure service jobs to highly skilled and better remunerated shipbuilding and manufacturing jobs is a sign of a strengthening economy and a development that should be encouraged.

Summary of IPSOS MORI (2017) shipbuilding socio-economic metrics

Aspect of Prosperity	Effect for 100 shipbuilding jobs created	Measure
Employment	Warship spend per gross job (at shipyard)	£10m-£13m
	Net increase in employment	19 jobs
Education	Gross apprenticeships created	25 - 33 apprentices
Income	Net increase in GVA per annum	£4.3m
	Net increase in wages per annum	£1.8m
Unemployment	Reduction in JSA claimants	16 claimants
	Reduction in LT JSA claimants	9 claimants
	Reduction in OOW benefit claimants	11 claimants

The MoD has conducted its own research which suggests that Royal Navy/RFA spending supports up to 25,000 jobs annually. Ministers have committed to publishing this analysis in response to a question from Kevan Jones MP, Chair of the APPG on Shipbuilding and Ship Repair, following a redaction process.⁶⁸ The MoD’s internal work had not been published at the time of writing.

The metrics from the IPSOS MORI commissioned research, and those drawn from other publications, can be used to tentatively estimate the positive impacts of building the Fleet Solid Support vessels in the UK. Initial estimates are included later in this report.

The consequences of job losses

Although heavy manufacturing employment has fallen in general since the 1970s, it is arguable that shipbuilding has experienced a decline that is exceeded only by the collapse of the deep-cast coal mining industry.

It is difficult to track job numbers with precision over time due to changing employment survey methodology, but within those limitations it can be estimated that the industry has shrunk to a quarter of its former size over twenty-five years, resulting in approximately 90,000 job losses.

Headline employment figures often fail to tell the full story. There is strong evidence that attests to the long-term scarring to the health, happiness and prosperity of the communities that are left behind when heavy manufacturing jobs are lost and replaced by a dependency on lower-paid and less secure service roles. Examples of these effects include shipbuilding job losses in the North East, and closures from comparable industries such as the collapse of MG Rover.

MG Rover – Britain’s last domestically owned mass car manufacturer – went into liquidation in 2005 and six thousand employees were made redundant. In a subsequent survey, 46 per cent of former staff said that their new employment was worse than their job at MG Rover. Only 28 per cent said that their employment had improved. Two thirds of ex-MG Rover workers said that they were financially worse off, and average annual earnings had fallen by £5,640 in real terms.⁶⁹

These findings are reinforced by a detailed study of the effects of job losses at the Swan Hunter shipyard on Tyneside, which was conducted in the 1990s.⁷⁰ Swan Hunter – a historic shipyard that produced such famous ships as the Blue Riband holder RMS Mauretania – collapsed in 1993 after the company failed to win a key MoD order. Although a buyer was eventually found in 1995, over two thousand workers were made redundant while the yard was in receivership.

A survey of 1,645 former Swan Hunter workers found that former shipyard workers were enduring very high levels of unemployment. The most numerous group – those judged to be skilled manual workers by the survey’s designers – reported the second highest unemployment rate at 42 per cent.

Former Swan Hunter employees – unemployment by grade

	n	%
Managers	12	18.5
Design and technical	56	28.0
Skilled manual	492	41.6
Clerical	16	26.7
Unskilled manual	47	45.2
Total	623	38.7

Like the former MG Rover workers, ex-Swan Hunter staff who stayed in the North East experienced a considerable loss of earnings even when they were able to obtain work. 68 per cent reported that they were now earning less than they did at Swan Hunter. The situation was reversed for staff who obtained work outside of the region, but only a small number of those survey (123 persons) fell into this category. Managerial and design roles were disproportionately represented in this group.

	North East		Not North East	
	n	%	n	%
Less than at Swan’s	312	67.97	29	22.95
More than at Swan’s	147	32.03	94	77.05

Average wages for those that stayed in the North East fell by 9 per cent in cash terms. Those who were able to move outside of the North East saw an increase in average earnings, but these gains must be set against the costs of moving and finding alternative employment.

The threat of closures and job losses remains all too present for the shipbuilding workforce. This was underscored when BAE Systems announced 1,775 job losses at Filton, Glasgow, Rosyth and Portsmouth in 2013 (with the latter yard ending shipbuilding activity entirely).⁷¹

We recommend that the MoD should commission research into the socio-economic effects of the end of shipbuilding at BAE System’s Portsmouth yard and recent job losses at Scottish yards to maintain an up-to-date evidence base on the impact of employment reductions and to inform the development of its procurement policy.



The economic impact of the Fleet Solid Support order

GMB estimates that if the FSS order was secured by UK yards, around **6,700 jobs** would be supported (including 1,800 shipyard jobs); and up to **£285 million** out of £800 million potential UK spend would be returned to the Treasury through taxation.

For reasons of data limitations and the use of metrics from a range of sources, the below table is intended as a cautious and illustrative exercise. It could be refined further by factoring in the taxation revenues from increased GDP growth, which would show a small additional improvement to the UK business case. **If the MoD proceeds to the international tendering stage of the FSS order, it should publish its own estimates of the likely economic and social effects of domestic versus offshore production.**

Public information on the FSS order is limited and there is not yet a single model for estimating the effects of shipbuilding spending. A range of metrics and a series of assumptions have therefore been made. The most significant on these is cost. In the absence of an official estimate, the reported contract value – of £1 billion – has been used, but it is also recognised that this number is of unclear provenance and that it may be an overestimate.

There is not enough information in the public domain to calculate a ‘negative optimism bias’ – ie, to account for the risk that the value of the order may be less than anticipated. A simple reduction of 20 per cent has made instead.

Cost inputs	Contract value	£1,000,000,000
	Minus 20% opt bias	£800,000,000
Cost breakdown	Shipyard spend	£240,000,000
	Supply chain spend	£560,000,000
Domestic savings	Returned taxation & NICs	£272,000,000
	Savings on JSA costs	£13,642,538
Final cost to taxpayers	Net cost	£514,357,462
Non-fiscal benefits	Shipyard jobs supported	1,805
	– of which, apprentices	451
	Additional local jobs (supported by shipyard spend)	198
	Reduction in JSA claimants	289
	Supply chain jobs supported	4,674

Sources: IPSOS MORI (2017); RUSI (2012); Oxford Economics (2009); New Economy CBA model (2015); HMT GDP deflator.

Assumptions: Contract value will be £1bn -20%; spend is within the UK and split 70/30 supply chain to shipyard; 34% of spend is returned to the Treasury through taxation; each shipyard job created lasts three years.

The future of British shipbuilding

As we approach the 2020s there should be a sense of optimism about the future of shipbuilding in the UK. The aircraft carrier programme is drawing to a successful conclusion. Orders for new frigates are on the books. We have a Government that says it wants to lead a shipbuilding ‘renaissance.’

The reality is very different. Shipyard workers are disillusioned by broken promises, continued job losses and uncertainty over future orders. According to analysis by the House of Commons Library, defence spending has fallen by 14 per cent in real terms since 2009/10 and is now at its lowest share of GDP since at least the mid-1950s.⁷² Further defence cuts are reportedly expected and there are even reports based on internal Royal Navy documents that an Astute-class submarine order due to be fulfilled at Barrow-in-Furness could be cancelled.⁷³

It is important that Ministers understand the depth of feeling that is held over the downgrading of the Type 26 order, the end of shipbuilding at Portsmouth, and the cancellation of BAE’s promised £200 million investment in a new ‘frigate factory’ at Scotstoun.

Just over a year has passed since Theresa May stood in front of an RAF helicopter and promised a ‘red, white and blue Brexit.’⁷⁴ Polling commissioned by GMB confirms that 64 per cent of Leave voters believe that defence orders should generally be placed with UK firms (compared to 52 per cent of Remain voters). The slogan ‘take back control’ held such power because, in part, of the disillusionment caused by the offshoring of jobs and orders being lost to overseas firms that enjoy uncompetitive advantages over UK employers. If the Fleet Solid Support order is awarded outside of the UK then that sense of betrayal will only grow.

The UK’s national defence demands a strong and sustainable shipbuilding industry. Its current policies actively work against that interest. It is difficult to avoid the impression that the UK is the only shipbuilding nation that holds true to the principles of the free market while its competitors do not hesitate to use their full range of state powers to support their own industries. As we argue in this report, attempting to rebuild our naval forces ‘on the cheap’ through international orders does not just harm the shipbuilding industry – it represents bad business for the wider UK economy too.

The Government argues that the shipbuilding industry should diversify into defence exports and winning more commercial orders. We agree. Employers have not invested enough in equipment or research and development for decades. The lack of certainty over future defence orders is an important contributing factor. Our shipbuilders are locked into cycles of uncertain and expensive bidding processes and wasteful fluctuations in workforce numbers as the investment cycle swings from feast to famine and back again.

There is a better way. Shipbuilders need a steady and predictable drum beat of orders over a long term. The Government has the power to use its procurement processes to support UK yards. The upcoming Fleet Solid Support order is the most immediate lever at its disposal. GMB, as the union for shipbuilding workers, urges Ministers to use it.

List of recommendations

GMB is calling on the Government and opposition parties to adopt and implement the following recommendations:

1. The Government should adopt a public procurement policy based on the principle of 'buying for Britain.' As part of this policy RFA ships be procured from British yards to encourage long-term investment and provide a steady drum beat of orders that will encourage innovation in other areas (page 8)
2. The MoD should end the uncertainty over its commitment to the MARS programme and publicly commit to ordering the full complement of three Fleet Solid Support ships (page 10)
3. The MoD should clarify its definitions of the terms 'warship,' 'complex,' 'war material,' and 'warlike' when they are used in relation to shipbuilding procurement (page 10)
4. The apparent savings that can be obtained through international tendering reflect, to a significant degree, subsidies, overcapacity, and insulation from full commercial risk. The MoD should account for these artificial price differences when comparing domestic and foreign bids for shipbuilding and defence contracts (page 12)
5. To meet the skills gap, and in exchange for a guarantee that RFA and Royal Navy vessels will be built in the UK, the Government should work with trade unions to set contractual targets for apprenticeship employment as part of all publicly funded shipbuilding orders and explore options for more proactively supporting the skills development of the existing workforce (page 14)
6. When scoring bids between domestic suppliers and foreign competitors, public bodies should factor in the revenue that would be returned to the Treasury in the form of taxation and lower welfare payments. The MoD and the Treasury should consult on and produce a model that provides an agreed methodology for doing so in respect of defence contracts that also accounts for likely corporation tax receipts. When placing shipbuilding orders, the MoD should proactively publish an estimate of the tax benefits of orders going to domestic suppliers. (page 16)
7. The MoD should commission research into the socio-economic effects of the end of shipbuilding at BAE System's Portsmouth yard and recent job losses at Scottish yards to maintain an up-to-date evidence base on the impact of employment reductions and to inform the development of its procurement policy (page 19)
8. If the MoD proceeds to the international tendering stage of the FSS order, it should publish its own estimates of the likely economic and social effects of domestic versus offshore production (page 20)

GMB shipbuilding policy

GMB, as the successor union of the Amalgamated Society of Boilermakers, Shipwrights, Blacksmiths and Structural Workers, is proud to have represented shipbuilders for over a hundred and fifty years.

This page summarises our policies on shipbuilding as passed by the GMB's internal democratic structures.

Shipbuilding

GMB notes with concern successive government's downsizing of the capacity of the Royal Navy; including surface fleet, submarine fleet and fleet air arm. This is in addition to the general decline in UK shipbuilding. GMB calls on the Government for urgent action to retain the ability to build warships in the UK and place orders to British ship building dockyards across the UK, not only for new builds but also for maintenance and repair work

GMB gives its full support to the recommendations of the independent Parker Report into the country's national shipbuilding strategy. (2017:171)

Commercial shipbuilding growth has been stunted by large companies depending only government defence contracts: their refusal to diversify over decades has meant that work has been cut back. Shipbuilding will not be bound by directives affecting commercial shipbuilding following the vote to leave the EU, and GMB Congress 2017 voted to campaign for the return of a viable commercial shipbuilding industry in the UK. (2017:172)

GMB notes the publication of the report The Defence Industry in Scotland commissioned from the Fraser of Allander Institute at Strathclyde University by GMB Scotland.

Congress has called on the UK Government to make clear its commitment to UK sovereign capability in defence shipbuilding by committing to the building of the three planned Royal Fleet Auxiliary support vessels, maintenance and routine refitting of the two aircraft carriers built by the Aircraft Carrier Alliance at Rosyth in the Forth and the delivery of the Type 26 frigate programme in full and in line with the promises that were made to the shipbuilders on the Clyde in advance of the 2014 referendum on Scottish independence. (2017:174)

This summary of union policy is taken from the GMB National Policy Guide (2018 edition). Figures in parentheses refer to motions passed by GMB's annual Congress.



Tables

British shipbuilding and ship repair employment – 1981 to 2016

Job estimates are for Great Britain (not including Northern Ireland)

The surveys and the SIC code classifications that underpin this table have changed considerably over time.

Caution should therefore be excised when comparing figures from different reporting periods. Significant changes in the survey employed or the methodology of that survey have been underscored. Background information on the history of British employment surveys can be found on the ONS's Business Register and Employment Survey (BRES) methodology page.

Year	Great Britain	North East	North West	Yorkshire and The Humber	East Midlands	West Midlands	East	London	South East	South West	Wales	Scotland
1981	122,200	26,000	14,000	3,000	600	600	4,000	1,000	22,000	18,000	1,000	32,000
1984	90,400	16,000	8,000	2,500	500	600	3,500	600	13,000	20,000	700	25,000
1987	58,400	8,000	3,000	1,500	1,000	600	3,000	500	9,000	15,000	800	16,000
1989	50,350	6,000	3,500	1,500	1,500	800	3,000	450	8,000	12,000	600	13,000
1991	46,450	7,000	3,000	1,750	1,000	600	2,500	200	7,000	9,000	400	14,000
1991	41,550	8,000	3,000	1,500	50	100	1,750	500	4,500	7,000	150	15,000
1993	38,325	3,500	8,000	900	100	300	1,500	225	4,500	8,000	300	11,000
1995	35,225	3,000	6,000	700	100	350	700	175	5,000	7,000	200	12,000
1996	41,725	8,000	6,000	900	75	150	1,000	250	6,000	7,000	350	12,000
1997	32,300	4,000	6,000	500	75	175	600	200	4,500	6,000	250	10,000
1998	33,200	4,500	6,000	600	50	125	1,500	200	6,000	5,000	225	9,000
1998	30,975	3,500	5,000	600	75	125	1,250	250	5,000	6,000	175	9,000
1999	29,175	2,000	5,000	500	50	100	1,000	175	5,000	6,000	350	9,000
2000	27,100	1,500	5,000	350	75	75	600	600	4,500	6,000	400	8,000
2001	27,850	1,750	6,000	400	50	125	700	75	4,500	7,000	250	7,000
2002	26,555	2,250	5,000	500	30	150	800	75	4,500	7,000	250	6,000
2003	23,165	2,000	4,500	500	40	150	600	75	3,000	7,000	300	5,000
2004	25,040	1,500	4,000	400	40	225	500	75	4,000	8,000	300	6,000
2005	22,065	1,500	4,000	450	40	150	600	75	3,000	7,000	250	5,000
2006	21,725	1,250	4,000	500	50	125	500	50	3,000	7,000	250	5,000
2007	23,425	1,000	4,500	400	50	100	500	75	3,500	7,000	300	6,000
2008	22,730	800	5,000	350	30	125	500	75	3,500	6,000	350	6,000
2009	28,885	2,150	6,350	600	85	385	1,700	40	2,850	7,500	425	6,800
2010	27,955	1,350	6,300	650	140	225	1,200	90	3,200	7,250	750	6,800
2011	28,630	1,000	6,125	900	180	135	700	40	5,000	7,000	650	6,900
2012	32,925	700	6,075	270	250	130	1,125	200	10,250	6,500	425	7,000
2013	27,355	525	6,150	435	225	75	1,150	45	4,250	7,250	450	6,800
2014	29,595	525	7,150	750	275	80	600	115	3,900	7,750	450	8,000
2015	29,940	550	9,150	450	140	85	800	65	3,700	7,500	700	6,800
2016	31,000	525	8,150	395	150	150	1,100	275	4,400	8,250	650	6,700

ONS sources

Survey	Period	SIC code(s)
Census of Employment	1981 to 1991	361: Shipbuilding/repairing
Annual Employment Survey	1991 to 1998	3511: Building and repairing of ships
Annual Business Inquiry	1998 to 2008	3511: Building and repairing of ships
Business Register and Employment Survey	2009 to 2016	30110: Building of ships/floating structures; 33150: Repair & maintenance of ships & boats

Active strength of the Royal Navy and the Royal Fleet Auxiliary – 1977/78 to 2017/18

In the absence of official statistics, the below table has been put together from commercial reporting. Multiple categories (some of which varied from report to report) have been consolidated. It is possible that some categories of minor support ships were no longer reported after 1992/93. The figures do however give a clear indication of the decline of orders for new vessels from the Royal Navy and the Royal Fleet Auxiliary.

Types of ships	1977/78	1982/83	1987/88	1992/93	1997/98
Aircraft carriers	2	2	3	2	2
Ballistic missile submarine	4	4	4	4	3
Other submarines	27	27	28	19	12
Destroyers	3	12	13	12	12
Frigates	56	43	35	30	22
Other fighting ships	8	-	-	-	-
Helicopter carriers	2	-	-	-	-
Hovercraft	5	6	-	-	-
Landing vessels	1	2	1	1	1
Landing vessels or transport crafts	70	66	57	79	6
Minesweepers/minehunters	28	38	42	31	18
Other ships	21	19	18	13	-
Patrol ships	17	10	23	17	40
Royal Navy Auxiliary Service	10	10	10	14	-
Royal Yacht	1	1	1	1	1
Support ships (various)	44	26	31	53	5
Survey ships	13	13	11	2	6
Tankers	17	19	20	16	12
Tenders	54	67	61	53	-
Training ships (various)	10	4	32	15	1
Tugs	72	64	58	52	-
All ships	465	433	448	414	141
Fighting ships	102	88	83	67	51

	2002/03	2007/08	2012/13	2017/18
	2	2	-	1
	4	4	4	4
	12	10	7	7
	11	8	6	6
	21	17	13	13
	-	-	-	-
	1	1	2	1
	-	-	-	-
	1	2	2	2
	8	10	9	7
	22	16	15	15
	-	-	1	1
	22	23	23	25
	-	-	-	-
	-	-	-	-
	5	5	5	3
	3	5	4	4
	9	8	5	4
	-	-	-	-
	1	1	-	-
	-	-	-	-
	122	112	96	93
	51	42	32	32

Survation polling on defence procurement

On 08 March 2018 Survation conducted polling on public attitudes to defence procurement on behalf of GMB.

The government is about to begin the process of contracting the purchase of three new support ships for the Royal Navy.

The government has the power to choose between an international bidding process, which would enable a company from outside the UK to produce these vessels, or can award the contract to a bidder solely from the UK due to Royal Navy ship building having sensitive security considerations.

Which of the following is closest to your view?

	Total	2017 GE Vote					2016 EU Ref Vote		Region												
		Con	Lab	LD	SNP	Other	Leave	Remain	East	London	North East	North West	South West	South West	East Midlands	West Midlands	Yorkshire & Humber	England	Scotland	Wales	Northern Ireland
The government should prioritise awarding the contract to the lowest price bidder to fulfil the order, even if that means placing the contract overseas (%)	14.5	15.4	9.8	14.7	20.7	14.8	11.5	16.4	17.5	25.2	10.9	10.3	13.4	8.1	10.8	15.2	14.7	14.7	12.5	20.6	2.1
The government should prioritise UK security, jobs, skills and industry considerations over price and award the contract to a UK based shipyard (%)	73.9	78.4	79.2	74.5	76.8	75.4	79.0	76.0	67.7	64.8	75.4	78.6	77.0	79.6	79.5	76.1	70.0	73.9	80.5	63.5	72.2
Don't know (%)	11.6	6.2	11.0	10.9	2.6	9.8	9.5	7.6	14.8	10.1	13.7	11.1	9.6	12.2	9.7	8.7	15.3	11.4	7.1	15.9	25.8
Unweighted total	1038	291	372	62	25	69	383	430	92	131	48	124	120	92	83	85	114	889	80	49	20
Weighted total	1038	347	328	61	25	59	422	391	97	136	42	114	142	89	75	91	86	872	88	50	29

Thinking about contracts for the UK's armed forces in general, which of the following statements is closest to your view?

	Total	2017 GE Vote					2016 EU Ref Vote		Region												
		Con	Lab	LD	SNP	Other	Leave	Remain	East	London	North East	North West	South West	South West	East Midlands	West Midlands	Yorkshire & Humber	England	Scotland	Wales	Northern Ireland
The government should generally place defence orders with UK companies to support jobs in this country, even if this may lead to higher prices (%)	52.7	59.0	57.3	37.2	72.1	49.2	63.7	52.1	52.9	36.7	53.8	56.7	53.3	51.6	59.2	54.2	50.1	51.2	66.0	58.9	46.2
The government should generally invite bids for defence orders from overseas companies to secure the lowest possible price, even if this may lead to fewer jobs in the UK (%)	9.5	8.2	10.5	15.0	2.7	5.4	7.0	9.9	9.0	22.0	5.5	6.3	8.1	9.0	11.2	7.7	6.3	10.1	10.4	2.0	-
The government should not have a general policy for defence procurement and it should instead decide how it seeks bids for each project on a case by case basis (%)	23.7	24.9	19.4	40.3	14.0	29.8	19.2	27.6	23.5	25.9	27.7	20.7	26.9	24.5	21.2	26.1	23.4	24.4	14.8	19.6	34.6
Don't know (%)	14.1	7.8	12.9	7.5	11.2	15.6	10.1	10.4	14.6	15.5	13.0	16.3	11.7	14.9	8.4	12.0	20.2	14.2	8.8	19.5	19.2
Unweighted total	1038	291	372	62	25	69	383	430	92	131	48	124	120	92	83	85	114	889	80	49	20
Weighted total	1038	347	328	61	25	59	422	391	97	136	42	114	142	89	75	91	86	872	88	50	29

Companies that attended the MoD Fleet Solid Support industry day

On 26 September 2017 the MoD held an industry day in Bristol 'to inform the feasibility of the acquisition options that are currently being considered.' The MoD also said that a number of potential prime contractors would be later invited to bilateral meetings.⁷⁵

The list of companies that attended the industry day is reproduced here. GMB has matched these names to their listed headquarters or prime production sites.

Name of Company	Postcode of UK headquarters or site	Constituency
A&M Defence Services	BH21 6SP	North Dorset
A&P	NE31 1SP	Jarrow
Aish	BH12 4NL	Bournemouth West
Atkins	KT18 5BW	Epsom and Ewell
Atlas Elektronik	DT2 8ZB	South Dorset
Babcock International	W1U 1QX	Cities of London and Westminster
BAE Systems (Maritime Services)	SW1Y 5AD	Cities of London and Westminster
BMT Asset Performance	TW11 8LZ	Twickenham
BMT Defence	BA2 3DQ	Bath
Bosch Rexroth	PE19 2ES	Huntingdon
Cammell Laird	CH41 9BP	Birkenhead
Consolite	BA12 6LY	South West Wiltshire
Damen	Netherlands	-
DAS Ltd	GU3 3BW	Guildford
Derek Lane & Co	TQ12 6RY	Central Devon
DESMI	ST5 7UB	Newcastle-under-Lyme
Daewoo Shipbuilding & Marine Engineering	South Korea	-
Ferguson Marine	PA14 5NG	Inverclyde
Fincantieri	Italy	-
Finning UK	WS11 8LL	Cannock Chase
Frazer-Nash	PL1 4SG	Plymouth, Sutton and Devonport
GE Power	CV21 1BU	Rugby
German Naval Yards	Germany	-
Harland & Wolff	BT3 9DU	Belfast East
Hyundai Heavy Industries	South Korea	-
Houlder	EC4R 3TE	Cities of London and Westminster
Husys	CT21 5ET	Folkestone and Hythe
iXblue	AB23 8GX	Gordon
James Fisher	LA14 1HR	Barrow and Furness
L-3 Marine Systems	RH15 9NB	Mid Sussex
MacTaggart Scott	EH20 9SP	Midlothian
Marine Electronic Systems	SO40 3WX	New Forest East
Navantia	Spain	-
Naval Design Partnership	Part of MoD	-

Name of Company	Postcode of UK headquarters or site	Constituency
Northrop Grumman	SW1Y 4EL	Cities of London and Westminster
OSD-IMT	DD1 3JA	Dundee East
OSI Maritime Systems	PO7 7SF	Meon Valley
P&S Automation	CM9 8PN	Witham
Pall	EX34 8BH	North Devon
Parkburn Precision Handling Systems	TF3 3BJ	Telford
Portsmouth Aviation	PO3 5PF	Portsmouth North
Qinetiq Commerce Decisions	GU14 0LX	Aldershot
Qinetiq Maritime		
Raytheon Systems Ltd	CM19 5BB	Harlow
Remontowa	Poland	-
Rockwell	MK11 3DR	Milton Keynes South
Roke Manor Research	SO51 0ZN	Romsey and Southampton North
Rolls-Royce	SW1E 6AT	Cities of London and Westminster
S.C. Chambers & Co	CH41 1EL	Birkenhead
Safeguard Engineering	GU33 6JQ	East Hampshire
SEA	Industry Association	
Serco	RG27 9UY	North East Hampshire
Servowatch	CM9 4ER	Maldon
Sir Joseph Sherwoods	No company by this name exists - this may be Sir Joseph Isherwood Limited (NE29 6DE, North Tyneside)	
Society of Maritime Industries	Industry Association	
Steller Systems	GL6 0AG	Stroud
Survivability Consulting Limited	KY11 8UU	Dunfermline and West Fife
Teekay Couplings	HP9 1LW	Beaconsfield
TP Group PLC	GU14 0LX	Aldershot
TVS Supply Chain Solutions	PR6 7AJ	Chorley
Tyco Marine (Fire & Integrated Systems)	M40 2WL	Manchester Central
Valmet	BB4 5SL	Hyndburn
Wartsila	PO9 1NX	Havant

Ministry of Defence response to GMB Freedom of Information Act request, 08 March 2018

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