

BRIEFING PAPER

Number 7737, 2 February 2017

The Royal Navy's new frigates and the National Shipbuilding Strategy: February 2017 update

By Louisa Brooke-Holland

Contents:

- 1. Naval shipbuilding in the UK
- 2. The Navy's new frigates
- 3. Offshore Patrol Vessels
- 4. Logistics ships
- 5. The Shipbuilding Strategy and the Parker report

Contents

Sum	mary	3
1. 1.1 1.2 1.3	Naval shipbuilding in the UK Naval shipbuilding in the UK Complex warships built only in the UK? Snapshot of the Shipbuilding Industry	5 5 9 10
2. 2.1 2.2 2.3 2.4	The Navy's new frigates Will the Strategy lay out a build timetable? No life extension for the Type 23 frigates The Type 26 Global Combat Ship The General Purpose Frigate (Type 31)	12 13 13 14 16
3.	Offshore Patrol Vessels	20
4.	Logistics ships	22
5. 5.1 5.2 5.3 5.4 5.5	The Shipbuilding Strategy and the Parker report Timeline of Government statements Defence Committee recommendations Sir John Parker's report Reaction Government response to Defence Committee report	23 23 26 26 29 30
Ann	endix: the Royal Navy's fleet	32

Contributing Authors: Chris Rhodes, Economic Policy and Statistics, section 2.3

Cover page image copyright <u>HMS St Albans</u> by Ministry of Defence. Licensed under the Open Government Licence / image cropped. HMS St Albans is a Type 23 frigate that is due to leave service in 2035.

Summary

The Government will publish a National Shipbuilding Strategy in 2017. Its purpose will be "to place UK naval shipbuilding on a sustainable long-term footing". The strategy is expected to outline the Government's plans for two new classes of frigates for the Navy which are needed in the 2020s.

A Government-commissioned report published in November 2016 criticised the way in which the Ministry of Defence develops and buys new surface ships and recommended a 'sea change' in naval procurement. The strategy will include the Government's responses to the report's proposals.

Frigates are the core of the Royal Navy's front-line fleet.

New surface ships

The Ministry of Defence is in the middle of an ambitious recapitalisation programme for its naval surface fleet. The Government plans to spend about £19bn over the next decade on surface ships for the Royal Navy and Royal Fleet Auxiliary. 1 A substantial portion of this is for the Navy's new frigates, oft-described as the backbone of the fleet.²

The Royal Navy designates a class of frigates/destroyers as a Type. The Navy has a fleet of thirteen frigates, all Type 23s, which will begin to leave service from 2023 onwards.

Plans to replace the fleet changed significantly in 2015 when the Government dropped proposals to replace them on a one-to-one basis with the yet to be built Type 26 frigates. Only eight Type 26 frigates will be ordered and instead a new class of General Purpose Frigates, unofficially known as the Type 31s, will be developed.

BAE Systems is the prime industry partner for naval warships and submarines. The Government has confirmed, subject to contract, that steel will be cut on the Type 26 in summer 2017. This will be at BAE's two remaining shipyards, both located on the Clyde. The Government's plans for the design and build of the Type 31 class are still at the early stages.

The aim of the shipbuilding strategy

The Government announced it will publish a new National Shipbuilding Strategy in the 2015 Strategic Defence and Security Review. The strategy will "will lay the foundations for a modern and efficient sector capable of meeting the country's future defence and security needs."

Concerns about recruiting and retaining the highly skilled workers needed to build warships is one of the factors driving the strategy. As is the Government's policy of building complex warships in the UK. Options for designing the new type 31 to be exportable will also be examined.

The Government has committed to replacing the current fleet of 13 frigates when they begin to leave service from 2023.

The plan to replace the current fleet with one class of Type 26 frigates was changed by the Government in the 2015 Strategic Defence and Security Review.

The Defence Equipment Plan 2015

The remainder is divided between money already committed to completing the new aircraft carriers, offshore patrol vessels and tanker ships, and maintenance and support for in-service equipment.

Timing of the publication

The 2015 Strategic Defence and Security Review (SDSR) set a publication date of 2016 for the Strategy. Sir John Parker was appointed as the independent chair of the Strategy and was expected to report to the Government by the Autumn Statement in November 2016.

The Parker report

Sir John Parker delivered his report to the Government ahead of the Autumn Statement but his report was not published until 29 November, six days after the Autumn Statement. Upon publication it transpired this was not the National Shipbuilding Strategy, as might have been inferred from Government comments, but an 'independent report to inform the National Shipbuilding Strategy'. The Government announced its response to the report will form the National Shipbuilding Strategy which it will publish in spring 2017.³

Parker made a total of 34 recommendations which, he said, amounted to a 'sea change' in how the MOD acquires surface ships. This included a new approach to procurement, making exportability inbuilt in the design process and harnessing the 'renaissance in shipbuilding' in UK regional shipyards to build the Type 31 class.

Parliamentary scrutiny

The Defence Committee published its report on naval procurement and the national shipbuilding strategy (HC 221, 2016-17) on 21 November 2016. The Government's response was published on 17 January 2017.

A debate on shipbuilding on the Clyde was held on <u>25 April 2016</u> and on the Type 26 frigates and the Clyde on <u>18 October 2016</u>. Members have asked a number of oral and written questions about the Navy's frigates and the strategy.

Note on this briefing paper

This briefing paper was first published on 14 October 2016. It was revised and updated to reflect the Parker report in mid-December. The paper was again updated with the Government's response to the Defence Committee's report in January 2017 ahead of the debate in the Westminster Hall on 8 February 2017.

Throughout this briefing the author has referred to the Type 31 rather than the Government-used 'general purpose frigate' as this term clearly differentiates the Type 31 clearly from the Type 26.

A new type of lighter frigates, the Type 31s, will be developed to complement the Type 26s. The latter will be designed for anti-submarine warfare.

Key issues include:

The timetable for the build of the new frigates - to avoid a gap between outgoing Type 23s and incoming frigates.

Where the frigates should be built.

How to retain the highly skilled shipbuilding workforce needed.

1. Naval shipbuilding in the UK

Naval shipbuilding in the UK has contracted and consolidated over the last few decades. BAE Systems and Babcock International are Britain's two major shipbuilders and naval support providers. The Government has a Terms of Business Agreement with both companies.

The Shipbuilding Strategy is tasked with looking at how to place UK shipbuilding on "a sustainable long-term footing."

This section provides a short summary of the naval shipbuilding industry in the UK. This includes the recent consolidation of shipbuilding in Glasgow, concerns about maintaining skills and jobs, Government policy towards building complex warships in the UK, and efforts to attract international orders for UK warships.

1.1 Naval shipbuilding in the UK

In the early 2000's the Government assessed the future of naval shipbuilding in the UK ahead of a lengthy period of major naval shipbuilding. It included commissioning Rand Europe to produce reports that examined various aspects of these plans and shipbuilding.⁴

The Government published its *Defence Industry Strategy* in 2005. The Government concluded that fragmentation within the shipbuilding sector was becoming increasingly detrimental to sustaining, within the domestic industrial base, those skills necessary for maintaining both a viable shipbuilding business in the UK and providing the MOD with the key capabilities that it would require in the long term. It called for industry to consolidate and refocus around a core workload. 6

Resulting closures and mergers has resulted in BAE Systems becoming the prime contractor for the construction of warships and submarines and Babcock International as the major provider of naval support, maintenance and refitting. BAE and Babcock are separately responsible for managing the Navy's three bases.

BAE is currently building offshore patrol vessels for the Navy and completing work (as part of the Aircraft Carrier Alliance) on the carriers. It is the prime contractor for the Type 26 programme which the Government expects to be built at BAE's two shipyards on the Clyde. It is building the Navy's new Astute-class submarine fleet at its yard in Barrow-on-Furness and is the prime contractor for the Successor submarine programme, now known as Dreadnought.

Naval shipbuilding involves a long supply chain. Other shipbuilding companies of note are A&P and Cammell Laird who have been involved in building sections of the two new aircraft carriers. Thales UK, BAE Systems and Babcock are the three industry partners that make up the

"Complex warships for the Royal Navy are only built in UK shipyards." Philip Dunne, then Minister for Defence Procurement, November 2014

⁴ Rand Europe summarised these various reports in one summary document available on the Rand Europe website: <u>Naval shipbuilding in the UK</u>.

Information on the state of the shipbuilding industry at the time, including then current yards, can be found in House of Commons Library Standard Note <u>Shipbuilding</u>, SN/EP/967, 26 August 2005

⁶ Defence Industry Strategy, Cm6697, December 2005, para xxviii

Aircraft Carrier Alliance, responsible for building the new carriers. Many other companies provide specialist Systems and Equipment for naval vessels and submarines including Rolls Royce and Selex ES (part of the Leonardo-Finmeccanica).

The Terms of Business Agreement

In 2009 the Government signed a 15-year Terms of Business Agreement (TOBA) with BAE Systems and Babcock.⁷ The TOBA guaranteed BAE Systems a minimum level of surface ship build and support activity of £230 million a year.⁸ This was judged as the minimum level of work possible to sustain a credible warship-building industry in the UK and thus avoid the delays encountered during the Astute-class submarine build caused in part by the loss of skilled staff following the gap between Astute and the Vanguard-class submarine build.⁹ If cancelled the MOD would be liable for industry closure costs and compensation to BAE Systems. The TOBA was premised on an expected build programme for the Type 45 destroyer, the Queen Elizabeth-class aircraft carriers and the Type 26 frigate.

Single source rather than open competition

The Government can exempt contracts for warships and other warlike materiel from EU procurement rules for reasons of national security. Article 346 of the Treaty on the Functioning of the European Union allows any EU member state to take measures to protect its essential security interests. What constitutes "essential security interests" remains the sole responsibility of Member States. Article 346 does not contain specifications of defence materiel.

The 2012 defence procurement white paper espoused a preference for open competition and off-the-shelf procurement where possible. However it also articulated the principle of protecting sovereignty: protecting the UK's operational advantages and freedom of action. ¹⁰

The Ministry of Defence can use a single-source, non-competitive process to buy equipment. It spent £8.8bn on single source contracts in financial year 2015-16, representing 25% of the defence budget for that year.¹¹

Shipbuilding consolidated on the Clyde

BAE Systems reviewed its shipbuilding facilities in 2013. It decided to end shipbuilding at its yard in Portsmouth and instead the company consolidated its shipbuilding operations at its two yards on the Clyde in Glasgow: Govan and Scotstoun. That decision resulted in a loss of 1,775

At the time the TOBA it was signed with BVT Surface Fleet Limited (BVT), a single company formed from BAE Systems and VT Shipbuilding. BAE Systems later bought out VT shipbuilding.

Public Accounts Committee, *The Major Projects Report 2010*, HC 687 2010-11, 23 February 2011, Ev 23

[&]quot;Briefing: solving the UK's shipyard and skills conundrum", Jane's Defence Industry, 3 April 2012. The gap in submarine construction was between the end of the Vanguard build programme and the start of the Astute submarine.

National Security through Technology: Technology, Equipment and support for UK defence and security, Cm 8278, February 2012

¹¹ PQ 43697, 8 September 2016

jobs in Portsmouth and Scotland. The review did not affect BAE's submarine building yard in Barrow-in-Furness.

Philip Hammond, then Defence Secretary, said at the time the loss of jobs was "regrettable" but said it "was always going to (be) inevitable as the work load associated with the Aircraft Carrier build came to an end." 12 Mr Hammond suggested the current level of employment in the naval shipbuilding industry was never going to be sustainable in the long term and that given the size of the navy and procurement budget, the UK could only sustain one shipbuilding location. He said that suggesting anything else was "fantasy economics." 13 The Defence Secretary also announced a renegotiation of the contract with the Aircraft Carrier Alliance responsible for building the two new aircraft carriers.

In 2015 BAE announced that following a further review it would retain both the Govan and Scotstoun yards. Media had reported BAE was considering closing Govan to focus on a single-site manufacturing facility at Scotstoun. 14

A debate on shipbuilding on the Clyde was held in the House of Commons on 25 April 2016.15

Other notable shipyards

The Government said Sir John Parker, who it had described as the chair of the National Shipbuilding Strategy, will "consider a range of locations around the UK." 16

Babcock International runs the Rosyth shipyard in Fife. Rosyth's primary role is in refitting and maintenance of the Royal Navy's fleet. However, in recent years it has housed the assembly of the two Queen Elizabeth class carriers. Each ship has been built in blocks at different shipyards around the country, including at BAE's yards in Glasgow and Portsmouth, Babcock's Appledore yard in Devon, A&P's Hebburn yard in Tyneside, Cammell Laird's Birkenhead yard in Merseyside, before being assembled at Rosyth.

A number of other commercial shipyards are involved in providing maintenance, refitting and other marine engineering support to Royal Navy and Royal Fleet Auxiliary vessels. A&P Group is ship repair, conversion and marine specialist and provides marine engineering services to the Navy. Cammell Laird has a 25-year 'through life support agreement' it signed with the MOD in 2008 for the maintenance of a number of RFA vessels. 17 Babcock recently completed work on Offshore Patrol Vessels for the Irish Navy at its Appledore yard and secured a further contract in June 2016.18

¹² HC Deb 6 November 2013 c253

¹³ HC Deb 6 November 2013 c265

¹⁴ "BAE Systems to retain Govan and Scotstoun shipyards with £100m investment", BBC News, 21 May 2015

¹⁵ HC Deb 25 April 2016 c1139-1150

¹⁶ PO HL7952, 10 May 2016

¹⁷ Cammell Laird website, accessed 7 October 2016

¹⁸ "280 jobs safe at Appledore after Irish Navy £48 million Babcock deal", Plymouth Herald, 16 June 2016

The Parker report describes a 'renaissance' in shipbuilding in a range of regional shipbuilding companies. Parker identifies an 'entrepreneurial attitude and an enthusiasm to embrace change" along with flexible skilled labour practices able to manage fluctuating workloads. The report cites Babcock's contract for OPVs for the Irish Navy and Cammell Laird's contract for the new 'Sir David Attenborourgh' research ship.

The Parker report recommends a Virtual Shipbuilding Industrial model to harness regional shipyards who could block-build parts of a ship (see section 5.2).

Maintaining a 'steady drum-beat' of orders

The Shipbuilding Strategy will look at how to build a complex warship on a regular schedule.¹⁹

Maintaining a steady drum-beat of orders is often mentioned by those following the Navy's acquisition programme. This is a reference to the fact the construction of surface warships and submarines requires highly skilled workers and delays to build programmes, or gaps, risks losing those workers.

BAE Systems says retaining the skilled workforce to deliver complex warships is "absolutely essential to what we do." ²⁰ The Unite union says that the delay to the Type 26 build is already having an impact, with cuts to the apprenticeship programme and apprentices having to switch trades. ²¹

UKNEST (Naval Engineering Science and Technology) was formed in 2005 as a forum between the MOD and industry to promote the engineering, science and technology interests of UK naval defence.²²

The MOD openly admits that the three offshore patrol vessels ordered in 2013 were procured to retain skilled workers and keep the shipyards busy. The Defence Secretary said at the time: "we are effectively ordering the OPVs to soak up money we would have been paying in any case to have these yards stand idle." ²³ Plans to buy a further two patrol vessels were announced in the Strategic Defence and Security Review 2015 and are thought to similarly fill the gap until work begins on the new Type 26 frigates. ²⁴

Other yards are experiencing similar concerns. Babcock moved staff from its Appledore yard in Plymouth in 2016 because of a shortage of

¹⁹ PQ35480, 28 April 2016

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q53

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q118

²² More information about UKNEST is available on the website.

²³ HC Deb 6 November 2013 c252-260. The provisional cost of the new vessels was given as £348 million but because the TOBA required a £230 million a year spend with BAE, the Defence Secretary estimated the additional cost to the MOD of the ships, over and above the payments the MOD would have had to have made to BAE, is less than £100 million.

Defence Minister Philip Dunne said the two new vessels "will provide continuity of shipbuilding workload at the shipyards on the Clyde before construction of the Type 26 begins" HC Deb 25 April 2016 c1139

work.²⁵ A new contract with the Irish Navy will, a local paper reported, secure 280 jobs at the yard.²⁶

The Astute experience

The MOD and industry are conscious of the difficulties encountered with the Astute-class submarine programme build. The National Audit Office identified the gap between the Astute and previous submarine construction programmes as meaning that "key skills and submarine-building experience had been lost" and contributed to programme delays and cost overruns. It found providing other ship-building work to the Barrow shipyard "did not prove sufficient to maintain those skills specific to the design and construction of submarines" ²⁷

Lord West, a former First Sea Lord, warned MPs recently about the risks of repeating mistakes made with Astute with the Type 26 programme.²⁸

1.2 Complex warships built only in the UK?

The Shipbuilding Strategy is focused on the UK warship building industry.

Successive Governments have maintained a policy of building warships only in the UK.²⁹

The run-up to the referendum for independence in Scotland in 2014 coincided with the expected contract placement for the Navy's new Type 26 frigates, expected to be built at BAE's shipyards in Glasgow. Government Ministers at the time repeatedly stated complex warships are built only in UK shipyards for reasons of national security and if Scotland were to become an independent nation, Scottish shipyards would not be eligible for such contracts.³⁰ Ministers would not be drawn on where else in the UK they could be built.

Box 1: What is a complex warship?

A warship is defined as an "armoured ship, equipped with guns and missiles, designed for fighting at sea" by the Dictionary of Military Terms.³¹

But what makes it 'complex'?

The Ministry of Defence provided the following definition to the House of Commons Library:

A warship is generally defined as a surface ship or submarine armed and equipped for military use. In the context of warships, the word "complex" is used commonly as a relative rather than an absolute, defined term. It enables us to differentiate between vessels across a broad spectrum of capability depending on their size, form, function and scale of integration between the on-board systems required to fulfil their role.³²

^{25 &}quot;Appledore shipyard staff moved due to shortage of work" BBC News, 25 February 2016

^{26 &}quot;280 jobs safe at Appledore after Irish Navy £48 million Babcock deal", Plymouth Herald, 16 June 2016

National Audit Office, <u>The United Kingdom's Future Nuclear Deterrent Capability</u>, HC 1115 2007-08, box 3

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, g20

²⁹ See for example <u>Defence Industry Strategy</u>, Cm 6697, December 2005, para xxviii

³¹ "Dictionary of military terms", Collins Publishing, second edition.

Ministry of Defence correspondence with House of Commons Library Paper author, 13 October 2016

The MOD has awarded contracts for non-complex ships outside the UK. In 2012 the Government awarded a contract for four fleet auxiliary tankers with a firm in South Korea. The Government said that since tankers were not complex warships they could be built outside the UK: "the design, build and integration requirements are not as military specific as complex warship procurements." 33 The tankers are being customised in the UK to Royal Fleet Auxiliary specifications. No UKbased firm submitted a final bid for the build contract.

1.3 Snapshot of the Shipbuilding Industry

This section provides a snapshot of the whole shipbuilding sector.

There are 900 shipbuilding firms in the UK, employing 32,000 people and generating economic output of £1.4 billion.³⁴

For context, this is less than 0.1% of total UK economic output. Automotive manufacturing economic output totalled £14.5 billion in 2015.

Shipbuilding industry

		% change
	2015 data	since 2010
Economic output (£ billions)	1.6	9%
Employees	32,000	3%
Businesses	900	-12%

Sources/notes:

Economic output: Gross Value Added, real terms change; from ONS, Quarterly national accounts, Q2 2016 Employees: Great Britain, rounded to nearest 500; from ONS, Business register and employment survey Businesses: 2014 data; from ONS, Annual business survey

Since 2010, when the economy was still recovering from the late 2000s recession, the shipbuilding industry's economic output has grown by 9% in real terms. The number of employees in the industry has also grown but by only around 3%. The number of firms in the industry has fallen by 12%.

The shipbuilding industry in the South West and the North West of England has 20,000 employees, over 60% of all employees in Great Britain. There are 6,500 shipbuilding employees in Scotland.

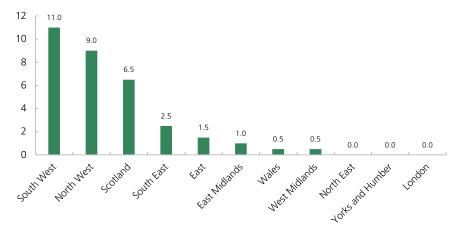
³² Ministry of Defence correspondence with House of Commons Library Paper author, 13 October 2016

³³ HC Deb 22 February 2012 c78WS

³⁴ Economic output is Gross Value Added, (GVA) a measure similar to GDP. Shipbuilding industry is Standard Industrial Classification 30.1, the manufacture of ships and boats. Business data are from ONS Annual Business Survey and refer to 2014.

Employees in shipbuilding

2016, 1000s, rounded to nearest 500



Analysis of the shipbuilding industry by the Telegraph identified competition from Asia, low productivity and a strong pound as causing the commercial shipbuilding industry to decline to "a shadow of what it once was". It notes the leisure and luxury sector and the maintenance and repair sector remain buoyant.³⁵

The Ministry of Defence gave the following figures for the state of the shipbuilding industry in the UK in the Defence Secretary's written statement on 29 November 2016:

- £1.4bn: the amount spent by the Government on shipbuilding and repair in FY2014-15
- 96%: the proportion of the £1.4bn spent with five UK prime contractors
- 15,000: number of people directly employed in UK shipbuilding and repair
- 10,000: number of people indirectly supported through the wider supply chain.³⁶

 [&]quot;Why Britain's boat builders are riding the crest of the luxury wave", The Telegraph,
 9 May 2015. See also "The decline of the UK shipbuilding industry was not inevitable", The Guardian, 6 November 2013
 HCWS288, 29 November 2016

2. The Navy's new frigates

The Ministry of Defence (MOD) is in the middle of an ambitious recapitalisation programme for its naval surface fleet. Having taken delivery of new destroyers and with the aircraft carriers near completion, the next major shipbuilding project is the Navy's new fleet of frigates.

A frigate is a medium-sized warship used to escort other ships or carry out missions on its own.

Key points:

- The Navy's current frigate fleet consists of thirteen Type 23 frigates. These will leave service from 2023 on an annual rate until 2035 and there are no plans to extend their life.³⁷
- Plans for a new fleet of frigate have been lengthy.
- The 2010 Strategic Defence and Security Review (SDSR) planned for a fleet of Type 26 frigates to replace the Type 23s as soon as possible after 2020. Planning assumptions were for a fleet of thirteen vessels with manufacturing to begin in the middle of the decade.
- The Government made significant changes to the frigate programme in the 2015 Strategic Defence and Security Review (SDSR) when it cut the expected fleet of thirteen Type 26 frigates to eight.
- The SDSR announced plans to design and build a new class of lighter, flexible general purpose frigates of at least five ships. This number will fulfil the Government's commitment to a fleet of 19 destroyers and frigates (six destroyers and 13 frigates).
- The Type 26 programme is currently in the Demonstration stage.
 This is expected to end in spring 2017 and steel will be cut in summer 2017, subject to contract negotiations, at BAE's shipyards on the Clyde.
- Approximately £8bn has been appropriated for the eight Type 26 frigates.³⁸
- Over half of the current frigate fleet are geared for anti-submarine warfare (ASW) – to locate, identify and if need be destroy enemy submarines.
- The Type 26 frigates will replace the eight Type 23 anti-submarine warfare vessels on a one to one basis.
- Details of the new general purpose frigates are limited. They are likely to be less high-end than the Type 26, meaning it will not be primarily designed for anti-submarine warfare.
- BAE Systems is currently building three Offshore Patrol Vessels (OPVs), expected in service in 2017, with a further two more on order.

⁸⁷ PO28004, 1 March 2016

Tony Douglas, chairman of DE&S, Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q137

• The Shipbuilding Strategy has a remit to look at how to maximise export opportunities. The Government says the new general purpose frigate will be designed to attract international orders. There are no international orders for the Type 26.

The Defence Committee published its report into naval procurement and the national shipbuilding strategy (HC221) in November 2016. Its conclusions and recommendations are included in this section.

2.1 Will the Strategy lay out a build timetable?

A central question of the Shipbuilding Strategy is whether it will lay out a build timetable for the new frigates.

The then First Sea Lord said in February 2016 that the strategy will "set out plans to replace all 13 Type 23 frigates on a one for one basis." 39

However in September Defence Minister Harriet Baldwin said work on the new general purpose frigate is at its very early stages and it "is too early to say what either the build strategy or the detailed supply chain arrangements may be."

The Defence Committee published its report on <u>naval procurement:</u> Type 26 and Type 45 on 21 November 2016. The Committee said the Strategy should "set out clear, timed production schedules for the delivery of both classes of frigate" and a detailed schedule laying out the expected in-service dates of the new frigates to match the retiring Type 23 frigates to avoid any reduction in warship numbers.⁴⁰

The Parker report recommends both classes be brought into service early in the 2020s. Parker described the Type 26's as critical for the Royal Navy and argued the Type 31s should be considered an 'urgent project'.

2.2 No life extension for the Type 23 frigates

The current fleet of Type 23 frigates will begin to leave service on an annual basis from 2023 until 2035.⁴¹

These frigates have already exceeded their original design life and the Defence Minister said in June that there were "currently no plans to extend further the out of service dates for the Type 23 frigates." ⁴² The First Sea Lord has said there is no planned funding to extend their lives. ⁴³

Five Type 26s are general-purpose variants and these will be the first to leave service. The remaining eight are roled for anti-submarine warfare.

The current fleet of frigates will begin to leave service in 2023.

^{39 &}quot;First Sea Lord speech on SDSR 2015 and the Royal Navy", Ministry of Defence, 5 February 2016

⁴⁰ Defence Committee, para 18

⁴¹ PO28004, 1 March 2016

⁴² <u>PQ39922</u>, 27 June 2016

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q153

This may influence the build timetable for the Type 26s and new General Purpose Frigate.

Implications for the Navy if the new frigates are delayed into service

A delay in bringing in new frigates could negatively impact Navy operations, a former head of the Navy has warned. Sir Mark Stanhope, First Sea Lord of the Navy until 2013, told the Defence Committee that if construction on the frigates does not begin soon, there will be some very old Type 23 frigates protecting brand new carriers and the strategic nuclear deterrent (the Trident submarines), warning that the Navy was in danger of not being able to fulfil all the requirements expected of it.⁴⁴

The Defence committee has similarly expressed concern about any gap in the number of frigates, especially as the committee believes the current number of 19 frigates/destroyers are "insufficient." The committee said it would be unacceptable for numbers to reduced, even temporarily, if the new frigates are not delivered to the decommissioning timetable of the type 23s. 45

2.3 The Type 26 Global Combat Ship

Plans for two classes of frigate under what was originally called the Future Surface Combatant (FSC) began in 1998. By 2010 it had become the Type 26 Global Combat Ship with a contract awarded to BAE Systems to develop a single class of ship delivered in two variants: eight anti-submarine warfare and five general purpose vessels based on a common, acoustically quiet hull – 13 ships in total. It had a planned in service date of 2020.⁴⁶

The Type 26 will be designed for antisubmarine warfare.

A significant change to the Type 26 programme was made in the SDSR 2015 when the Government committed to only eight Type 26 Global Combat Ships. These will replace the current Type 23s in their antisubmarine role. The rest of the fleet will be made up of five General Purpose Frigates.

Manufacturing of the Type 26 was expected to begin around the middle of the decade and even in early 2015 the MOD was giving a date of 2016, with the first in class to enter service in 2022 in time to begin replacing the Type 23s.⁴⁷

Manufacturing will now not begin before summer 2017. The Government announced on 4 November that steel will be cut on the Type 26s in summer 2017 but did not give any further specific information. The Ministry of Defence said this date is subject to contract negotiations. 48

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q19

⁴⁵ Defence Committee, Naval procurement: type 26 and type 45, HC 221 2016-17, 21 November 2016

National Audit Office, Ministry of Defence Major Projects Report 2012 Appendices and Project Summary sheets, January 2013, HC 684-II 2012-13

⁴⁷ PQ 224988, 2 March 2015 and HCWS289, 23 February 2015

⁴⁸ HCWS237, 4 November 2016

The programme moved from the assessment to the demonstration phase in April 2016. The demonstration phase was then extended until June 2017 with the signing of a £472 million contract in March 2016.⁴⁹

The MOD says a fixed date for the start of manufacture won't be committed to until Main Gate. This is not expected to occur until the end of the demonstration phase. 50

So far £1.9bn has been committed to the Type 26 programme. 51 BAE Systems is working on the assumption that the initial order will be for three hulls.52

RUSI analyst Peter Roberts suggests the reason for the continued delay to the build is not for design reasons but because the Type 26 budget is underfunded by around £750m this year. Lord Sir Mark Stanhope worried that these delays would simply increase the overall cost of the programme.53

How central is the Type 26 to the shipbuilding strategy?

Is the Type 26 still central to the Shipbuilding Strategy?

SDSR 2015 explicitly said the acquisition of the Type 26 would form "a central part of the strategy." 54

However the Type 26 was not mentioned at all when the MOD explained the strategy's terms of reference – which was notably after the demonstration phase extension:

The National Shipbuilding Strategy is intended to place UK shipbuilding on a sustainable long-term footing. It will look at how to build a new complex warship on a regular schedule and maximise export opportunities in order to deliver capable ships and value for money, as well as maintaining jobs and skills. It will ensure that the Royal Navy continues to have the capability it needs to protect our nation's interests, retaining its status as the most modern Navy in the world. Sir John Parker has been appointed as the Independent Chair of the Strategy. He will bring strong strategic direction and guidance to the work, and report to Ministers. He will lead the high level engagement with key stakeholders. 55

Defence Minister Harriet Baldwin told the Defence Committee that the building of the Type 26 is "part of" what Sir John Parker is looking at. 56

⁴⁹ PQ 32497, 11 April 2016. The £472 million contract includes money for long lead items for the first three vessels and shore-testing facilities.

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q156

HCWS237, 4 November 2016. This is an increase in the £1.8bn cited in Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q169. The increase is because of the award of a £100 million contract for the Sea Ceptor self-defence missile system.

⁵² Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q57

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q10

⁵⁴ National Security Strategy and Strategic Defence and Security Review 2015, Cm 9161, November 2015, para 6.55

⁵⁵ <u>PO 35480</u>, 28 April 2016

⁵⁶ Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q139

Tony Douglas, the head of the MOD's procurement arm (DE&S), said that the Type 26 "is not mutually dependent upon the national shipbuilding strategy." ⁵⁷

Sir John Parker's report focused almost entirely on the Type 31 and his proposals to reform the procurement process. Relatively little attention was paid to the Type 26 except to acknowledge BAES as the prime contractor for building the Type 26. Parker did raise the possibility manufacturing of the frigates at BAE's shipyards on the Clyde could be supported by regional shipyards via block build.

2.4 The General Purpose Frigate (Type 31)

The Government made a significant change to its frigate plans in the 2015 SDSR when it announced plans for a new class of "lighter, flexible general purpose frigates" to complete the Navy's frigate fleet. The SDSR explicitly cited the export potential and the lower cost as advantages to a new fleet and also dangled the tantalising prospect (to Navy enthusiasts) of potentially expanding the fleet in the 2030s.

Details of the new class, known as the General Purpose Frigate (GPFF), are sketchy. Media reports suggest it will the class will be designated Type 31 but this has not been confirmed by the Ministry of Defence. The Government said that as part of his work on the shipbuilding strategy, Sir John Parker "will be considering how to balance the GPFF requirement against export opportunities and industrial capacity." ⁵⁸

The frigate's primary purpose is yet to be clearly spelt out. Sir Mark Stanhope, former First Sea Lord, pointed out that it is unlikely to be expected to fulfil an anti-submarine warfare function as this requires expensive silent platforms. ⁵⁹ This was confirmed by current First Sea Lord Admiral Sir Philip Jones who said it will be deliberately designed to be a much less high-end ship than the Type 26, which *is* being designed as a high-end anti-submarine warfare frigate. The Admiral added that a "key part of the strategy" for the Type 31 is to make it appealing to potential partners to buy. ⁶⁰

A Defence Minister said in early September that the type 31 (general purpose frigate/GPFF) is at the initial pre-concept work stage. This means that it is "too early to say what either the build strategy or the detailed supply chain arrangements may be." ⁶¹

Industry's view is that the MOD's CADMID acquisition model⁶² will not be able to deliver the programme at either the estimated cost (under £350 million per unit) or timescale (to replace the Type 23s that will leave service from 2023 onwards), according to analysis by Jane's

The Type 31 will be a general purpose frigate, lighter than the Type 26.

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q138

⁵⁸ <u>PQ43692</u>, 7 September 2016

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q4

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q149

⁶¹ PQ 43692, 7 September 2016

⁶² Concept, assessment, demonstration, manufacture, in-service, disposal (CADMID)

Defence Weekly. The consensus among industry, IHS Jane's reports, is that the MOD "will have to pursue a streamlined, design-to-cost ship procurement that leverages off-the-shelf design and proven, low-risk technology as far as possible." 63 BAE System's Managing Director told MPs that he does not think there is any current design to meet the MOD requirements for the frigate. 64 The Defence Committee in its report said it was vital to know which European examples the MOD had considered as being suitable templates for the Type 31.

Export potential?

The Government has cited the General Purpose Frigate's export potential as an attractive feature of the new class. The Minster for Defence Procurement says Sir John Parker "will be considering how to balance the GPFF requirement against export opportunities and industrial capacity."

Export potential was cited as potential gain for the Type 26 Global Combat Ship when that programme was in its infancy. However, attempts to attract foreign buyers failed to materialise and the Navy has acknowledged this is partly because "it is beyond the needs of what they believe they have to have and of what they think they can afford."65

Analysis by PA consulting concurs with this assessment. It finds the UK's approach has been to design to meet its own requirements first. This results in "bespoke, complex and expensive platforms which do not meet the needs of nations whose budgets are more limited."

The MOD acknowledged this in its 2012 Defence procurement white paper:

In the past, the MOD has sometimes set its equipment requirements so high that the resulting systems exceeded any potential export customer's needs or budget. 66

PA Consulting says the MOD and industry needs to design for export first and adopt an 'export-led' way of working.⁶⁷

DSTL wrote a study in how to embed exportability in the Ministry of Defence in 2014. It was released under an FOI request and the Think Defence blog has extracted this comment on the Type 26 programme, which explains why export orders were not forthcoming:

The Type 26 project team made an attempt at implementing exportability by identifying and consulting potential international partners/customers early in the projects lifecycle. This aspect was successful but did not occur early enough and there wasn't a real appetite to compromise on UK requirements to accommodate

The Government hopes to sell the new Type 31 overseas.

⁶³ "Credible choices: UK General Purpose Frigate Programme", Jane's Defence Weekly, 13 July 2016

⁶⁴ Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 7 June 2016, HC 221 2016-17, q45

⁶⁵ Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q149.

National Security Through Technology, Cm 8278, February 2012, para 182

[&]quot;Developing a sustainable export market for UK defence", PA Consulting, date not

export customers. The premise of achieving exports of the platform was also based on flawed market intelligence, leading to a poor export strategy.⁶⁸

The MOD says the GFPP will have export potential and the Navy says they will work closely with industry to ensure that the eventual design "is appealing to a very broad cross section of potential partners" which, the First Sea Lord added, "is a key part of the strategy for that ship."

A number of major European nations are currently committed to or exploring their own frigate replacement requirements. Analysis by Jane's Defence Weekly notes that despite potential benefits of scale, reduced risk and shared development costs, new projects underway in Europe are "notably national in nature." This is attributed to diverging requirements and incompatible schedules, as well as national shipbuilding industry demands. This means that new designs and major subsystems will "appear and jostle on the ever-important export markets." ⁶⁹

The First Sea Lord suggested that in Government assessments of other navies needs, most are not looking for ships to protect a carrier strike group or a deterrent submarine but rather ocean-going general purpose frigates that can conduct maritime security operations.⁷⁰

A core recommendation of the Parker report is to place exports at the heart of naval procurement. He calls for naval exports to be viewed as a core task of Defence and for a ship's, and its sub-systems, to be designed from the beginning with the export market in mind. Parker adds an 'e' to the Type 31 designation to show that "export flexibility is inbuilt, not a variant."

The UK does have a history of successfully selling de-commissioned warships. Three Type 23s were sold to the Chilean Navy as part of a 2004 decision to reduce the frigate fleet. A Defence Minister raised the prospect of selling the Type 23s when they retire in the 2020s, although it is not clear whether he was talking about the whole ship or its capabilities. Mike Penning told MPs "we must not underestimate the capabilities of the Type 23s, not least because many other countries are looking to purchase them when we can sell them off." 71

[&]quot;Embedding Exportability in the UK Ministry of Defence" DSTL, 28 May 2014, para 3.2 via the Think Defence blog article "Type 26 frigate exports", 30 January 2015

^{69 &}quot;Surface ambitions", Jane's Defence Weekly, 12 October 2016

Defence Committee, Oral evidence: Naval procurement: type 26 and type 45, 20 July 2016, HC 221 2016-17, q196

⁷¹ HC Deb 12 December 2016 c492

Box 2: Defence Committee report

The Defence Committee published its report on 'Naval Procurement and the National Shipbuilding Strategy' on 21 November 2016. Excerpt:

The MoD is embarking on a major modernisation of the Royal Navy surface fleet. Notwithstanding the Committee's concerns that the number of ships is at a dangerous and an historic low, it is a programme which has the potential to deliver a modern navy with a broad range of capabilities, especially if the GPFF design proves versatile and sufficiently economical to increase the number of frigates in the Fleet. However, there are serious concerns about the funding available for the programme and the timetable to which the MoD is working. The delay to the construction of the Type 26 has had a negative impact on the skills of the shipbuilding workforce. If this situation is allowed to continue, it risks undermining the ability of the shipbuilding industry to deliver the Type 26s to the necessary timetable. The MoD must also demonstrate that it has learnt from the extraordinary mistakes in the design of the Type 45.

The introduction of the Type 26 represents only part of the modernisation of the Royal Navy's frigates. Five of its existing Type 23 frigates will need to be replaced by the new General Purpose Frigate, the design of which is only in its infancy. The MoD must not allow this programme to experience the delays to previous Royal Navy procurement programmes. It also has to ensure that the General Purpose Frigate provides the Royal Navy with the capabilities it requires and is not a less capable ship which is there merely to meet the Government's commitment to 19 frigates and destroyers, and possibly to be suitable for export. Modular design and "plug and play" incremental acquisition could and should enable this to be achieved. Hulls can be designed and constructed to enable an increase in the number of platforms and subsequent augmentation of their equipment. Furthermore, the refit programme and associated costs for the Type 45 must not result in further delays to the frigate programmes.

The National Shipbuilding Strategy offers the MoD the opportunity to put its plans for the modernisation of the frigate fleet back on track. For this to happen, the MoD has to ensure that the Strategy includes a timed production schedule for the delivery of both the Type 26 and GPFF, in close co-ordination with the withdrawal from service of the Type 23s, and that both programmes are fully funded to proceed to that timetable.

At 19 ships, the Royal Navy's frigate and destroyer fleet is at a dangerous and an historic low. By giving a commitment to build "at least" five General Purpose Frigates, the SDSR implicitly acknowledged the need to increase this woefully inadequate total. The Government has now set itself a target date for the start of construction of Type 26. It now has to demonstrate that it can deliver these ships, and the GPFF/Type 31 frigates to the timetable set by the out-of-service timetable for the Type 23s. If the MoD does not, it will put at even greater risk our frigate numbers and the capabilities they provide. The SDSR 2015 undertook to modernise the Royal Navy, it is now time for the MoD to deliver on its promises. 72

3. Offshore Patrol Vessels

The Royal Navy currently has four River-class Offshore Patrol Vessels (OPVs). Three of the four are dedicated to fisheries protection around the UK and when they were purchased in 2012 they had an expected service life of eleven years taking them to 2023.73 The fourth, HMS Clyde, is the Falkland Islands Patrol vessel and will leave service in 2017. The MOD has said the "Falklands Islands patrol vessel capability will be retained" when HMS Clyde retires.74

In 2013 the MOD ordered three new offshore patrol vessels. They are being built by BAE Systems on the Clyde and will enter service in 2018.

The Government announced in the 2015 SDSR it will buy two further new Offshore Patrol Vessels and committed to a fleet of up to six OPVs. A £287 million contract for the two new vessels was announced on 8 December 2016. The contract includes support for all five vessels. The two new vessels will be delivered in 2019.

The vessels will be manufactured at the Govan shipyard and then floated to Scotstoun for fitting out.

The five new OPVs will replace the four River-class vessels. The latter will be decommissioned by 2019.⁷⁵ The new River-class (third generation) vessels are named HMS Forth, Medway, Trent, Tamar and Spey.

The MOD says the OPVs will carry out counter-terrorism, anti-piracy, anti-smuggling and maritime defence operations. They will be equipped with a 30mm cannon and a flight deck capable of receiving a Merlin helicopter. They will displace around 2,000 tonnes, a maximum speed of 24 knots and will be able to sail 5,500 nautical miles before having to resupply.⁷⁶

The Defence Committee is concerned the programme "has the potential to interfere with, and further delay, the construction of the Type 26."77

Background

New offshore patrol vessels (OPVs) were not in the Navy's core equipment programme during the Coalition Government (2010-2015).

In 2012 Portsmouth area MPs began pressing the Ministry of Defence to order OPVs from BAE Systems, which was at the time reviewing its shipbuilding facilities in the city. In 2012 and early 2013 the Government ruled out purchasing new vessels and also said it had no plans to operate additional OPVs to those currently in service. 78

⁷³ PQ HL2074, 11 October 2016

⁷⁴ HL deb 24 March 2015 c1320

⁷⁵ HL4864, 30 January 2017

⁷⁶ "£287M for two more Royal Navy ships as work begins on the next", Ministry of Defence, 8 December 2016; HCWS338, 8 December 2016

⁷⁷ Defence Committee, <u>Restoring the fleet: naval procurement and the national</u> shipbuilding strategy, HC 221 2016-17, 21 November 2016, para 61

⁷⁸ HC Deb 18 September 2012 c618W

However, in November 2013 the Defence Secretary announced plans to order three new OPVs from BAE Systems, based on 'more capable variant' of the River-class and with a landing deck able to take a Merlin helicopter. The new vessels will be built in Scotland from 2014 with the first expected to enter service in 2017.

The reasons given for this decision were:

- The decision by BAE Systems to end of shipbuilding operations in Portsmouth and would consolidate its shipbuilding operations in Glasgow.
- A review of the warship-building programme
- An assumption the main investment decision on the Type 26 would not be made before the end of 2014
- Construction of the Type 26 would not begin until 2016
- The need to sustain a skilled shipbuilding workforce in the UK between the completion of construction of the blocks for the second carrier and the beginning of Type 26 construction
- The MOD would be obliged to pay BAE Systems for shipyards and workers to stand idle under the terms of the 2009 Terms of **Business Agreement**

Philip Hammond, then Defence Secretary, admitted "we are effectively ordering the OPVs to soak up money we would have been paying in any case to have these yards stand idle." 79 Lord Astor of Hever said the Government provisionally agreed a firm price of £348 million with BAE Systems for the supply of three OPVs, inclusive of initial spares and support. He said this sum is "entirely contained within provision set aside to meet the Ministry of Defence's obligation for redundancy and rationalisation costs." 80 Mr Hammond estimated the additional cost to the MOD of the ships, over and above the payments the MOD would have had to have made to BAE, is less than £100 million.81

The 15 year Terms of Business Agreement guaranteed BAE Systems a minimum level of surface ship build and support activity of £230 million a year. This was judged as the minimum level of work possible to sustain a credible warship-building industry in the UK.

BAE Systems said construction of the new OPVs "will provide additional capability for the Royal Navy and sustain key shipbuilding skills."82

The Government repeated the linkage with maintaining skills when it announced the contract in December 2016, saying work on the fleet will sustain 800 jobs at shipyards on the Clyde and "guaranteeing the crucial manufacturing skills needed" to build the Type 26's.83

⁷⁹ HC Deb 6 November 2013 c260

⁸⁰ HC Deb 6 November 2013 c237

⁸¹ HC Deb 6 November 2013 c252

⁸² "<u>UK naval sector restructuring</u>", *BAE Systems*, 6 November 2013

^{83 &}quot;£287M for two more Royal Navy ships as work begins on the next", Ministry of Defence, 8 December 2016

4. Logistics ships

The Government confirmed plans to buy three new logistics ships in the 2015 SDSR for the Royal Fleet Auxiliary. The building of these new ships may be beyond the scope of the National Shipbuilding Strategy because the contract is likely to be open to international competition as the principal requirements for the ships are not warlike, and therefore not exempt from EU procurement rules for reasons of national security.84

In 2012 the contract for four tankers for the Royal Fleet Auxiliary was awarded to a South Korean firm after an open competition, for which no UK-based firm submitted a final bid.

Jane's Defence Weekly suggests there is uncertainty about whether the Shipbuilding Strategy will touch on the logistics ships. While it quotes MOD sources saying it will be opened to international competition, Jane's also quotes industry sources suggesting that these logistics ships will be significantly more 'complex' than the four tankers being built in South Korea which, combined with political sensitivities about the UK steel industry, might make the situation less clear cut.85

The Parker report does discuss the Logistics ships. The report suggests that, to address future affordability challenges, the MOD should consider conversion of commercial shipping to meet certain support shipping needs. The report cites the example of RFA Argus. RFA Argus was originally a container ship requisitioned for use in the Falklands War and later bought by the MOD. She has since become a Primary Casualty Receiving Ship. The report recommends the MOD should continue to explore the possibility of conversions from commercial shipping adding that while it may not always be the right solution, it should always be examined.

The procurement of complex warships and submarines is covered by an exemption to EU procurement regulations by Article 346 of the Treaty on the Functioning of the European Union which allows any EU member state to take measures to protect its essential security interests. What constitutes "essential security interests" remains the sole responsibility of Member States. Article 346 does not contain specifications of defence materiel.

[&]quot;Support strategy: the UK's Future Sold Support ships", Jane's Defence Weekly, 6 May 2016

5. The Shipbuilding Strategy and the Parker report

The Government committed, in the 2015 Strategic Defence and Security Review, to publish a National Shipbuilding Strategy in 2016.

The Government appointed Sir John Parker as the independent chair of the strategy and said, in the 2016 Budget, that he would report by the autumn statement.

However upon publication it transpired Parker's report was not the Shipbuilding Strategy but instead an 'Independent Report to inform the UK National Shipbuilding Strategy. 'The Government says its response to Parker's report will now be the Shipbuilding Strategy and it will publish it in spring 2017.

Parker made 34 recommendations in his report. The Government said it would need time to give his work "the full consideration that it deserves" hence the spring 2017 date for its response. Defence Minister Earle Howe described some of the recommendations as "pretty adventurous."

"The Strategy is intended to place **UK** warship shipbuilding on a sustainable longterm footina" Earl Howe, Defence Minister, September 2016

5.1 Timeline of Government statements

A timeline of Government comments on the shipbuilding strategy from announcement to present.

Announcing the Strategy

The Government announced it will publish a new National Shipbuilding Strategy in the National Security Strategy and Strategic Defence and Security Review (Cm 9161) published on 23 November 2015:

We will publish a new national shipbuilding strategy in 2016, which will lay the foundations for a modern and efficient sector capable of meeting the country's future defence and security needs. The acquisition of the Type 26 Global Combat Ship will be crucial to the future of the UK's warship-building industry and form a central part of the strategy.86

Announcing the chair and deadline

Budget 2016 identified Sir John Parker as the independent chair and that he will report by Autumn Statement 2016:

The government has appointed Sir John Parker to lead the national ship building strategy, which was confirmed in the Strategic Defence and Security Review 2015. He will report by Autumn Statement 2016.87

Sir John Parker is chairman of the mining firm Anglo American. He was previously the chairman of Babcock International and BVT Surface Fleet and is a naval architect by training.

⁸⁶ National Security Strategy and Strategic Defence and Security Review 2015, Cm 9161, November 2015, para 6.55

Budget 2016, HC 901, para 2.284, 16 March 2016

The Terms of Reference

The MOD said the strategy look at the build schedule, export opportunities, jobs and skills, and capabilities when it gave this description of the Strategy's terms of reference in April:

The National Shipbuilding Strategy is intended to place UK shipbuilding on a sustainable long-term footing. It will look at how to build a new complex warship on a regular schedule and maximise export opportunities in order to deliver capable ships and value for money, as well as maintaining jobs and skills. It will ensure that the Royal Navy continues to have the capability it needs to protect our nation's interests, retaining its status as the most modern Navy in the world. Sir John Parker has been appointed as the Independent Chair of the Strategy. He will bring strong strategic direction and guidance to the work, and report to Ministers. He will lead the high level engagement with key stakeholders.⁸⁸

Ministerial comments pre-publication

Comments made by ministers between March and November asserted Sir John was the chair of the strategy and he would report by the autumn statement 2016. No mention was made of a 2017 publication date for the strategy.

11 April 2016, Earl Howe:

My Lords, the new national shipbuilding strategy led by the independent chair, Sir John Parker, will consider the optimum build rate, the cost per ship and number of yards required to ensure a modern and efficient national warship sector capable of meeting the country's future defence and security needs. Work on the strategy is ongoing and Sir John Parker will make recommendations to the Government later this year.⁸⁹

25 April 2016, Philip Dunne (then Minister for Defence Procurement):

To deliver the SDSR, we must improve and develop our national shipbuilding capability to become more efficient, sustainable and competitive internationally. To that end, we announced the intent to have a national shipbuilding strategy, and I am delighted that Sir John Parker, a pre-eminent engineer and foremost authority in naval shipbuilding, has started work as the independent chair of that project. I look forward to receiving his recommendations, which will address, among other things, the best approach to the GPFF build. ⁹⁰

10 May 2016, Earl Howe:

The Government has appointed Sir John Parker as the Independent Chair of the National Shipbuilding Strategy, which is intended to place UK shipbuilding on a sustainable long-term footing. Sir John Parker will consider a range of locations around the UK and report by the end of 2016.⁹¹

4 July 2016, Philip Dunne:

^{88 &}lt;u>PQ 35480</u>, 28 April 2016

⁸⁹ HL Deb 7 April 2016 c7

⁹⁰ HC Deb 25 April 2016 1139

⁹¹ HL7952, 10 May 2016

Sir John Parker will report on the national shipbuilding strategy by the Autumn Statement 2016, as stated in the Budget Report 16 March 2016, HC 901, paragraph 2.284.92

18 October, Harriet Baldwin (Minister for Defence Procurement):

I want to touch on the national shipbuilding strategy, which was raised by the hon. Member for Strangford (Jim Shannon) and others. I hope the assiduous Member for Strangford has had a chance to meet with Sir John Parker, who hails from Northern Ireland, as part of his review. He is a leading authority on naval shipbuilding and was appointed independent chair of the shipbuilding strategy. He will make his recommendations by the time of the autumn statement.93

Publication of the report

The Government published Sir John Parker's report on 29 November 2016. This is available on the <u>gov.uk</u> website along with Sir John Parker's covering letter.

In a written statement the Government described it as an independent report to *inform* the shipbuilding strategy and announced the National Shipbuilding Strategy will be published in spring 2017:

Sir John Parker has submitted his independent report to inform the United Kingdom National Shipbuilding Strategy.

It is important that the Government gives Sir John's work the full consideration that it deserves. I have asked officials, working with others across Government, to examine the report and recommendations, and to discuss them with industry. The Government will then publish a full and considered response and implementation plan in spring 2017. This response will be the National Shipbuilding Strategy. 94

Having promised the report would be given by the autumn statement, Kevan Jones MP tabled a guestion to the Government the day after the autumn statement why it had not published the Shipbuilding Strategy. Harriet Baldwin replied on 29 November, the same day as the Government released the report, denying the report had been delayed. The Minister said both herself and the Chief Secretary received the report ahead of the autumn statement. 95

Brendan O'Hara MP raised a point of order with the Speaker on 2 December suggesting the Strategy had not been delivered to the House by the autumn statement as promised:

I believe that the Leader of the House inadvertently misled the House by suggesting that the Defence Secretary's announcement on the national shipbuilding strategy on Tuesday was always the Government's plan. However, on four occasions, the Under-Secretary of State for Defence, the hon. Member for West Worcestershire (Harriett Baldwin), has told us that the national shipbuilding strategy would report by the autumn statement.

⁹² PQ41500, 4 July 2016

⁹³ HC Deb 18 October 2016, c316WH

⁹⁴ HCWS288, 29 November 2016

⁹⁵ PQ5438, 29 November 2016

There can be no doubt that the strategy has not been delivered to the House as promised. 96

Further reaction from MPs can be found in section 5.4.

5.2 Defence Committee recommendations

The Defence Committee published its report on 21 November, before the publication of Sir John Parker's report. The Committee said to avoid offering little more than aspirations for the future the strategy must include strict timelines for the delivery of the Type 26 frigates and an indicative timeframe for the Type 31s. The committee recommended the strategy include:

- a detailed timeline for the delivery of the new frigates
- a criteria against which the expansion of the UK's share of the export market in warships will be judged
- plans to ensure the UK retains the specialist skills necessary to deliver the Strategy
- set out the numbers of apprenticeships required in each of the key trades and how it will monitor them to ensure there are no longer-term skills gaps.⁹⁷

5.3 Sir John Parker's report

In his independent report Sir John Parker called for a 'sea change' in approach to naval procurement from both Government and industry.

Faults with current naval procurement system

The report is deeply critical of the current naval procurement process as a "vicious cycle" in which fewer and more expensive ships than planned are ordered too late while old ships are retained, at high cost, beyond their retirement date. Parker argues this cycle is depleting the Royal Navy fleet and costs money.

Parker identified four problems affecting naval procurement:

- 1 A lack of pace with timescale and cost impacted by a non-assured capital budget (i.e. subject to annual change);
- A lack of a governance system that grips design and specification to budget and time to contract;
- Responsibility and ownership of the project is not always being clear or aligned;
- 4 Naval ships are not designed to be export friendly.

Parker also addresses the exclusive position held by BAE Systems. Parker suggests such single customer dependency can add to the overall cost of a programme. The report questions whether the MOD has sufficient and sufficiently expert project contract managers to manage the sophisticated warship contracts with BAE Systems.

"Current Royal Navy warship programmes take far too long." Sir John Parker

⁹⁶ HC Deb 1 December 2016 c1689

Defence Committee, <u>Restoring the fleet: naval procurement and the national shipbuilding strategy</u>, HC 221 2016-17, 21 November 2016

The report recommends a new Governance model with new Boards and for the MOD to have a 30 year master plan that lays out procurement plans for each series of ships over that time period.

Impressed by the 'renaissance' found in regional shipyards, Parker recommends a Regional Industrial Strategy that harnesses the energy of regional shipyards and suggests the Type 31 frigates could be built using a modular block build system. The report calls on these shipyards to develop 'Global Competitiveness Plans' and for Government and industry to develop a Virtual Shipbuilding model.

Parker criticises past efforts to make surface ships attractive to international customers and argues exportability should be built into the design from the beginning.

Core conclusions for Government and Industry:

- Govern the design and specification of the Royal Navy ships to a target cost within an assured capital budget and inject pace to contract on time:
- Design ships suitable for both Royal Navy and export;
- Build via a Regional Industrial Strategy to achieve competitive cost and reduced build cycle time;
- Maintain Royal Navy fleet numbers over the next decade via urgent and early build of the Type 31
- Use Type 31 as a Pathfinder Project to implement the recommendations of this review.

Box 3: The themes of the Parker report

The report makes 34 recommendations in total. The overriding themes are:

To overhaul the Ministry of Defence's governance of naval programmes.

For the Government the report recommends a new Governance Model for naval procurement. This would be underpinned by a 30 year master plan for replacing each series of naval ships. The First Sea Lord should chair a new Client Project Contracting Board to oversee the project director and provide high-level, authoritative decision making and finalise the design, cost and build programme for each class of ship. His call for a tightly controlled number of high level decision makers is, the report states, to eliminate preferential engineering -"specifying unnecessarily exquisite standards in design by technically-focussed project teams, often at limited or no accurate knowledge of the true cost, operating in an environment of weak financial/commercial challenge."

The MOD needs to be an 'intelligence client'

The MOD needs to be an 'intelligent client' and better understand the cost implications of naval standards, preferential engineering and bespoke equipment (i.e. not always opting for the 'gold standard' if a cheaper and equally capable piece of kit is available). There should be a clear point at which the design is frozen with no further changes allowed, to avoid delays and cost increases. Contracts should be tautly drawn with a firm cost base and clear milestones and to incentivise industry to invest in support of their 'global competitiveness plan' (see below).

Assured Capital Budgets

Each new series of ships should be backed by 'set and assured' capital budgets and reviewed at every Strategic Defence and Security Review (currently held every five years). The emphasis on Capital allocation is "critical" to prevent annual funding changes, which drive up overall cost, provide stability to drive pace and reduce cost over time. This, Parker argues, should break the 'vicious cycle' in the procurement programme.

To continue to build warships in the UK but harness the skills of regional shipyards

A key proposal of the Report is to harness UK regional shipyards who have demonstrated their cost competitiveness and capability to build fully outfitted blocks. This is inspired by the aircraft carrier build programme which involved several shipyards building blocks of the new carriers. Parker describes this as a Virtual Shipbuilding (VSb) industry model and argues this approach will "deliver high productivity, competitive cost and a dramatic reduction in the conventional build time. If it were built solely in one shipyard." If successful with the Type 31's, the model could be applied to future Navy and Royal Fleet Auxiliary ships.

Type 31's should be built using Virtual Shipbuilding Industry model

The report argues there is a "national urgency" for both frigate types: the Type 26 is a priority and the Type 31 is critical to future fleet numbers and to establish a competitive light frigate design for export. Parker recommends the Type 31 be brought into service early in the 2020s. As there is no UK precedent for constructing two different first of class frigates in the same shipyard, and since constructing both first of class simultaneously in one facility "significantly heightens the risk for both the shipyard and the Royal Navy", Parker recommends using the Virtual Shipbuilding model of using several shipyards to build blocks which are then put together in one lead shipyard. This recommendation has potential implications for BAE's two shipyards on the Clyde which had been expecting to build all of the Navy's new frigates – that is to say, the previously assumed fleet of thirteen Type 26's – until the publication of the 2015 SDSR.

BAE Systems to build the Type 26's

The complete series of Type 26 should be contracted to BAE Systems. The report argues that the Type 26 work, combined with the contract for the Dreadnought submarines class and potential export wins, should allow BAE Systems to protect sovereign capability through retaining sufficient skilled engineers and designers.

Place exportability at the heart of the design for the Type 31

Export flexibility should be built in to the Type 31 from the beginning of the design rather than as an afterthought. This is why Parker adds an 'e' to the Type 31 throughout his report to emphasis the centrality of exportability. This means a modular build based on a standard platform that can be adapted to different customer needs, supported by a stronger national co-ordinated effort to encourage exports of not just the vessels themselves but sub-systems, design and equipment.

Use off the shelf equipment

Parker recommends the Government makes better use of 'off the shelf' equipment and ensure the MOD is an 'intelligent client' that fully understands the cost implications of naval standards and bespoke equipment. Examples of off the shelf equipment include modular accommodation, toilet/shower and galley compartments, particularly those that have a high degree of automation (e.g. laundry) as used by the cruise ship industry and other commercial operators.

Convert commercial shipping

To consider the conversion of commercial shipping for certain support ship needs, for example by using frigates or Offshore Patrol Vessels to host certain capabilities, like unmanned vehicles for minesweeping, rather than procuring bespoke vessels.

Encourage UK firms to bid for new support ships contract

To encourage UK firms to make competitive bids for the new Royal Fleet Auxiliary Fleet Solid Support ships, with the purpose of bringing direct economic benefit to the UK and avoid the challenges of overseas construction (denial of opportunities for the UK supply chain, higher costs of overseas supervision and potential foreign exchange risks).

Shipyards should develop 'Global Competitiveness Plans'

These plans should focus on tight scrutiny of overheads and targeted investment in skills, modern working practices, digital systems and modern tooling. Parker cites Jaquar Land Rover and Meyer Werft (Germany) as examples of companies which have installed modern digital engineering systems.

Increase weight given to socio-economic benefit of UK shipbuilding

More weight should be given to the socio-economic benefit of awarding work to UK shipyards or suppliers (in non-warship building and ship outfitting procurement decisions). Government and industry should support the creation and sustainment of high skilled jobs. The report cites MOD estimates that the MOD spent around £1.4bn on shipbuilding and repair in 2014/15, of which approximately 96% was spent with five UK prime-contractors. The MOD estimates the quantifiable impact of the MOD's shipbuilding and repair spend with UK based firms contributes approximately £1.5bn of added value

annually to the economy. The MOD also estimates the naval industry supports 15,000 direct and 10,000 indirect supply chain jobs.

5.4 Reaction

Much of the initial reaction focused on the impact on shipyards.

The Financial Times headlined its report 'Navy's reliance on the Clyde put in doubt' and described Sir John Parker's recommendations as a "shot across the bow of BAE Systems."

The Mirror said Parker had delivered a "scathing verdict" on the Navy's shipbuilding programme, focusing on his comments about the 'vicious cycle' of naval procurement. The Herald reflected SNP MPs concerns about further delays to the frigate programmes. The Scottish Daily Mail suggested the report casts "fresh doubts" on the long-term future of Scottish shipbuilding sites.

Regional papers raised hope of potential work for local shipyards. The News quoted a local former union official describing the report as a "vital opportunity" for Portsmouth to bring shipbuilding back to the dockyard and the editorial called for shipbuilding to return to the city.

The Wirral Globe and the Liverpool Echo focused on the potential effect on Cammell Laird with the Echo highlighting the praise given by Sir John Parker to Cammell Laird. Falmouth's The Packet concentrated on the potential impact on A&P's Falmouth dockyard.

MPs whose constituency's home regional shipyards seized on the potential opportunities hinted at in the report. Both Portsmouth MPs, Penny Mordaunt and Flick Drummond, focused on the opportunities for Portsmouth (BAE ended shipbuilding at its yard in the city in 2013). 98 Plymouth MP Oliver Colvile pushed for Devonport dockyard as a potential location for part of the Type 31 build. Torridge MP Geoffrey Cox said the report marks "the beginning of a new era for Appledore shipyard."

Some MPs guestioned why this was not the actual shipbuilding strategy as had been expected. Brendan O'Hara MP raised a point of order with the Speaker on 2 December suggesting the Strategy had not been delivered to the House by the autumn statement as promised:

I believe that the Leader of the House inadvertently misled the House by suggesting that the Defence Secretary's announcement on the national shipbuilding strategy on Tuesday was always the Government's plan. However, on four occasions, the Under-Secretary of State for Defence, the hon. Member for West Worcestershire (Harriett Baldwin), has told us that the national shipbuilding strategy would report by the autumn statement. There can be no doubt that the strategy has not been delivered to the House as promised.99

[&]quot;Union boss says now is the time for shipbuilding to return home", The News, 30 November 2016

HC Deb 1 December 2016 c1689

The first opportunity for MPs to question Defence Ministers at length on the Parker report came in defence questions on 12 December 2016. Brendan O'Hara asked the Minister for Defence Procurement "to explain why the shipbuilding strategy did not appear when she promised it would appear?" to which Harriet Baldwin replied "he is complaining about the lack of publication of a report that has been published; the Government will provide their response next year." 100 The shadow defence secretary Nia Griffiths described the Minister's response as "not good enough", adding:

The fact is that on 29 November the Government only published Sir John Parker's independent review to inform the strategy, when just last year the Government promised to "publish a new national shipbuilding strategy in 2016". With just six parliamentary days left until the end of the year, will the Minister tell us exactly when are we going to see that strategy?

Mike Penning, the Minister for Armed Forces, replied "we will see it in spring 2017." The Minister did not directly answer Ms Griffith's followup question asking if the strategy would include a timetable for the Type 26s and a timeframe for the Type 31s. 101 Jack Lopresti pressed the Minister to confirm the Type 23s would be replaced at the rate of one a year. Mike Penning said he could only confirm the frigates would replace the Type 23s. 102

The Save the Royal Navy website described Parker's recommendations as "eminently sensible", in particular his reforms for the Ministry of Defence. The article says "the structural failings in strategy, management, financing and accountability within defence procurement have been apparent to even a casual observer for many years" and said a "ruthless restructuring of project management practice in the MoD and navy" is required.

5.5 Government response to Defence Committee report

The Government's response to the Defence Committee's report was published in January 2017. 103 The Government confirmed its response to Sir John's recommendations will form the National Shipbuilding Strategy and it will provide an update on the Type 31e and how this will align with the Type 23 Frigate replacement programme and the Type 26 build programme.

The Government resisted the committee's request for a timeline for the Type 26 programme, arguing this is commercially sensitive while detailed contractual negotiations are ongoing. The MOD said a timeline for the Type 26 build will not be available until later in 2017, when the timetable for replacing the current Anti-submarine warfare variant Type

¹⁰⁰ HC Deb 12 December 2016 c485

¹⁰¹ HC Deb 12 December 2016 c493

¹⁰² HC Deb 12 December 2016 c492

¹⁰³ Defence Committee, <u>Restoring the fleet: naval procurement and the shipbuilding</u> strategy: Government's response, HC 973 2016-17, 26 January 2017

23s will also be clearer. The MOD said it expects to sign a contract by mid-2017 and start manufacture "shortly thereafter."

The MOD disagreed with the Committee's suggestion the Navy's frigate and destroyer fleet is "at a dangerous and an historic low." The department outlined the Navy's actions in the last year: over 8,000 naval service personnel were involved in 22 operations at home and abroad, serving on almost 30 ships and submarines, at the peak of activity in 2016.

Appendix: the Royal Navy's fleet

- 64 surface vessels
- 11 submarines
- 12 Royal Fleet Auxiliary vessels¹⁰⁴

The Navy's surface fleet consists of destroyers, frigates, mine countermeasure ships, landing platform docks and landing platform helicopters, offshore patrol vessels, inshore patrol vessels and survey ships.

They can be called upon to perform a wide-range of tasks, including counter-piracy and counter-smuggling operations; humanitarian and disaster relief; anti-submarine warfare; air defence for a carrier group; mine-hunters and fishery protection to name a few. 105

The Navy has not operated an aircraft carrier since 2010 and will not have what is called a 'carrier strike' capability until 2020. This is when the first of two Queen Elizabeth-class aircraft carriers is expected to be operational with an initial squadron of new Lightning II combat aircraft. HMS Queen Elizabeth II is expected to begin sea trials in 2017.

Three Royal Navy ships provide an **amphibious assault** capability (delivering troops and equipment from sea). 106 HMS Ocean is currently the largest warship in the Navy's fleet and is a dedicated helicopter carrier. HMS Bulwark is the flagship of the fleet and together with her sister ship, HMS Albion, can deliver 256 troops (Royal Marines) ashore by air and sea together with vehicles and combat supplies. All three are based at Devonport. 107 HMS Ocean will leave service in 2018. HMS Bulwark and HMS Albion are expected to remain in service until the early 2030s. 108

The Government has committed to retaining the current fleet of 19 frigates and destroyers.

The primary role of Navy's six-strong fleet of **Destroyers** is to protect the fleet from air attack – they provide air defence to a carrier group. 109 The last of the new Daring class submarines entered service in 2009.

Frigates are often described as the workhorses of the fleet and fulfil many roles, with just over half the fleet specifically roled for antisubmarine warfare (to locate, identify and destroy enemy submarines)

¹⁰⁴ Figures as of 1 April 2016, "<u>UK Armed Forces and Equipment Formations 2016</u>", Ministry of Defence, 6 September 2016

¹⁰⁵ The <u>Royal Navy's website</u> provides a full list of operations and locations it is currently involved in.

¹⁰⁶ The RFA's Bay-class also provide an amphibious landing capability.

¹⁰⁷ The 2010 SDSR placed one of either Bulwark or Albion at extended readiness, meaning she remains in port. HMS Albion was placed in extended readiness in 2011 and is expected to resume operations in 2017, when HMS Bulwark will go into extended readiness. HC Deb 23 February 2013 c18; "Lion awakens as HMS Albion prepares to enter the water again". Navy News, 9 March 2016

HC Deb 6 November 2008 c678W

¹⁰⁹ The current destroyer fleet already perform such a function for Allies. HMS Defender provided air defence for the French aircraft carrier Charles de Gaulle in late 2015: 'British warship set to support French carrier group on ISIL mission", Ministry of Defence, 18 November 2015

to protect a carrier group and the strategic nuclear deterrent. The current thirteen-strong fleet of Type 23 frigates are divided between Portsmouth and Devonport. They will be replaced by a new fleet of eight Type 26 and five general purpose frigates.

There are 15 mine counter measure vessels in service, eight Hunt class based in Portsmouth and seven Sandown class based in Faslane. Their primary task is to keep the sea lanes safe from unexploded ordinance. They have specially designed plastic hulls to protect them from seamines.

Three of the four **River-class** Offshore Patrol Vessels (OPV) are dedicated to fisheries protection around the UK and when they were purchased in 2012 they had an expected service life of eleven years. 110 The fourth in the class, HMS Clyde, is based in the South Atlantic in the Falkland Islands and will leave service in 2017. 111 All four will be decommissioned by 2019 and replaced by the new OPVs under construction.

The rest of the surface fleet is made up of ice patrol and survey ships (5) and inshore patrol vessels including the Faslane fast patrol boat squadron and The Royal Navy's Gibraltar Squadron.

The Navy's submarine fleet consists of four **Vanguard**-class nuclear submarines that carry the UK's strategic nuclear deterrent and seven hunter-killer nuclear powered submarines. The new **Astute**-class boats are replacing the retiring **Trafalgar**-class. Three of the new Astute class are now in service and are based at HMNB Clyde (Faslane) with the Vanguard-class. The four remaining Trafalgar-class are based in Devonport. HMNB Clyde will be the Navy's submarine centre of specialisation from 2020.

The **Royal Fleet Auxiliary** consists of 12 vessels including tankers, replenishment ships, casualty receiving ships, landing ship docks and a forward repair ship. The MOD is awaiting delivery of four new tankers to replace the current Rover class and they should all be in service by the end of 2018. 112 The three Bay-class landing ship dock vessels (RFA Cardigan Bay, Lyme Bae and Mounts Bay) are amphibious landing ships (deliver troops from sea). The MOD announced the forward repair ship RFA Diligence will retire from service at the end of 2016 rather than 2020 and will not be replaced. 113 RFA Black Rover will be taken out of service in 2016.

¹¹⁰ PQ HL2074, 11 October 2016

¹¹¹ HL Deb 24 March 2015 c1320

¹¹² PQ HL2076, 11 October 2016

¹¹³ Navy FOI2016-08591, 7 October 2016

34	The Royal Navy's new	rfrigates and t	the National	Shipbuilding	Strategy:	February 201	7 update

About the Library

The House of Commons Library research service provides MPs and their staff with the impartial briefing and evidence base they need to do their work in scrutinising Government, proposing legislation, and supporting constituents.

As well as providing MPs with a confidential service we publish open briefing papers, which are available on the Parliament website.

Every effort is made to ensure that the information contained in these publicly available research briefings is correct at the time of publication. Readers should be aware however that briefings are not necessarily updated or otherwise amended to reflect subsequent changes.

If you have any comments on our briefings please email <u>papers@parliament.uk</u>. Authors are available to discuss the content of this briefing only with Members and their staff.

If you have any general questions about the work of the House of Commons you can email hcenquiries@parliament.uk.

Disclaimer

This information is provided to Members of Parliament in support of their parliamentary duties. It is a general briefing only and should not be relied on as a substitute for specific advice. The House of Commons or the author(s) shall not be liable for any errors or omissions, or for any loss or damage of any kind arising from its use, and may remove, vary or amend any information at any time without prior notice.

The House of Commons accepts no responsibility for any references or links to, or the content of, information maintained by third parties. This information is provided subject to the conditions of the Open Parliament Licence.