BAE SYSTEMS

Half-yearly Report 2022

BAE Systems plc
Half-yearly Report 2022

Results in brief

Financial performance measures as defined by the Group[1]

	Six months ended 30 June 2022	Six months ended 30 June 2021	Year ended 31 December 2021
Sales	**£10,581m**	£10,035m	£21,310m
Underlying EBIT	**£1,112m**	£1,028m	£2,205m
Underlying earnings per share			
excluding one-off tax benefit (2021 only)[3]	**24.5p**	21.9p	47.8p
including one-off tax benefit (2021 only)[3]	**24.5p**	24.8p	50.7p
Free cash flow	**£123m**	£461m	£1,864m
Net debt (excluding lease liabilities)	**£(3,135)m**	£(2,745)m	£(2,160)m
Order intake	**£17,985m**	£10,582m	£21,458m
Order backlog	**£52.7bn**	£44.6bn	£44.0bn

Financial performance measures derived from IFRS[2]

	Six months ended 30 June 2022	Six months ended 30 June 2021	Year ended 31 December 2021
Revenue	**£9,739m**	£9,339m	£19,521m
Operating profit	**£1,028m**	£1,303m	£2,389m
Basic earnings per share	**19.6p**	31.3p	55.2p
Net cash flow from operating activities	**£493m**	£623m	£2,447m
Order book	**£42.5bn**	£35.5bn	£35.5bn
Dividend per share	**10.4p[4]**	9.9p[4]	25.1p
Group's share of the net post-employment benefits surplus/(deficit)	**£0.9bn**	£(2.4)bn	£(2.1)bn

Charles Woodburn, Chief Executive, said: *"Trading in the first half has been in line with expectations delivering strong order intake and good operational performance.*

"Our diverse portfolio, together with our focus on programme execution, cash generation and efficiencies are helping us navigate the current macroeconomic challenges and position us well for sustained top line and margin growth in the coming years. We see further opportunities to enhance the medium- and long-term outlook as our customers commit to increased defence spending to address the elevated threat environment.

"The positive outcome of the UK pension triennial review, along with our performance and confidence in the outlook enable us to maintain our guidance, continue to invest in our business and progress our ESG agenda whilst increasing returns to our shareholders.

"Good operational performance, execution on our strategy and confidence in the outlook enables us today to announce a 5% increase in the interim dividend as well as initiating a new, three-year share buyback programme for up to £1.5bn."

Guidance for 2022

The Group's full year 2022 guidance across all metrics is unchanged from that provided at the Preliminary announcement on 24 February 2022, which was provided on the basis of an exchange rate of $1.38:£1 for the year.

- Sales +2% to +4% (2021: £21,310m)
- Underlying EBIT +4% to +6% (2021: £2,205m)
- Underlying EPS[3] +4% to +6% (2021: 47.8p)
- 2022 Free Cash Flow (FCF) >£1bn
- Cumulative FCF 2022-2024 >£4bn

Should the current dollar rate persist, this will be a tailwind to earnings with sensitivity to EPS being around 1 pence for every 5 cent movement.

The guidance is based on the measures used to monitor the underlying financial performance of the Group. Reconciliations from these measures to the financial performance measures derived from International Financial Reporting Standards for the six months ended 30 June 2022 are provided in the Group financial review on pages 12 to 18.

Financial highlights

Financial performance measures as defined by the Group[1]

- Sales increased by 2.8% on a constant currency basis[5] to £10.6bn.
- Underlying EBIT of £1,112m increased by 4.4% on a constant currency basis[5].
- Underlying earnings per share increased by 11.9% to 24.5p[3], excluding the impact in 2021 of the one-off tax benefit. The Group's underlying effective tax rate for the first half of the year was 19%.
- Free cash inflow of £123m (2021 £461m inflow, including £250m receipt in respect of the Filton and Broughton site disposals).
- Net debt (excluding lease liabilities) at £3,135m (£2,160m at 31 December 2021).
- Order backlog of £52.7bn (£44.0bn at 31 December 2021).

Financial performance measures derived from IFRS[2]

- Revenue increased by 4.3% to £9.7bn.
- Operating profit decreased by 21.1% to £1,028m.
- Basic earnings per share decreased to 19.6p (2021 31.3p).
- Net cash inflow from operating activities of £493m (2021 £623m inflow).
- Order book of £42.5bn (£35.5bn at 31 December 2021).

Dividend

The directors have declared an interim dividend of 10.4p per share in respect of the half year ended 30 June 2022. This dividend will be payable on 30 November 2022. The directors have also approved a new share buyback programme of up to £1.5bn over the next three years, which will commence immediately.

Post-employment benefits

The Group's share of the accounting net post-employment benefits obligations has improved by £3.0bn moving from a deficit as of 31 December 2021 of £2.1bn to a surplus of £0.9bn, which is presented after deducting withholding tax which would be levied prior to the future refunding of any surplus.

1. We monitor the underlying financial performance of the Group using alternative performance measures. These measures are not defined in International Financial Reporting Standards (IFRS) and, therefore, are considered to be non-GAAP (Generally Accepted Accounting Principles) measures. Accordingly, the relevant IFRS measures are also presented where appropriate. For alternative performance measure definitions see glossary on page 9.
2. International Financial Reporting Standards.
3. A one-off tax benefit of £94m was recognised in 2021, in respect of agreements reached regarding the exposure arising from the April 2019 European Commission decision regarding the UK's Controlled Foreign Company regime. Growth rate disclosed excludes the impact of the 2021 one-off tax benefit.
4. Interim dividends declared (see note 7).
5. Current period compared with prior period translated at current period exchange rates.

Operational and strategic key points

Ukraine

- Closely engaged with our global customers to provide on-going support wherever requested.
- Delivering on programme specific mission critical requirements of our customers.

COVID-19

- Kept an agile and flexible business response to the ever-evolving situation.
- Focus remained on employee safety and well-being whilst maintaining delivery on our customer commitments.

Group Portfolio actions

- UK Triennial pension review completed.
- Acquisition of Bohemia Interactive Simulations (BISim) completed in March.
- Agreement signed in July for the sale of BAE Systems' financial crime detection business from Cyber & Intelligence, with completion expected in the next few months.
- Reflecting the changes in operational reporting lines effective from the beginning of the year, the BAE Systems Australia business has moved from being reported in the Air segment to the Maritime segment. Additionally, the Group has established a new Digital Intelligence business, bringing together the non-US digital and data capabilities to further strengthen how we deliver these services and capabilities to our customers. Digital Intelligence is reported within the Cyber & Intelligence segment.

Electronic Systems
- Cumulatively, over 1,100 electronic warfare systems have been delivered on the F-35 programme.
- Deliveries continue of next-generation EW Eagle Passive Active Warning Survivability System to support upgrade of US Air Force F-15 platform and testing on F-15E and F-15EX test aircraft.
- Awarded $176m (£145m) for Airborne High Frequency Radio Modernization programme.
- Selected to design, test and supply energy management components for GE Aviation’s megawatt class hybrid electric propulsion system supporting NASA’s Electrified Powertrain Flight Demonstration project.

Platforms & Services
- M109A7 programme is consistently delivering at full rate production levels and received a $299m (£246m) contract.
- Deliveries of all five variants of Armored Multi-Purpose Vehicles to the US Army continue.
- Amphibious Combat Vehicle deliveries to US Marine Corps continue, with design and development under way for new mission variants.
- Bradley vehicle upgrade work continues on contracts for 459 vehicles.
- BAE Systems Hägglunds is ramping to perform on multiple contracts for CV90 and BvS10.
- CV90 wins Slovakia’s competitive evaluation for its Infantry Fighting Vehicle programme.
- US Ship Repair profitability was significantly impacted by the COVID-19 pandemic, but continues to recover.

Air
- Production on F-35 is at full rate levels. 74 rear fuselage assemblies have been completed in the period.
- The Qatar Typhoon and Hawk programme is progressing well. The first Typhoon deliveries will commence in the second half of 2022.
- Work continues on the Typhoon programme and the production programme has been extended further following the award in June of 20 further aircraft for Spain.
- The future electronically scanned European Common Radar Solution continues in line with the Typhoon plan.
- The sector continues to work closely with industry partners and the UK government to continue to fulfil contractual support arrangements in Saudi Arabia.
- The Future Combat Air System (FCAS) programme continues as anticipated with the initial Concept & Assessment Phase contract underway across national and international partners.
- Saudi British Defence Co-operation Programme five-year renewal support funding agreed.

Maritime
- £2.5bn of further contract funding awarded as part of Delivery Phase 3 for the Dreadnought programme.
- New Submarine Build Capability contract maintains BAE Systems' role as the lead for the design and build of nuclear submarines within the UK submarine enterprise.
- The Submersible Ship Nuclear Replacement (SSNR) programme has moved into its Functional Design phase.
- Ongoing support to the Royal Navy’s Portsmouth-based flotilla and the operation of HM Naval Base Portsmouth under the UK Ministry of Defence’s Future Maritime Support Programme, including support to the UK’s two aircraft carriers.
- The Hunter Class Frigate programme in Australia continues to make strong progress through the prototyping phase.
- HMAS Toowoomba, the fifth ANZAC Class frigate to move through the ANZAC Mid Life Capability Assurance Programme (AMCAP) was returned to the Australian Navy following successful completion of the dry production phase of AMCAP.
- Mobilisation of the Challenger 3 and Mechanised Infantry Vehicle contracts secured by the RBSL joint venture is advancing well.
- Transition to the Next Generation Munitions Supply Solution (NGMS) contract is ongoing.

Cyber & Intelligence

Intelligence & Security

- Strong operational performance and integration of Bohemia Interactive Simulations progressing well.
- Awarded an 18-year contract to continue supporting the sustainment of U.S intercontinental ballistic missiles (ICBMs).
- Won a $699m (£575m), five-year contract for operations, maintenance, and management services for the US Army's Defense Supercomputing Resource Center.

Digital Intelligence

- Ongoing integration and transformation of the newly-formed business.
- Increasing underlying profitability supported by strong programme execution, productivity and cost base optimisation.
- Continued integration and growth of the acquired In-Space Missions business, a UK-based satellite and satellite systems company, to accelerate our space capabilities.

HQ

- Repayment of £400m bond in June from existing resources.

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Analyst and investor presentation

A presentation, for analysts and investors, of the Group's first half results for 2022 will be available via WebEx at 11.00am today (28 July 2022).

Details can be found on **investors.baesystems.com**, together with presentation slides and a pdf copy of this report. A recording of the WebEx will be available for replay later in the day.

About BAE Systems

At BAE Systems, we provide some of the world's most advanced, technology-led defence, aerospace and security solutions. We employ a skilled workforce of 91,400 people[1] in over 40 countries. We help our customers to stay a step ahead when protecting people and national security, critical infrastructure and vital information. We also work closely with local partners to support economic development through the transfer of knowledge, skills and technology.

1. Including share of equity accounted investments.

Interim management report

Half year overview

We entered 2022 with positive momentum building on a strong and resilient performance over the last couple of years. In the first half of the year we have:

- Stepped up to assist our customers in delivering urgent mission critical capability;
- Sustained good operational performance;
- Managed the material impacts of supply chain and inflationary pressures;
- Enhanced the portfolio with the acquisition of Bohemia Interactive Simulations (BISim) and the agreement for the sale of BAE Systems' financial crime detection business;
- Completed the UK pension triennial review – positive outcome for all stakeholders;
- Evolved our ESG agenda and engagement;
- Secured 70% increase in order intake and opportunity pipeline enhanced; and
- Continued investment in the business.

Strategically, our geographically diverse portfolio is very well aligned with growing defence budgets and we are leveraging our leading capabilities in evolving markets with a number of short- and longer-term opportunities progressing positively both in defence and the adjacent sustainable technology domains.

Financial focus is on revenue growth, margin expansion and cash conversion over the medium term and we are continuing to make good progress in line with our expectations in these areas.

Confidence in our strategic positioning and financial progress has once again allowed us to increase the interim dividend and initiate a new share repurchase programme of up to £1.5bn over three years.

Operational performance

Operational performance in the first half of 2022 has been good, underlining our confidence in our programme execution capabilities and in the guidance for sales growth, margin expansion and our three-year cash targets.

There remain ongoing pressures on our supply chains, delivery lead times and people resourcing across our operations with Microelectronics continuing to be a highly constrained category, and consistent with our guidance we continue to mitigate the major financial impacts. In many cases, we benefit from long-term programme positions and incumbencies with more stable forward visibility for long-lead items allowing us to continue to actively manage supplier lead times against demand requirements.

As the war in Ukraine continues, we remain closely engaged with our customers around the world to provide on-going support for mission critical activities.

Overall programme execution has been good across all sectors. Electronic Systems' short-term volumes are impacted by the constraints of the supply chain but programme execution remains strong.

In Platforms & Services combat vehicle deliveries have been maintained. There are a number of opportunities through US Foreign Military Sales (FMS) and for our BAE Systems Hägglunds and Bofors products that are progressing positively. Operational performance in US Ship Repair has improved from last year.

The Air sector is performing in line with sales growth expectations for the year. Production of rear fuselage assemblies for the F-35 Lightning II aircraft programme is at full rate levels. Typhoon production is currently focused on the Qatar, Kuwait and German Quadriga programmes with the first Qatari deliveries scheduled for the second half. We continue to provide Typhoon operators with ongoing support and training services to deliver availability, maintenance and upgrade enhancements. The Tempest technology maturation programme is progressing well and work continues to progress to plan on the next-generation Future Combat Air System programme, with the initial Concept & Assessment Phase underway.

In Maritime, work on the Type 26 programme in the UK and construction of the first two Dreadnought submarines continues apace and the remaining three Astute class boats are making good progress. On the Hunter programme in Australia, focus continues on prototyping, engineering maturity, change management and design separation.

Intelligence & Security continues to deliver strong operational performance and the integration of Bohemia Interactive Simulations is progressing to plan.

ESG

Assisting governments in delivering their mission critical requirements in the face of escalating threats highlights our role as a defence and security company in contributing to security and prosperity.

Global events have demonstrated the need for strong defence and security in the face of aggression by nation states. The defence industry and we at BAE Systems provide critical capabilities and support to our governments and their allies to fulfill their primary obligations to keep their citizens safe, as well as providing important economic and societal contributions through the provision of sustainable high-quality jobs.

Additionally, we continue to advance our capabilities in sustainable technologies with a number of electric hybrid contracts won in the period. We are harnessing our expertise in energy management systems and flight controls to support the development of electric propulsion systems for future flight, with GE Aviation selecting us to provide energy management solutions for NASA's single aisle hybrid electric aircraft technology demonstrator programme.

The progress we are making on our sustainability agenda has been reflected in an improvement in ratings from a number of providers and we have maintained our AA leader class rating with MSCI.

Competitiveness and efficiency

During these inflationary times we are focused on operational excellence and efficiency. This is vital to our success, since we recognise we will win and grow in the future based on our performance today, and helps us to address in part where we have exposure from inflation. We have a number of programmes to achieve efficiency and simplification across the Group, building on the lessons learned on working practices and cost savings, while recognising the cost of living challenges experienced by our employees. We are also bringing data analytics to bear across the Group to benchmark and drive efficiency.

Advancing and further leveraging our technology

Investment in advanced technologies and innovation is a benefit which spans the breadth of the business, supporting operational performance, competitiveness, our sustainability objectives and growth aspirations. The threat environment consists not just of the physical risks but also those in the grey zone which need to be addressed. It is critical to our customers to have a fully-integrated combination of capabilities to negate these threats.

Against this backdrop, we are set to increase our self-funded research & development (R&D) investments this year. We are positioning the Group towards future growth areas aligned to our customer priorities, by identifying collaboration opportunities and investing in our leading capabilities and technologies across electronic warfare, combat aircraft, precision weaponry, cyber and the underwater battlespace. From these established positions we are developing solutions into priority areas such as multi-domain networks, big data, autonomy, space and sustainability-driven technology developments. The current threat environment is constantly evolving and as part of our response we continue to increase our technical agility along with strengthening our partnerships with Small to Medium Enterprise companies to provide rapid defence solutions.

While our R&D investments are important, we sustain our leading positions through collaboration with our customers, educational institutions and in partnership with defence laboratories and research institutions like DARPA, the Air Force Research Laboratory, and the Office of Naval Research.

Additionally, we accelerate the pace and reach of our innovation by collaborating wherever possible across our global enterprise.

Order flow

We have delivered a strong half year of order intake, up 70% and ahead of our expectations, resulting in a record defence order backlog. Order flow was especially good on our long-term programmes and has been predominantly long cycle in nature, which will support our growth expectations into the coming years.

We expect continued strong order flow in the second half of the year, with opportunities across all sectors to enhance the growth outlook as we look to support our key customers and allies in addressing their requirements to counter the threat environment.

Defence spending outlook in our key markets

Our geographic diversity positions us strongly as many of the countries in which we operate have announced or are making plans to increase spending to counter the elevated and evolving threat environment on multiple fronts.

In the US, the spending outlook is positive. The Fiscal Year 2022 Omnibus Appropriations bill was signed into law on 9 March. This FY22 budget of $743bn (£612bn) maintains funding support for many of our key programmes: combat vehicles; F-35 and other electronic warfare programmes; and precision weapon systems. The President's Fiscal Year 2023 Budget Request includes $773bn (£636bn) for the Department of Defense (DoD) and the business remains well aligned to the current US National Defense Strategy readiness and modernisation priorities of the US military services.

In the UK, the 2021 Defence Command Paper renewed commitments to our major long-term programmes in complex warship, submarine and combat aircraft design and build, allowing for long-term investment in these key sovereign capabilities, as well as strong support for the cyber domain. The opportunity pipeline is positive with domestic, export and collaboration opportunities identified and we have the capabilities to support our UK customer in its space ambitions.

In Europe, the shifts in defence expenditure have been profound with the significant step up in German defence expenditure, Sweden and Finland looking to join NATO and other nations increasing their defence budgets to, and even beyond, their NATO 2% of GDP commitments. We remain increasingly well placed to secure a number of significant opportunities through our positions on Eurofighter Typhoon, our shareholding in MBDA, our BAE Systems Hägglunds and Bofors businesses based in Sweden, and through US FMS.

Our portfolio is well positioned to benefit from increased defence spending in Asia Pacific through our Australia business, which is already set to grow significantly due to our contracted positions and through export opportunities from our UK, US and Australian businesses to the region. The AUKUS announcement is strategically significant and a clear example of how nations are looking to co-ordinate capabilities in multi-domain operations to address the threat environment. As the largest defence provider in the UK and Australia and a top 10 prime contractor to the US DoD, we are well positioned to support our government customers in these nations as discussions progress.

In the Middle East, our longstanding relationships at government and company levels, continued regional instability and the nature of our long-term contracts, mean we expect defence and security to remain a priority. The renewal of certain existing long-term support contracts is tracking in line with expectations and we continue to progress a number of opportunities with existing customers.

Balance sheet and capital allocation

The Group recognises the importance to investors of a clear and consistent capital allocation policy. The Group's balance sheet is managed conservatively in line with its policy to retain its investment grade credit rating and to ensure operating flexibility. The Group expects to continue to meet its pension obligations, invest in research and technology and other organic investment opportunities, and plans to pay dividends in line with its policy of long-term sustainable cover of around two times underlying earnings.

Accelerated returns to shareholders, such as through a share repurchase, are considered when the balance sheet allows and when the return from doing so is value enhancing. Consistent with this approach, the Group has initiated a share repurchase programme of up to £1.5bn, over a period of three years. Investment in acquisitions will continue to be considered where market conditions are right, where they deliver on the Group's strategy and where they offer long-term value.

Post-employment benefits schemes

The Group's share of the accounting net post-employment benefits obligations has improved by £3.0bn moving from a deficit of £2.1bn as at 31 December 2021 to a surplus of £0.9bn as at 30 June 2022, which is presented after deducting withholding tax which would be levied prior to the future refunding of any surplus. The change was mainly driven by an increase in discount rates during the first half of the year.

The Group's deficit funding programme has completed and this was confirmed during the recently-completed triennial review which showed the scheme was fully funded on a technical provisions basis and therefore no company deficit contributions are required.

Dividend

The Board has declared an interim dividend of 10.4p for the half year ended 30 June 2022, an increase of 5% on the interim dividend in respect of the first half of 2021. This will be paid on 30 November 2022 in line with our usual dividend timetable.

Directors and the Board

As previously announced, Dame Carolyn Fairbairn and Ian Tyler stood down from their roles as non-executive directors at the Annual General Meeting (AGM). Nicole Piasecki has succeeded Ian Tyler as Chair of the Remuneration Committee.

In June, it was announced that Lord Sedwill has been appointed as a non-executive director of the Company with effect from 1 November 2022.

The Company has today announced that Cressida Hogg will join the Board as a non-executive director and Chair designate, with effect from 1 November 2022. Subject to election at the Company's AGM next year, she will succeed Sir Roger Carr as Chair at the conclusion of that meeting, due to be held on 4 May 2023.

Investor engagement

We will host a capital markets event in October with a focus on the Digital Intelligence business and an update on our ESG agenda.

Summary

The fundamentals of our business remain strong and the strategy of the Group is unchanged. We remain well placed to deliver against our business and financial objectives and are managing the material risks associated with global macroeconomic challenges. Our business benefits from a large order backlog, with established positions on long-term programmes in the US, UK, Saudi Arabia and Australia. Governments in our key markets now more than ever are prioritising defence and security, with strong demand for our capabilities. This backdrop, together with our focus on programme execution, positions us to grow our sales profitably and increase cash conversion in the coming years. We are evolving the business to have an appropriate ESG agenda embedded at its core with a constant focus on operational performance and value creation. Higher cash generation gives us increased strategic flexibility focused on technology aligned to our customers' priorities and enables us to deliver increased cash returns to shareholders.

Glossary

We monitor the underlying financial performance of the Group using alternative performance measures (APMs). These measures are not defined in International Financial Reporting Standards (IFRS) and, therefore, are considered to be non-GAAP (Generally Accepted Accounting Principles) measures. Accordingly, the relevant IFRS measures are also presented where appropriate.

The Group uses these APMs as a mechanism to support year-on-year business performance and cash generation comparisons, and to enhance management's planning and decision making on the allocation of resources. The APMs are also used to provide information in line with the expectations of investors, and when setting guidance on expected future business performance. The Group presents these measures to the users to enhance their understanding of how the business has performed within the period, and do not consider them to be more important than, or superior to, their equivalent IFRS measures.

Measure	Definition	Purpose	Closest IFRS measure and reconciliation
Financial performance measures as defined by the Group			
Sales	Revenue plus the Group's share of revenue of equity accounted investments, excluding subsidiaries' revenue from equity accounted investments.	Enables management to monitor the review of both the Group's own subsidiaries as well as its strategically important equity accounted investments, to ensure programme performance is understood and in line with expectations.	Revenue Page 12
Underlying EBIT	Operating profit excluding amortisation of programme, customer-related and other[1] intangible assets, impairment of intangible assets, finance costs and taxation expense of equity accounted investments (EBIT) and non-recurring items[2]. The exclusion of amortisation of acquisition-related intangible assets is to allow consistent comparability internally and externally between our businesses, regardless of whether they have been grown organically or via acquisition.	Provides a measure of operating profitability, excluding one-off events, to enable management to monitor the performance of recurring operations over time, and which is comparable across the Group.	Operating profit Page 44
Return on sales	Underlying EBIT as a percentage of sales.	Provides a measure of operating profitability, excluding one-off events, to enable management to monitor the performance of recurring operations over time, and which is comparable across the Group.	Return on revenue Page 12
Underlying earnings per share	Profit for the period attributable to shareholders, excluding post-tax impact of amortisation of programme, customer-related and other[1] intangible assets, impairment of intangible assets, non-cash finance movements on pensions and financial derivatives, and non-recurring items[2] attributable to shareholders, being underlying earnings, divided by number of shares as defined for Basic EPS in accordance with IAS 33 Earnings per Share.	Provides a measure of the Group's underlying performance, which enables management to compare the profitability of the Group's recurring operations over time.	Basic earnings per share Page 48

Underlying interest	Net finance costs for the Group and its share of equity accounted investments, excluding net interest expense on post-employment benefit obligations and fair value and foreign exchange adjustments on financial instruments and investments.	Provides a measure of finance costs associated with the operational borrowings of the Group that is comparable over time.	Net finance costs Page 46
Underlying effective tax rate	Taxation expense for the Group and its share of equity accounted investments, excluding any one-off tax benefit/expense, as a percentage of adjusted profit before taxation, being Profit before tax plus taxation expense of equity accounted investments, adjusted for non-recurring items[2].	Provides a measure of taxation for the Group, excluding one-off items, that is comparable over time.	Taxation expense Page 47
Operating business cash flow	Net cash flow from operating activities excluding taxation and including net capital expenditure and lease principal amounts, financial investment and dividends from equity accounted investments.	Provides a measure of cash generated by the Group's operations, to service debt and meet tax obligations, and in turn available for use in line with the Group's capital allocation policy.	Net cash flow from operating activities Page 16
Free cash flow	Operating business cash flow less interest paid (net) and taxation.	Provides a measure of cash generated by the Group's operations after servicing debt and tax obligations, available for use in line with the Group's capital allocation policy.	Net cash flow from operating activities Page 16
Net debt (excluding lease liabilities)	Cash and cash equivalents, less loans and overdrafts (including debt-related derivative financial instruments). Net debt does not include lease liabilities.	Allows management to monitor indebtedness of the Group, to ensure the Group's capital structure is appropriate and capital allocation policy decisions are suitably informed.	n/a
Order intake	Funded orders received from customers including the Group's share of order intake of equity accounted investments.	Allows management to monitor the order intake of the Group's own subsidiaries as well as its strategically important equity accounted investments, providing insight into future years' sales performance.	n/a
Order backlog	Funded and unfunded unexecuted customer orders including the Group's share of order backlog of equity accounted investments. Unfunded orders include the elements of US multi-year contracts for which funding has not been authorised by the customer.	Supports future years' sales performance of subsidiaries and equity accounted investments.	Page 44

Measure	Definition
Financial performance measures derived from IFRS	
Revenue	Income derived from the provision of goods and services by the Company and its subsidiary undertakings.
Operating profit	Profit for the period before finance costs and taxation expense. This measure includes finance costs and taxation expense of equity accounted investments.
Return on revenue	Operating profit as a percentage of revenue.
Basic earnings per share	Basic earnings per share in accordance with International Accounting Standard 33 Earnings per Share.
Net cash flow from operating activities	Net cash flow from operating activities in accordance with International Accounting Standard 7 Statement of Cash Flows.
Order book	The transaction price allocated to unsatisfied and partially satisfied performance obligations as defined by IFRS 15 Revenue from Contracts with Customers.
Net post-employment benefits surplus/(deficit)	Net International Accounting Standard 19 Employee Benefits surplus/(deficit), excluding amounts allocated to equity accounted investments.
Dividend per share	Interim dividend paid and final dividend proposed per share.

1. Other intangible assets consists of patents, trademarks and licenses.
2. Non-recurring items are items of financial performance which have been determined by management as being material by their size or incidence and not relevant to an understanding of the Group's underlying business performance. The Group's definition of non-recurring items includes profit or loss on business transactions, the impact of substantively enacted tax rate changes, and costs incurred which are one-off in nature, for example non-routine costs or income relating to post-retirement benefit schemes, and other exceptional items which management has determined as not being relevant to an understanding of the Group's underlying business performance. Note 2 Segmental analysis includes more information on those items reported as non-recurring in the period.

Group financial review
Income statement summary

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Financial performance measures as defined by the Group[1]		
Sales	**10,581**	10,035
Underlying EBIT	**1,112**	1,028
Return on sales	**10.5%**	10.2%
Financial performance measures derived from IFRS[2]		
Revenue	**9,739**	9,339
Operating profit	**1,028**	1,303
Return on revenue	**10.6%**	14.0%
Reconciliation of sales to revenue		
Sales	**10,581**	10,035
Deduct Group's share of revenue of equity accounted investments	**(1,459)**	(1,233)
Add Subsidiaries' revenue from equity accounted investments	**617**	537
Revenue	**9,739**	9,339
Reconciliation of underlying EBIT to operating profit and profit for the period		
Underlying EBIT	**1,112**	1,028
Non-recurring items	**(8)**	346
Amortisation of programme, customer-related and other intangible assets	**(51)**	(43)
Financial expense of equity accounted investments	**(9)**	(15)
Taxation expense of equity accounted investments	**(16)**	(13)
Operating profit	**1,028**	1,303
Net finance costs	**(249)**	(152)
Taxation expense	**(132)**	(49)
Profit for the period	**647**	1,102

1. For alternative performance measure definitions see glossary on page 9.
2. International Financial Reporting Standards.

Segmental analysis[1]

Financial performance measures as defined by the Group[2]

	Sales		Underlying EBIT	
	Six months ended 30 June 2022 £m	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m
Electronic Systems	**2,276**	2,142	**359**	335
Platforms & Services	**1,638**	1,595	**146**	109
Air	**3,497**	3,394	**362**	360
Maritime	**2,155**	2,028	**182**	184
Cyber & Intelligence	**1,050**	944	**123**	97
HQ	**157**	113	**(60)**	(57)
Deduct Intra-group	**(192)**	(181)	**–**	–
	10,581	10,035	**1,112**	1,028

Financial performance measures derived from IFRS[3]

	Revenue		Operating profit/(loss)	
	Six months ended 30 June 2022 £m	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m
Electronic Systems	**2,276**	2,142	**316**	327
Platforms & Services	**1,616**	1,565	**143**	107
Air	**2,863**	2,846	**345**	476
Maritime	**2,100**	2,000	**180**	182
Cyber & Intelligence	**1,050**	944	**108**	95
HQ	**5**	3	**(64)**	116
Deduct Intra-group	**(171)**	(161)	**–**	–
	9,739	9,339	**1,028**	1,303

Exchange rates

Average	**Six months ended 30 June 2022**	Six months ended 30 June 2021
£/$	**1.298**	1.388
£/€	**1.188**	1.153
£/A$	**1.804**	1.801

Period end	**30 June 2022**	30 June 2021
£/$	**1.215**	1.381
£/€	**1.163**	1.165
£/A$	**1.764**	1.840

Year end	31 December 2021
£/$	1.354
£/€	1.191
£/A$	1.863

Sensitivity analysis	**£m**
Estimated impact on annual sales of a ten cent movement in the average exchange rate:	
$	**645**
€	**115**
A$	**40**

Sales[2] in the first half increased to £10.6bn (2021 £10.0bn), up 2.8% on a constant currency basis[4], or 5.4% on a reported basis.

Underlying EBIT[2] was £1,112m (2021 £1,028m), up 4.4% on a constant currency basis[4], or 8.2% on a reported basis.

Revenue increased to £9.7bn (2021 £9.3bn), up 4.3%.

Operating profit was £1,028m (2021 £1,303m), down 21.1% on last year due to the impact of non-recurring items in the prior year.

Non-recurring items[2] in 2022 comprises £8m related to current and historical business transactions. The 2021 gain comprised a gain on the sale of the Filton and Broughton sites (£182m), gains on disposal of Advanced Electronics Company in the Air sector (£131m, of which £63m was attributable to non-controlling interests) and on disposal of a business in our Electronic Systems segment (£26m), and a £7m gain relating to a historical acquisition.

Amortisation of programme, customer-related and other intangible assets was £51m (2021 £43m).

Net finance costs were £249m (2021 £152m). The underlying interest charge[2] was £122m (2021 £122m). There was a charge of £113m (2021 charge of £9m) in respect of rolling hedges on balances with the Group's subsidiaries and equity accounted investments.

Taxation expense, including taxation expense of equity accounted investments, of £148m (2021 £62m) reflects the Group's underlying effective tax rate[2] for the period of 19% (2021 18%), adjusted for the impact of tax on non-recurring items and of the UK tax rate adjustment. The 2021 charge also reflects the impact of a one-off tax benefit of £94m in respect of agreements reached regarding the exposure arising from the April 2019 European Commission decision regarding the UK's Controlled Foreign Company regime (see note 4).

The underlying effective tax rate[2] for the full year is expected to be around 20%, with the final rate dependent on the geographical mix of profits.

1. With effect from 2022, the Group has established a new Digital Intelligence business, bringing together our non-US digital and data capabilities to further strengthen how we deliver these services and capabilities for our customers. The new Digital Intelligence business is reported within the Cyber & Intelligence segment. In addition our BAE Systems Australia business transitioned from the Air segment to the Maritime segment. Comparative segmental financial information for 2021 has been re-presented in this report to reflect the new business structures. See note 2 for further details of the re-presentation.
2. For alternative performance measure definitions see glossary on page 9.
3. International Financial Reporting Standards.
4. Current period compared with prior period translated at current period exchange rates.

Earnings per share

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Financial performance measures as defined by the Group[1]		
Underlying earnings (excluding the one-off tax benefit – 2021 only)	**768**	701
Underlying earnings per share (excluding the one-off tax benefit – 2021 only)	**24.5p**	21.9p
Underlying earnings (including the one-off tax benefit – 2021 only)	**768**	795
Underlying earnings per share (including the one-off tax benefit – 2021 only)	**24.5p**	24.8p
Financial performance measures derived from IFRS[2]		
Profit for the period attributable to equity shareholders	**615**	1,000
Basic earnings per share	**19.6p**	31.3p
Reconciliation of underlying earnings to profit for the period		
Underlying earnings attributable to shareholders (excluding the one-off tax benefit – 2021 only)	**768**	701
Non-recurring items attributable to shareholders, post tax[3]	**(2)**	277
Amortisation of programme, customer-related and other intangible assets, and impairment of intangibles, post tax[4]	**(41)**	(35)
Net interest expense on retirement benefit obligations, post tax[4]	**(17)**	(27)
Fair value and foreign exchange adjustments on financial instruments and investments, post tax[4]	**(93)**	(10)
One-off tax benefit (2021 only)	**–**	94
Profit for the period attributable to equity shareholders	**615**	1,000
Non-controlling interests	**32**	102
Profit for the period	**647**	1,102

Underlying earnings per share for the period increased by 11.9% to 24.5p (2021 21.9p excluding the one-off 2021 tax benefit).

Basic earnings per share for the period decreased by 37.4% to 19.6p (2021 31.3p). The decrease was driven mainly by the non-recurring gains in 2021 of £182m on disposal of investment property, and £157m from gains on disposal of subsidiaries and equity accounted investments.

1. For alternative performance measure definitions see glossary on page 9.
2. International Financial Reporting Standards.
3. In 2021, £63m of the gain on disposal of AEC was attributable to non-controlling interest. Therefore, only the gain attributable to shareholders has been removed in calculating the underlying earnings attributable to shareholders. See note 12 for more details. The tax on non-recurring items has been determined using the actual tax due on those items, see note 4 for details.
4. The tax impact, where applicable, is calculated using the underlying effective tax rate of 19% (2021 18%).

Cash flow summary

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Financial performance measures as defined by the Group[1]		
Free cash flow	**123**	461
Financial performance measures derived from IFRS[2]		
Net cash flow from operating activities	**493**	623
Reconciliation from free cash flow to net cash flow from operating activities		
Free cash flow	**123**	461
Add back Interest paid, net of interest received	**119**	117
Add back Taxation	**168**	116
Operating business cash flow	**410**	694
Add back/(Deduct) Net capital expenditure and financial investment	**201**	(67)
Add back Principal element of lease payments and receipts	**137**	123
Deduct Dividends received from equity accounted investments	**(87)**	(11)
Deduct Taxation	**(168)**	(116)
Net cash flow from operating activities	**493**	623
Net capital expenditure and financial investment	**(201)**	67
Principal element of finance lease receipts	**5**	5
Dividends received from equity accounted investments	**87**	11
Interest received	**9**	12
Acquisitions, disposals and assets held for sale	**(161)**	187
Net cash flow from investing activities	**(261)**	282
Interest paid	**(128)**	(129)
Equity dividends paid	**(480)**	(461)
Purchase of own shares	**(130)**	–
Dividends paid to non-controlling interests	**(75)**	(172)
Partial disposal of shareholding in subsidiary undertaking	**–**	27
Principal element of lease payments	**(142)**	(128)
Cash flow from derivative financial instruments (excluding cash flow hedges)	**107**	(81)
Movement in cash collateral	**–**	(4)
Net cash flow from loans	**(400)**	–
Net cash flow from financing activities	**(1,248)**	(948)
Net decrease in cash and cash equivalents	**(1,016)**	(43)
Foreign exchange translation	**(477)**	37
Other non-cash movements	**118**	(21)
Add back Net cash flow from loans	**400**	–
Increase in net debt (excluding lease liabilities)	**(975)**	(27)
Opening net debt (excluding lease liabilities)	**(2,160)**	(2,718)
Net debt (excluding lease liabilities)	**(3,135)**	(2,745)

1. For alternative performance measure definitions see glossary on page 9.
2. International Financial Reporting Standards.

Segmental analysis[1]

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021[1] £m
Financial performance measures as defined by the Group[2]		
Electronic Systems	**93**	254
Platforms & Services	**(59)**	(9)
Air	**380**	159
Maritime	**(22)**	(17)
Cyber & Intelligence	**69**	106
HQ	**(51)**	201
Operating business cash flow	**410**	694
Taxation paid[3]	**(168)**	(116)
Interest paid, net of interest received	**(119)**	(117)
Free cash flow	**123**	461
Financial performance measures derived from IFRS[4]		
Electronic Systems	**187**	328
Platforms & Services	**(20)**	13
Air	**378**	238
Maritime	**46**	44
Cyber & Intelligence	**85**	118
HQ	**(15)**	(2)
Deduct Taxation[3]	**(168)**	(116)
Net cash flow from operating activities	**493**	623

Free cash flow was an inflow of £123m (2021 inflow of £461m). **Operating business cash inflow** was £410m (2021 inflow £694m). The inflow reflects operational business performance, and working capital management. 2021 included £250m inflow from the sale of the Filton and Broughton sites.

Net cash inflow from operating activities was £493m (2021 inflow £623m).

Taxation payments increased to £168m (2021 £116m).

Net capital expenditure and financial investment comprises a net outflow of £201m (2021 inflow of £67m, mainly as a result of the proceeds from the Filton and Broughton site sales).

Dividends received from equity accounted investments were £87m (2021 £11m). **Dividends paid to non-controlling interests** of £75m (2021 £172m), primarily reflects payments made by our partially owned subsidiaries in Saudi Arabia. The reduction is primarily due to the dividend paid last year in respect of the divestment of the Advanced Electronics Company.

Net cash outflow in respect of acquisitions, disposals and held for sale assets of £161m (2021 inflow £187m) comprises cash paid for the acquisition of Bohemia Interactive Simulations, deferred consideration for historical acquisitions, plus cash classified as held for sale for the divestment of the Financial Services business. The net inflow of £187m in 2021 was primarily in relation to the divestment of the Advanced Electronics Company.

Equity dividends paid in 2022 represents the 2021 final dividend.

There was a net **cash inflow from derivative financial instruments** of £107m (2021 outflow £81m) primarily from rolling hedges on balances with the Group's subsidiaries and equity accounted investments.

Foreign exchange translation primarily arises in respect of the Group's US dollar-denominated borrowing.

1. With effect from 2022, the Group has established a new Digital Intelligence business, bringing together our non-US digital and data capabilities to further strengthen how we deliver these services and capabilities for our customers. The new Digital Intelligence business is reported within the Cyber & Intelligence segment. In addition our BAE Systems Australia business transitioned from the Air segment to the Maritime segment. Comparative segmental financial information for 2021 has been re-presented in this report to reflect the new business structures. See note 2 for further details of the re-presentation.
2. For alternative performance measure definitions see glossary on page 9.
3. Taxation is managed on a Group basis.
4. International Financial Reporting Standards.

Net debt (excluding lease liabilities)

	30 June 2022 £m	31 December 2021 £m
Components of net debt (excluding lease liabilities)		
Cash and cash equivalents	**1,956**	2,917
Debt-related derivative financial instrument assets – non-current	**130**	114
Loans – non-current	**(5,136)**	(4,604)
Loans and overdrafts – current	**(53)**	(457)
Debt-related derivative financial instrument liabilities – non-current	**(32)**	(130)
Net debt (excluding lease liabilities)[1]	**(3,135)**	(2,160)

The Group's **net debt** (excluding lease liabilities) at 30 June 2022 is £3,135m, a net increase of £975m from the position of £2,160m at the start of the year.

Cash and cash equivalents of £1,956m (31 December 2021 £2,917m) are held primarily for the repayment of debt securities, payment of the 2022 interim dividends and management of working capital.

Going concern

After making due enquiries, the directors have a reasonable expectation that the Group has adequate resources to continue in operational existence for at least 12 months from the date of approval of this report and, therefore, continue to adopt the going concern basis in preparing the financial statements.

The Group continues to conduct ongoing risk assessments in relation to its business operations and liquidity, including in relation to the potential future impact of the COVID-19 pandemic. Demand from the Group's key customers remains strong, underpinned by our order backlog, programme positions and pipeline of opportunities across all sectors. The Group also continues to work with and support its supply chain to actively address the risk of disruption.

The Group's liquidity has remained strong despite the pandemic. We have continued to work closely with customers and the supply chain to manage risk in this area. Cash flow forecasting is performed by the businesses on a monthly basis. The Group also monitors a rolling forecast of its liquidity requirements to ensure that there is sufficient cash to meet operational needs and maintain adequate headroom.

Having undertaken these assessments, the directors consider that the Group will be able to continue in operational existence for the foreseeable future. For this reason they continue to adopt the going concern basis in preparing the financial statements.

Principal risks and uncertainties

Having considered recent geopolitical and macroeconomic events, the Group believes the principal risks and uncertainties facing the Group for the remainder of the year are included in, and are therefore unchanged from, those reported in the Annual Report 2021.

The Group's principal risks and uncertainties at 31 December 2021 were detailed on pages 107 to 113 of the Annual Report 2021, and related to the following areas: government customers, defence spending and terms of trade; international markets; contract risk, execution and supply chain; competition in international markets; outbreak of contagious diseases; cyber security; people; pension funding; climate change and the environment; laws and regulations; and acquisitions.

1. For alternative performance measure definitions see glossary on page 9.

Segmental performance: Electronic Systems

Electronic Systems, with 16,900 employees[1], comprises the US- and UK-based electronics activities, including electronic warfare systems, navigation systems, electro-optical sensors, military and commercial digital engine and flight controls, precision guidance and seeker solutions, next-generation military communications systems and data links, persistent surveillance capabilities, space electronics and electric drive propulsion systems.

Financial performance

Financial performance measures as defined by the Group[2]

	Six months ended 30 June 2022	Six months ended 30 June 2021	Year ended 31 December 2021
Sales	**£2,276m**	£2,142m	£4,491m
Underlying EBIT	**£359m**	£335m	£766m
Return on sales	**15.8%**	15.6%	17.1%
Operating business cash flow	**£93m**	£254m	£774m
Order intake	**£2,344m**	£2,234m	£4,923m
Order backlog	**£7.7bn**	£6.6bn	£7.2bn

Financial performance measures derived from IFRS[3]

	Six months ended 30 June 2022	Six months ended 30 June 2021	Year ended 31 December 2021
Revenue	**£2,276m**	£2,142m	£4,491m
Operating profit	**£316m**	£327m	£715m
Return on revenue	**13.9%**	15.3%	15.9%
Cash flow from operating activities	**£187m**	£328m	£951m
Order book	**£6.4bn**	£5.3bn	£5.7bn

– Sales of £2.3bn are in line with 2021 on a constant currency basis[4] reflecting challenges in the supply chain and resourcing constraints.

– Return on sales was 15.8%, up 20bps reflecting good programme execution, with the usual second half weighting.

– Operating business cash flow of £93m reflects a more usual second half weighted business cycle compared with last year.

– Order backlog grew since year-end, with a book-to-bill ratio[5] of 1.0 driven by awards on F-35, Precision Strike and C4ISR capabilities.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 9.
3. International Financial Reporting Standards.
4. Current period compared with prior period translated at current period exchange rates.
5. Ratio of Order intake to Sales.

Operational performance

Electronic Combat Solutions

The F-35 Lightning II programme completed the build of Lot 14 electronic warfare (EW) systems and has delivered a cumulative total of over 1,100 EW systems. We are also supporting the Block 4 modernisation efforts under multiple contracts worth over $870m (£716m), and continue to operate under a five-year Performance-Based Logistics contract to provide critical sustainment support for the F-35 EW system.

Under contract from Boeing, we continue to deliver our next-generation EW Eagle Passive Active Warning Survivability System to support the upgrade of the US Air Force F-15 platform and testing on F-15E and F-15EX test aircraft. In April, BAE Systems was awarded $36m (£30m) for low-rate initial production phase two. We continue to pursue additional F-15 EW upgrade opportunities, both domestic and international.

We are completing Lot 3 deliveries on Long Range Anti-Ship Missile and are procuring material and building lower-level assemblies on Lot 4 and have received awards for Lots 4, 5 and 6.

Due to the sensitive nature of electronic combat systems and technology, many of our programmes are classified. These include our work as a world leader in electronic warfare providing next-generation defence technology.

Countermeasure & Electromagnetic Attack Solutions

We have received six orders from the US Army towards the ten-year $872m (£718m) Indefinite Delivery, Indefinite Quantity contract to provide lifecycle sustainment and technical support to the Limited Interim Missile Warning System programme. We continue to deliver on the first three production lot orders totalling $188m (£155m) and anticipate further contracts to advance efforts to enable fielding on other Army rotary-wing aircraft.

The Compass Call programme is currently executing contracts valued at more than $1bn (£0.8bn), focused on the cross-decking of prime mission equipment to the new EC-37B aircraft while sustaining and upgrading the existing EC-130H fleet. We completed the second phase of testing to demonstrate the Small Adaptive Bank of Electronic Resources technology on the EC-130H which fielded in early 2022. Integration and test of the EC-37B mission system is ongoing with the first new aircraft targeted to initially field in 2024.

Precision Strike & Sensing Solutions

The APKWS® guidance kit programme is executing production under an Indefinite Delivery, Indefinite Quantity contract, with awards worth over $48m (£40m) received in the first half. Test events in May proved enhanced mission sets in support of US and allied forces precision strike missions.

The Terminal High Altitude Area Defense (THAAD) seeker programme, which provides critical targeting technology that helps protect the US and its allies from ballistic missiles, is currently executing at full-rate production levels. In parallel, we are designing and prototyping next-generation THAAD infrared seekers valued at $150m (£123m).

We are executing a contract with Space Systems Command to develop an Increment II Miniature Serial Interface GPS receiver with next-generation Application Specific Integrated Circuit engine valued at more than $270m (£222m).

C4ISR Systems

Recent awards have positioned us as a full-spectrum communications provider to meet customers' needs for connectivity and information sharing to support joint all-domain command and control, to include our selection and award for Airborne High Frequency Radio Modernization during the first half.

We have entered into a customer agreement to launch an experimental satellite which brings our disruptive technology capability to the space domain. We are continuing our radiation-hardened Application Specific Integrated Circuit Library technology on a number of programmes and developing novel radiation-tolerant microelectronics.

Controls & Avionics Solutions

We are seeing an uptick in airline traffic and business travel, resulting in improving demand for Original Equipment Manufacturer deliveries and aftermarket services.

The business continues to develop the integrated flight control electronics and remote electronic units for the new Boeing 777X aircraft family. The flight control system is performing as expected during flight testing, and we continue to incorporate software updates and conduct systems verification testing.

Our engine control products, offered through the FADEC International and FADEC Alliance joint ventures, continue to perform well across our portfolio. On the military side, the GE T901 FADEC is developing and completed a successful engine test in March.

We are engaged in the trend towards electric aircraft, specifically in the emerging advanced air mobility segment. We were also selected to design, test and supply energy management components for GE Aviation's megawatt class hybrid electric propulsion system in support of NASA's Electrified Powertrain Flight Demonstration project.

Deliveries of F-35 vehicle management computer and active inceptor systems have successfully ramped up, and we are enabling the first US Depot stand-up scheduled for 2022. Internationally, development of the advanced vehicle control system for the UK Dreadnought submarine programme remains on plan.

We continue to advance our autonomous control technologies through successful crewed-uncrewed teaming flight tests under a US Department of Defense programme.

Power & Propulsion Solutions

As global greenhouse gases rise, the pressure is on for the transportation industry to reduce harmful emissions. BAE Systems is opening channels to market with a new bus-manufacturing customer, Hometown Manufacturing, leading to increased opportunities for battery electric trolley and bus systems in North America.

Sales to Nova Bus continue to grow as legacy customers, such as Houston Metro, move from electric-hybrid technology to full battery electric systems. In the first half, Philadelphia, Pennsylvania and Boston, Massachusetts, purchased 380 electric hybrid buses, and Canadian transit operators in Mississauga and Toronto placed orders for more than 500 systems.

We also saw the pandemic move the maritime domain into a period of evolution and growth. The Maine Department of Transportation selected Senesco Marine to build its new passenger vessel using BAE Systems' electric-hybrid propulsion solution to deliver reduced and zero-emission ferry operations.

Looking forward

Electronic Systems is well positioned for growth in the medium term as it continues to address current and evolving US defence priority programmes from its strong franchise positions in electronic warfare, navigation systems, precision guidance and seeker solutions. Electronic Systems has a long-standing programme of research and development. Its focus remains on maintaining a diverse portfolio of defence and commercial products and capabilities for US and international customers. The business expects to benefit from its ability to apply innovative technology solutions that meet defence customers' changing requirements. As a result, the business is well positioned for the medium term with significant roles on F-35 Lightning II, F-15 upgrade, M-Code GPS upgrades and classified programmes, as well as with specific products such as APKWS®. Over the longer term, the business is poised to leverage its technology strength in emerging areas of demand such as precision weaponry, space resilience, hyper-velocity and autonomous vehicles. With our electric drive propulsion capabilities we are well placed to continue to address the need for low and zero emission technology across an increasing number of platforms.

The commercial aviation market has been negatively impacted by the pandemic and whilst we are seeing early stages of recovery it is expected to take several years to reach previous levels. The business has been scaled appropriately and Electronic Systems' technology innovations are enabling the business to maintain its long-standing customer positions and adjust as the market evolves.

Segmental performance: Platforms & Services

Platforms & Services, with 12,200 employees[1], has operations in the US, UK and Sweden. It manufactures and upgrades combat vehicles, weapons and munitions, and delivers services and sustainment activities, including naval ship repair and the management and operation of government-owned munitions facilities.

Financial performance

Financial performance measures as defined by the Group[2]

	Six months ended 30 June 2022	Six months ended 30 June 2021	Year ended 31 December 2021
Sales	**£1,638m**	£1,595m	£3,395m
Underlying EBIT	**£146m**	£109m	£259m
Return on sales	**8.9%**	6.8%	7.6%
Operating business cash flow	**£(59)m**	£(9)m	£287m
Order intake	**£1,513m**	£1,845m	£3,236m
Order backlog	**£5.9bn**	£6.1bn	£5.6bn

Financial performance measures derived from IFRS[3]

	Six months ended 30 June 2022	Six months ended 30 June 2021	Year ended 31 December 2021
Revenue	**£1,616m**	£1,565m	£3,318m
Operating profit	**£143m**	£107m	£252m
Return on revenue	**8.8%**	6.8%	7.6%
Cash flow from operating activities	**£(20)m**	£13m	£351m
Order book	**£5.6bn**	£5.7bn	£5.3bn

– Sales of £1.6bn declined by 3% on a constant currency basis[4]. This decline was driven by lower US Ship Repair volumes, while combat vehicles volumes were maintained.

– Return on sales performance for the half year was 8.9%, an improvement of 210bps driven by improved efficiencies in Ship Repair and improved operational performance in combat vehicles.

– The first half saw cash outflow of £59m, which reflects the utilisation of advances received in the prior year.

– Book-to-bill ratio[5] of 0.9 reflects further awards on M109 and Amphibious Combat Vehicles.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 9.
3. International Financial Reporting Standards.
4. Current period compared with prior period translated at current period exchange rates.
5. Ratio of Order intake to Sales.

Operational performance

Combat Mission Systems

Combat Mission Systems is achieving consistent production throughput at heightened volumes across multiple programmes. The team has worked closely with customers to address pandemic-related disruptions and schedule impacts. Investments in facilities and manufacturing technologies, including automation and robotic welding, are delivering positive returns as we move to full-rate production across a number of platforms.

We delivered Amphibious Combat Vehicles (ACVs) to the US Marine Corps under low-rate initial production contracts totalling approximately $600m (£494m) for 116 vehicles, and continue to execute on four full-rate production contracts for an additional 155 vehicles at a value of $810m (£667m). We received a $35m (£29m) contract for a new ACV recovery variant in March and are working on additional variants.

On the US Army's Armored Multi-Purpose Vehicle (AMPV) programme, we have received production contracts worth $1.3bn (£1.1bn). Deliveries of the five variants continued this year according to the rebaselined schedule contractually agreed with the Army in December. We are also working under a July 2021 contract worth up to $600m (£494m) for AMPV sustainment services.

On M109A7 programme, contracts worth a total of $1.5bn (£1.2bn), all 133 low-rate initial production vehicle sets and 216 full-rate production vehicle sets have been delivered. We are now executing on 2019 and 2020 full-rate production contracts totalling $996m (£820m) for 232 vehicle sets, including a $299m (£246m) contract in June. We have also received early order material awards totalling $121m (£100m) for future full-rate production.

Following several modifications, the contract to upgrade Bradley vehicles to the A4 configuration is valued at $809m (£666m) for 459 vehicles and spares. We are working on a five-year follow-on production contract to add about $210m (£173m) for 70 vehicles through 2023, with quantities to be determined for the remaining four years.

We are executing on a prototype contract to integrate a hybrid-electric drive system onto Bradley Fighting Vehicles.

We continue to produce and sustain the US Army's M88A2 recovery vehicles, and develop next-generation M88A3 prototypes under a $79m (£65m) contract.

We are producing Mk 41 Vertical Launching System (VLS) missile canisters for the US Navy under awards totalling $433m (£356m), with a total potential value of more than $624m (£514m). We are also working on a $164m (£135m), five-year contract as the Navy's design agent for missile canisters and the mechanical portion of the VLS.

We are delivering Mk45 Mod 4 gun systems to the US Navy, and working to provide 57mm Mk110 gun systems for the US Navy and Coast Guard. We are also executing on a 2021 contract to deliver the first Mk 38 Mod 3 25mm machine gun system designed to counter unmanned aerial systems (C-UAS) to the Navy, and another contract to convert existing Mk 38 Mod 2 gun systems to Mod 3 and add C-UAS capability.

Deliveries continue of 37 Virginia Payload Module tubes for the US Navy's Block V Virginia Class submarines.

Ordnance Systems

We continue to operate and modernise the US Army's Radford and Holston ammunition plants under a total of $1.7bn (£1.4bn) in modernisation contracts. We are performing under the Army's previously granted two-year extension for Radford operations, and in July we were awarded a five-year contract extension for the operations of the Radford Army Ammunition Plant with a $1.3bn (£1.1bn) ceiling value that is expected to be incrementally funded in future periods. We are also progressing our response for the upcoming Holston operations competition.

At Holston, modernisation activities continue, including the construction of a Weak Acetic Acid Recovery Plant, a wastewater management facility, and the design, construction and commissioning of new production facilities.

At Radford, construction of a modern nitrocellulose facility has been completed and is in the product qualification phase.

US Ship Repair

The business continues to modernise and maintain US Navy ships, receiving contracts worth a cumulative value of over $440m (£362m) during the first half for maintenance and modernisation.

Our shipyards were impacted by delayed starts to ship repair contracts due to operational naval tasking, coupled with delays to pending contract awards and higher than usual levels of customer-added work to existing contracts. Investments in operational excellence and resources are delivering benefits as we address several challenged ship modernisations.

BAE Systems Hägglunds

As the business expands its workforce and facilities to accommodate the significant number of new orders received over the last 18 months, the team is executing on a contract to upgrade and extend the life of the Netherlands CV9035 fleet, including the integration of an Active Protection System, an anti-tank guided-missile system, and the addition of rubber band tracks. In addition, we are performing under a 2021 contract exceeding $500m (£412m) for mid-life upgrades, including the development and testing of a new turret.

In March, we received a contract to equip 20 CV90s with the Mjölner mortar system for Sweden, following the delivery of 40 of the systems on time, at cost and quality, as work is progressing to refurbish the Swedish CV90 fleet.

Our work continues to extend the life of 186 Swiss Army CV90s to 2040.

For Norway, the first four of 20 vehicles were delivered on time and at cost in May under a contract exceeding $50m (£41m), and we received a seven-year contract in January for support, sustainment and readiness of 144 CV90s.

Under a contract for Finland, we are upgrading and extending the life of its CV90s.

As we pursue the Czech Republic's evolving procurement for new fighting vehicles, the CV90 won the competitive evaluation for Slovakia's Infantry Fighting Vehicle programme, and contract negotiations are expected to complete in the second half.

We received a contract worth approximately $200m (£165m) from Sweden for 127 BvS10s. Additionally, we are under contract from the French Army to sustain and maintain readiness of its BvS10 fleet.

BAE Systems Bofors

The 24 additional ARCHER systems for Sweden are nearing completion, with a number of ARCHER pursuits in our home and export markets. ARCHER was selected as one of two systems under consideration by the Swiss government for its future artillery system.

We are under multiple export contracts to deliver 40Mk4 and 57Mk3 naval gun systems, including five 57Mk3s and ten 40Mk4s for the UK Royal Navy's Type 31 frigates, as well as 12 40Mk4s to the Belgian and Dutch navies, and 57mm (Mk110) gun systems for the US Navy and Coast Guard.

Weapon Systems UK

Production of 145 M777s for the Indian Army continues under a $542m (£446m) Foreign Military Sales contract. We continue to assess the likely projected workload for M777 production.

FNSS

FNSS, our land systems joint venture based in Turkey, continues to produce 8x8 wheeled armoured vehicles for the Royal Malaysian Army. Production continues on medium-weight tanks for delivery to Indonesia, and work on a specialist engineering vehicles agreement for the Philippines continues.

Multiple contracts for the Turkish Armed Forces worth roughly €800m (£688m) are progressing. These include contracts for air defence vehicles, assault amphibious vehicles, and special purpose 8x8 and 6x6 vehicles. In 2021 a contract extension was signed for a further 84 anti-tank vehicles in addition to the 260 already delivered or in production, and last December a €25m (£21m) logistics support contract was signed. The first vehicles are in production on a programme to modernise 133 armoured combat vehicles for the Turkish Armed Forces.

Looking forward

Combat Mission Systems and BAE Systems Hägglunds is underpinned by a growing order backlog and incumbencies on key franchise programmes. These include the US Army's Armored Multi-Purpose Vehicle, M109A7 self-propelled howitzer, Bradley upgrade programmes, Amphibious Combat Vehicle, M88, as well as the CV90 and BvS10 and Archer products from our Swedish-based businesses. FNSS continues to execute on its order book of both Turkish and international orders. These long-term contracts and franchise positions make the combat vehicles businesses well placed for future growth given the opportunity pipeline over the medium term. Additionally, the team is working on, and is closely following, the US Army's acquisition plans for its next generation of combat vehicles.

In the maritime domain, the sector has a strong position on naval gun programmes and US Navy ship repair activities where the business has invested in facilities in key home ports. This capitalised infrastructure represents a high barrier to entry, and the business remains well aligned to the US Navy's operational strategy and projected fleet increase.

The Group remains a leading provider of gun systems and precision strike capabilities and, in the complex ordnance manufacturing business, continues to manage and operate the US Army's Radford and Holston munitions facilities under previously awarded contracts.

Segmental performance: Air

Air, with 24,200 employees[1], comprises the Group's UK-based air activities for European and International markets, US Programmes and development of Future Combat Air Systems, alongside its business in Saudi Arabia, together with its 37.5% interest in the European MBDA joint venture.

Financial performance[2]

Financial performance measures as defined by the Group[3]

	Six months ended 30 June 2022	Six months ended 30 June 2021[2]	Year ended 31 December 2021[2]
Sales	**£3,497m**	£3,394m	£7,449m
Underlying EBIT	**£362m**	£360m	£772m
Return on sales	**10.4%**	10.6%	10.4%
Operating business cash flow	**£380m**	£159m	£548m
Order intake	**£8,883m**	£2,270m	£5,695m
Order backlog	**£23.3bn**	£18.6bn	£17.8bn

Financial performance measures derived from IFRS[4]

	Six months ended 30 June 2022	Six months ended 30 June 2021[2]	Year ended 31 December 2021[2]
Revenue	**£2,863m**	£2,846m	£6,041m
Operating profit	**£345m**	£476m	£849m
Return on revenue	**12.1%**	16.7%	14.1%
Cash flow from operating activities	**£378m**	£238m	£638m
Order book	**£16.3bn**	£12.6bn	£12.2bn

– Sales of £3.5bn were up 4% on a constant currency basis[5], driven by F-35 running at full rate production, increased activity on Tempest in Future Combat Air System, growth in MBDA, and good progress being made towards the first Qatar Typhoon deliveries in the second half of the year.

– The return on sales is 10.4%, with good programme execution maintained.

– Cash flow of £380m largely reflects strong cash performance from MBDA.

– Order backlog was £23.3bn, which represents significant orders received across Saudi Arabia support, F-35 LRIP and Sustainment awards, Typhoon production orders, Hawk UK support orders and a strong MBDA order flow.

1. Including share of equity accounted investments.
2. Financial information for 2021 in relation to the Air segment has been re-presented to reflect the organisational changes which took effect at the start of 2022, which established the new Digital Intelligence business and whereby the management of the Group's Australia business was transferred to the Maritime segment. See note 2 for further details of the re-presentation.
3. For alternative performance measure definitions see glossary on page 9.
4. International Financial Reporting Standards.
5. Current period compared with prior period translated at current period exchange rates.

Operational performance

European & International markets

Activity on the 24 Typhoon and 9 Hawk aircraft and associated support and training contract for the State of Qatar is progressing well. Seven Hawk aircraft have been accepted by the customer and entered into service at RAF Leeming, in line with the agreement to base the Qatari Hawk aircraft in the UK. The first Typhoon aircraft remains on schedule for delivery in Q3 this year, and in total six Typhoon aircraft are planned to be delivered before the end of 2022.

Deliveries of major units continue under the Kuwait Typhoon contract, secured by Italian Eurofighter partner Leonardo. Four major units were completed in the first half of 2022, with the one remaining delivery planned for the second half of the year.

Production of major units is progressing to plan on the £1.3bn German Air Force order for 38 aircraft to replace its original Typhoon Tranche 1 aircraft, with 15 major units now having commenced build, and completion of the first front fuselage planned for the second half of 2022.

During the first half of 2022 BAE Systems received an order for our workshare valued at in excess of £0.5bn for an additional 20 aircraft for the Spanish Air Force.

During the period the Group secured an eleven-year follow-on contract valued at £0.6bn for support to the Royal Air Force's fleet of Hawk fast jet trainer and Royal Air Force Aerobatic Team aircraft.

Alongside this, the ten-year partnership arrangement for support to the Royal Air Force's Typhoon fleet continues to deliver the contracted flying hours.

Following initial entry into service of the export standard electronically scanned European Common Radar in late 2021 further deliveries continue in 2022. Development continues on the national radar variants for the UK, German, Italian and Spanish Air Forces. The UK continues to fund development activity for the future UK Typhoon weapon system and sensors, as part of the Partner Nations' commitment to the ten-year Typhoon capability enhancement programme.

Future Combat Air System
The Tempest technology maturation programme is progressing well, and work continues to plan on the contract received in 2021 for the Future Combat Air System Concept & Assessment Phase. Working with national and international industry partners and the Ministry of Defence, this contract enables the development of a range of digital concepts, embedding new tools and techniques to design, evaluate and shape the final design and capability requirements of Tempest. The project will deliver the first flying combat air demonstrator within the next five years.

US Programmes
F-35 rear fuselage manufacturing continues at full rate production through 2022 with 74 rear fuselage assemblies completed during the first half, and a further 76 planned for the second half, in line with the programmes for Lot 14, 15 and 16 contracts.

Following the award in 2021 of a five-year contract for F-35 sustainment services to December 2025, we continue to provide services for both the UK and US customers in support of key F-35 sustainment activities.

Saudi Arabia
In Saudi Arabia, the In-Kingdom Industrial Participation programme continues to make good progress consistent with our long-term strategy, as well as the Saudi Arabian government's National Transformation Plan and Vision 2030. Our in-Kingdom Saudi employee base continues to grow with 76% Saudisation, and 94% of our in-Kingdom female employees are Saudi nationals. We also continue the development of our footprint across the Kingdom, with demonstrable contributions to our local communities.

The Group is reliant on the continued approval of export licences by a number of governments in order to continue to support programme operations in the Kingdom of Saudi Arabia. We are working closely with industry partners and the UK government to continue to fulfil our contractual support arrangements in the Kingdom.

BAE Systems continues to perform against the current five-year contract to provide Typhoon support services to the Royal Saudi Air Force, which will complete at the end of 2022. Through this contract, the business also supports the Industrialisation of Defence capabilities in Saudi Arabia. Discussions have commenced with the customer for the company to continue to provide these support services for a further five years.

Under the Saudi British Defence Co-operation Programme (SBDCP) agreement, the Group discharges a number of contracts, including support to the Tornado fleet, provision of Officer and Aircrew Training and Technician training for the Royal Saudi Air Force, as well as technical training, engineering and logistics services for the Royal Saudi Naval Forces.

Following the completion of the previous five-year SBDCP funding arrangement on 31 December 2021, we have reached an agreement with the Saudi Arabian government to continue to provide these services for a further five years through to 31 December 2026. An Instruction To Proceed for the full five-year contract has now been received from the Royal Saudi Air Force.

All 22 Hawk aircraft assembled in-Kingdom have now been completed. The final aircraft remains subject to formal acceptance by the Royal Saudi Air Force, and this is anticipated to occur by the end of July 2022.

Following the Saudi Arabia Military Industries purchase of Advanced Electronics Company in 2021, we continue to review our portfolio of interests in a number of industrial companies in Saudi Arabia. We continue to explore opportunities to collaborate with key local partners, including Saudi defence entities, to deliver further In-Kingdom Industrial Participation, in line with the Kingdom's National Transformation Plan and Vision 2030.

Future Programmes

The Group continues to invest in promising new and innovative technologies for the future including the exploration and development of e-products capability with a number of partners. BAE Systems is one of a consortium of investors in the Eve Urban Air Mobility (UAM) electric vertical take-off and landing (eVTOL) company, aimed at designing, testing, and manufacturing small, zero-emission aircraft. We have also signed a Memorandum of Understanding with Embraer S.A. confirming our intention to create a joint venture to develop a defence variant of Eve's eVTOL aircraft.

MBDA

After winning a number of key domestic and export orders in 2021, MBDA has continued this success in the first half of 2022, and the business is well placed to benefit from increased defence spending in a number of European countries along with further international opportunities.

In the period, significant export market orders were received. Aligned with the Rafale platform sales, MBDA has been awarded an air weapons package from the UAE and a further air weapons package for Greece. Following the Naval Group Defence and Intervention Frigate platform success in Greece, MBDA has been awarded a Naval Based Air Defence weapons package for the frigates.

With European countries recognising the importance of sovereign capabilities in the missile sector and re-evaluating their needs, Poland has accelerated its ground-based air defence campaign, awarding the first phase to MBDA for the Common Anti Air Modular Missiles and launchers.

Production is being maintained across the MBDA product range, despite supply chain pressure in the aftermath of the pandemic and as a result of the Ukraine crisis. Progress continues across a number of assessment and development phase programmes including Future Cruise and Anti-Ship Weapon; MICA Next Generation, Spear Capability 3 and Aster Block 1 New Technology.

Looking forward

Future Typhoon production and support sales are underpinned by existing contracts. Discussions continue in relation to potential further contract awards for Typhoon, which would extend current production revenues. Production of rear fuselage assemblies for the F-35 is expected to be sustained at the current full rate levels. The business plays a significant role in the F-35 sustainment programme in support of Lockheed Martin, and revenues will continue to grow as the number of aircraft deployed increases over the coming years. Defence and security remains a priority for the UK government. The UK Combat Air Strategy provides the base to enable long-term planning and investment in a key strategic part of the business.

In Saudi Arabia, the In-Kingdom Industrial Participation programme continues to make good progress consistent with our long-term strategy, as well as the Saudi Arabian government's National Transformation Plan and Vision 2030. Our in-Kingdom support business is expected to remain stable underpinned by long-standing contracts renewed every five years.

In order to provide ongoing capability to international customers, the Group is reliant on the continued approval of export licences by a number of governments. The withholding of such export licences may have an adverse effect on the Group's provision of capability to the Kingdom of Saudi Arabia and the Group will seek to work closely with the UK government to manage the impact of any such occurrence.

MBDA has a strong order backlog and positively evolving opportunity pipeline supporting future years' sales. Development programmes continue to improve the long-term capabilities of the business in air, land and sea domains.

Segmental performance: Maritime

Maritime, with 22,800 employees[1], comprises the Group's UK-based maritime and land activities, as well as the Group's Australian business.

Financial performance[2]

Financial performance measures as defined by the Group[3]

	Six months ended 30 June 2022	Six months ended 30 June 2021[2]	Year ended 31 December 2021[2]
Sales	**£2,155m**	£2,028m	£4,169m
Underlying EBIT	**£182m**	£184m	£351m
Return on sales	**8.4%**	9.1%	8.4%
Operating business cash flow	**£(22)m**	£(17)m	£374m
Order intake	**£4,108m**	£3,082m	£5,688m
Order backlog	**£14.2bn**	£11.8bn	£12.1bn

Financial performance measures derived from IFRS[4]

	Six months ended 30 June 2022	Six months ended 30 June 2021[2]	Year ended 31 December 2021[2]
Revenue	**£2,100m**	£2,000m	£4,093m
Operating profit	**£180m**	£182m	£347m
Return on revenue	**8.6%**	9.1%	8.5%
Cash flow from operating activities	**£46m**	£44m	£534m
Order book	**£13.3bn**	£11.0bn	£11.6bn

– Sales were up by 6% at £2.2bn on a constant currency basis[5], due to increased volumes on Dreadnought and Type 26 programmes.

– Return on sales was at 8.4%. 2021 benefitted from risk releases across a number of programmes.

– The operating business cash outflow was £22m, reflecting utilisation of UK munitions advanced funding.

– Order backlog increased to £14.2bn, reflecting ongoing Dreadnought funding.

1. Including share of equity accounted investments.
2. Financial information for 2021 in relation to the Maritime segment has been re-presented to reflect the organisational changes which took effect at the start of 2022, whereby the management of the Group's Australia business was transferred to the Maritime segment. In addition, the management of certain other Maritime segment activities was transferred to the Group's new Digital Intelligence business, reported within the Cyber & Intelligence segment. See note 2 for further details of the re-presentation.
3. For alternative performance measure definitions see glossary on page 9.
4. International Financial Reporting Standards.
5. Current period compared with prior period translated at current period exchange rates.

Operational performance

Maritime

Naval Ships

The Type 26 programme continues to progress with construction underway on the first three City Class Type 26 frigates. Preparations continue for the first of class, Glasgow, to depart our Govan shipyard and enter the water later this year. She will then transition to our Scotstoun shipyard where further outfit, test and commissioning will take place. Half of the major units of the second ship in class, Cardiff, are erected, while the third ship, Belfast, continues to progress after entering manufacture in June 2021.

The Canadian Surface Combatant programme work is progressing on the Definition Phase Contract, where we have the responsibility for Warship Design and are currently in the Preliminary Design Review stage. Work is also progressing on the Support Services subcontract, which is a four-year framework agreement to provide technical assistance to Irving Shipbuilding Inc., through intellectual property licensing, and the provision of consultancy services to help upskill its workforce ahead of cutting steel on the first ship.

In our Combat Systems business, the successful delivery of major upgrades to the combat system capabilities on board both HMS Queen Elizabeth and HMS Prince of Wales enabled Carrier Strike Group tasking whilst achieving 99.5% equipment availability for the fleet. Our Combat Systems business also continues to focus on the future, forging new partnerships and investing in new open architecture and cloud-ready mission systems.

Submarines

Our Submarines business is a member of the Dreadnought Alliance, working alongside the Submarine Delivery Agency (SDA) and Rolls-Royce to deliver the replacement for the Royal Navy's Vanguard Class, which carries the UK's nuclear deterrent. Four Dreadnought Class submarines will be built in Barrow, with the first of these due to be in operational service in the early 2030s. Construction of the first and second submarines continues to advance. The value of the programme to the company to date is £10.3bn, with additional contract funding of £2.5bn received to date in 2022 as part of Delivery Phase 3 (DP3). DP3 will see the first submarine, Dreadnought, exit our Barrow site to begin sea trials, laying the foundation to sustain the Continuous at Sea Deterrent.

In April of this year, BAE Systems Submarines entered into the Submarine Build Capability Contract with the SDA, which maintains the business' role as the lead for the design and build of nuclear submarines within the UK submarine enterprise.

Four Astute Class submarines have been delivered to the Royal Navy, while the fifth, Anson, is scheduled to exit the Barrow shipyard for sea trials later this year. The remaining two submarines, Agamemnon and Agincourt, are at an advanced stage of construction in Barrow.

Early design and mobilisation activities for the Submersible Ship Nuclear Replacement (SSNR), the programme to deliver a replacement for the Astute class, are progressing, with the programme recently entering the Functional Design phase.

Maritime Services

Our Maritime Services business has successfully delivered continued support to the UK Ministry of Defence and the Royal Navy at HM Naval Base Portsmouth. Service delivery under the Ministry of Defence's Future Maritime Support Programme (FMSP) came into effect on 1 October 2021 and will continue for at least five years. The Hard Facilities Management Alongside Services contract is delivered by the KBS Maritime joint venture with KBR which was established last year.

Under the FMSP Ship Engineering Management contract, we continue to maintain, repair, upgrade and prepare the Portsmouth flotilla. This includes support to HMS Prince of Wales, currently the NATO flagship, ahead of and during Exercise Cold Response 2022, a major NATO exercise in Norway.

We are supporting the Royal Navy's Batch 2 Offshore Patrol Vessels around the globe with our teams deployed to North America, the Caribbean, the South Atlantic and the Indo-Pacific regions during the period. We have maintained more than 98% availability for these five vessels.

The Type 45 Propulsion Improvement Programme is progressing, with three ships simultaneously in the programme during the period. HMS Dauntless is scheduled to conclude sea trials in Q3 ahead of a return to the fleet, HMS Daring has commenced her work in Birkenhead, and HMS Dragon's upgrade is being conducted alongside a deep maintenance upkeep in Portsmouth.

An agreement was signed with Barzan Maintenance Shield and the Qatar Emiri Naval Force (QENF) outlining the parties' intent to develop Warship and Naval Base Management Services for the QENF.

In the Underwater Weapons business stream, the Torpedo Repair and Maintenance contract for in-service support to the UK's Royal Navy continues to perform well. The £270m Spearfish torpedo upgrade programme, delivered for the UK Ministry of Defence and Royal Navy, continues to produce modification kits as part of the production phase which commenced in 2021.

Land UK

The business has started transitioning to the Next Generation Munitions Supply Solution (NGMS) contract, which supersedes the Munitions Acquisition Supply Solution (MASS) contract at the end of this year and details the supply of munitions to the Ministry of Defence for the next 15 years. Both the MASS and NGMS programmes are progressing well and the business is on track to achieve agreed timelines. The £90m NGMS investment programme is also advancing at pace, with £20m of this committed to updating and expanding manufacturing equipment and infrastructure by the end of 2023.

Mobilisation of the Challenger 3 and Mechanised Infantry Vehicle contracts secured by the RBSL joint venture are progressing well. Supply chain manufacturing has begun, with the first steel cut on the vehicle's turret structures. RBSL's multi-million pound investment in its Telford manufacturing site included the installation of grit blast and paint booths. Additional works to complete the facility upgrade ready for Challenger 3 and Boxer production are progressing as planned.

Australia

Work on the Hunter Class Frigate programme continues, with three prototype blocks now under construction. Following the successful achievement of the Systems Definition Review, the programme is now undergoing a Preliminary Design Review process, which is a technical evaluation that ensures the design is operationally effective and sets the pace for detailed design and planning phases. The business and the Commonwealth of Australia have agreed to revise the cut steel date for the first ship, which will allow an accelerated build schedule as greater design maturity will reduce the risk of rework, allowing the ships to be built more efficiently.

The Jindalee Operational Radar Network programme is delivering against schedule and operational support continues to meet availability requirements. Trials of prototype technology have been successfully demonstrated to the customer at site and proven the maturity of the hardware design.

Hawk Mk127 Lead-In Fighter aircraft availability continues to meet customer expectations for Australian Defence Force pilot training.

F-35 Sustainment activity is continuing to build at Williamtown across the South Pacific Regional Airframe Depot, Squadron Operational Maintenance Support and Warehousing.

The Maritime Sustainment line of business is achieving significant progress with the recent undocking of HMAS Toowoomba at the Henderson Shipyard in Western Australia. HMAS Ballarat and HMAS Stuart are currently the focus of significant upgrade activity in the shipyard.

Red Ochre LABS, our internal Australian R&D hub, continues to grow. Expertise is being developed and exploited in autonomous systems, high speed weapons, high frequency systems and electronic warfare. Emerging and disruptive technologies are being applied to deliver complex solutions like common autonomous architectures, artificially intelligent uncrewed ground vehicles and leading electronic support measures like Mantlet©.

Looking forward

Maritime

There is a positive outlook based on long-term contracted positions on major programmes and an increasing pipeline of opportunities. Within Submarines, the business is executing on two long-term build programmes, Astute and Dreadnought, and has commenced early-stage design activities for SSNR. On the Astute Class programme, the fifth of class vessel is undergoing final commissioning activities and the two remaining boats are in build. On the Dreadnought programme, manufacturing activities continue on the first two boats of a four-boat programme. Investment continues in the Barrow facilities in order to provide the capabilities to deliver these long-term programmes through the decade and beyond. On the SSNR programme, work has recently begun on the Functional Design. In shipbuilding, sales through the decade and beyond are underpinned by the manufacture of Type 26 frigates. The through-life support of surface ship platforms provides a sustainable business in technical services and mid-life upgrades.

The Australian business has long-term sustainment and upgrade activities in maritime, air, wide-area surveillance, missile defence and electronic systems. It has expanded into ship design and production on the Hunter Class Frigate programme, which will drive growth in the coming years.

Land UK

Future work will be underpinned by existing support contracts and the contracted workshare on the Mechanised Infantry Vehicle and Challenger 3 Main Battle Tank programmes. Munitions supply continues under the Munitions Acquisition Supply Solution partnering agreement which will be followed in 2023 by the recently-agreed 15-year Next Generation Munitions Supply Solution.

Segmental performance: Cyber & Intelligence

Cyber & Intelligence, with 10,900 employees[1], comprises the US-based Intelligence & Security business and the newly-formed UK-headquartered Digital Intelligence business, and covers the Group's cyber security, secure government and defence, and data and digital activities.

Financial performance[2]

Financial performance measures as defined by the Group[3]

	Six months ended 30 June 2022	Six months ended 30 June 2021[2]	Year ended 31 December 2021[2]
Sales	**£1,050m**	£944m	£1,923m
Underlying EBIT	**£123m**	£97m	£179m
Return on sales	**11.7%**	10.3%	9.3%
Operating business cash flow	**£69m**	£106m	£201m
Order intake	**£1,254m**	£1,161m	£2,034m
Order backlog	**£2.3bn**	£1.9bn	£1.8bn

Financial performance measures derived from IFRS[4]

	Six months ended 30 June 2022	Six months ended 30 June 2021[2]	Year ended 31 December 2021[2]
Revenue	**£1,050m**	£944m	£1,923m
Operating profit	**£108m**	£95m	£177m
Return on revenue	**10.3%**	10.1%	9.2%
Cash flow from operating activities	**£85m**	£118m	£233m
Order book	**£1.6bn**	£1.3bn	£1.2bn

- The Digital Intelligence business saw 7% sales growth driven by good utilisation and performance. The US Intelligence & Security business grew sales by 6% on a constant currency basis[5], driven by the Bohemia Interactive Simulations acquisition. On a reported exchange rate basis, segment sales were up 11.2%.
- Return on sales was 11.7%, an expansion of 140bps led by good utilisation and programme performance.
- Operating business cash flow in the first half of the year was £69m.
- Order backlog remained in line with the year-end, with a book-to-bill ratio[6] of 1.2.

1. Including share of equity accounted investments.
2. Financial information for 2021 in relation to the Cyber & Intelligence segment has been re-presented to reflect the organisational changes which took effect at the start of 2022, when the Group established its Digital Intelligence business, bringing together the Group's non-US digital and data capabilities to further strengthen how we deliver these services and capabilities for our customers. See note 2 for further details of the re-presentation.
3. For alternative performance measure definitions see glossary on page 9.
4. International Financial Reporting Standards.
5. Current period compared with prior period translated at current period exchange rates.
6. Ratio of Order intake to Sales.

Operational performance

Intelligence & Security

Air and Space Force Solutions

On the US Air Force Intercontinental Ballistic Missile Integration Support Contractor (ISC) programme, we continue to provide programme management, systems engineering, integration and testing, sustainment and cyber defence support, with cumulative funding approaching the previously increased $1.25bn (£1.0bn) contractual ceiling. In late June, the Air Force announced we were awarded the recompete of the program under an 18-year ISC 2.0 contract with a ceiling value of $12bn (£10bn). This award has been protested, as sometimes happens, with a protest decision expected during the second half.

We were awarded a $15m (£12m) Indefinite Delivery, Indefinite Quantity contract by the Naval Air Warfare Aircraft Division to integrate the C-27J into the US Coast Guard's (USCG) Medium Range Surveillance Aircraft Fleet. The aircraft will help the USCG to fulfil its maritime patrol, drug and migrant interdiction, disaster response, and search and rescue missions more effectively.

The business successfully completed prototype tests of its Multiple Object Tracking Radar, a mobile instrumentation radar, demonstrating its ability to meet critical performance parameters – range, transportability, accuracy, and beacon tracking – that other radars of comparable cost, size, weight and power cannot.

Integrated Defense Solutions

I&S continues to perform on the five-year, $478m (£393m) sole-source contract to continue supporting weapon systems on board US Ohio and UK Vanguard Class submarines, as well as future US Columbia Class and UK Dreadnought Class submarines.

The U.S Army has awarded I&S a $699m (£575m), five-year contract for Defense Supercomputing Resource Center operations, maintenance, and management services. We will provide technical support to advance high-performance computer services, capabilities, and infrastructure across five sites in the US.

Intelligence Solutions

We were awarded one of the prime positions on a multi-award $300m (£247m) Indefinite Delivery, Indefinite Quantity contract to support critical mission operations for a government customer.

BAE Systems continues to execute on a $506m (£416m) contract to provide industry-leading and multi-disciplinary analytic support capabilities supporting first responders, war fighters and policy makers. These tailored analytic services span a multitude of mission specifications and operating environments. Services include, but are not limited to: source discovery and collection; time-dominant and long-term analytic assessments; cartographic production; and multi-media content generation.

In March, we completed the acquisition of Bohemia Interactive Simulations (BISim), a global software developer of simulation and training solutions for military organisations around the world. BISim has more than 325 employees in the US, UK, Australia, the Czech Republic and Slovakia. Since the acquisition, BISim was awarded the £7.5m DVS2 contract by the UK Ministry of Defence, continuing its delivery of the standard for virtual training.

Digital Intelligence

The business performed strongly in the first half of 2022, with the order backlog growing in the period. The business delivered revenue and profit growth with National Security, C5ISR and Digital Defence Services remaining the key drivers of growth. C5ISR includes Command, Control, Computers, Communication, Cyber, Intelligence, Surveillance and Reconnaissance activities.

Programme execution continues to be strong and well controlled across all areas supporting underlying margin growth. Operating costs continue to be tightly controlled with investment expenditure being prioritised.

Government businesses

Within National Security, operational cyber and digital transformation remain the focus areas, and the business is prioritising growth in these areas through resourcing and geographical presence. The key framework through which most of the business is operated has been renewed and customers are keen to secure work with us for multiple years which provides certainty in the form of backlog going forward. The business continues to invest in future talent through development academies.

The International Government business continues to be successful in delivering key programmes into its existing customers, and challenges in overseas travel continue to be overcome. Bidding activity into new markets has picked up as a result of COVID-19 restrictions around the world generally easing through the first half of the year. Recruitment of staff with niche skills remains a challenge.

The UK Central Government business has renewed various key programmes across the Foreign, Commonwealth & Development Office, UK Border Force and Health sectors. The team also won a procurement to be the Delivery Partner for the Super Computer Exploitation Programme at the Met Office, which will enable us to continue to co-ordinate and assure the delivery for the programme for five years.

Within our Digital Defence Services business customer demand for product and service solutions remains high. In-Space Missions has built a satellite which will be the first to be launched from UK soil this summer, in a collaboration between the Ministry of Defence and international partners.

Financial Services

Agreement signed for the sale of BAE Systems' financial crime detection business from Cyber & Intelligence with completion expected in the coming months.

Looking forward

Intelligence & Security

The outlook for the US government services sector is robust with the opportunity for mid-term growth, although market conditions remain highly competitive and continue to evolve in response to shifting government priorities. The US business remains well positioned and will continue to leverage its established market positions and reputation for reliable and adaptable performance to meet customer demands for innovative, cost-effective and cyber-hardened solutions to pursue both recompeted contracts and new business across its portfolio of systems integration, sustainment and modernisation solutions for military and intelligence customers.

Digital Intelligence

The services and products we offer in Digital Intelligence are focussed on ensuring that we are well placed to deliver growth as UK cyber, data and digital budgets increase and cyber security and information advantage continue to be an important part of a nation's security and economic prosperity. Government, Defence and Space continue to be our key target markets, both in the UK and overseas.

Responsibility statement of the directors in respect of the half-yearly financial report

Each of the directors (as detailed below) confirms that to the best of his / her knowledge:

- The condensed set of financial statements has been prepared in accordance with United Kingdom adopted International Accounting Standard 34 Interim Financial Reporting.
- The interim management report on pages 1 to 33 includes a fair review of the information required by:
  (a) DTR 4.2.7R of the Disclosure Guidance and Transparency Rules (DTR), being an indication of important events that have occurred during the first six months of the financial year and their impact on the condensed set of financial statements; and a description of the principal risks and uncertainties for the remaining six months of the financial year; and
  (b) DTR 4.2.8R of the DTR, being related party transactions that have taken place in the first six months of the current financial year and that have materially affected the financial position or the performance of the Company during that period; and any changes in the related party transactions described in the last annual report that could do so.

For and on behalf of the directors:

Sir Roger Carr

Chairman
27 July 2022

Directors

Sir Roger Carr	Chairman
Charles Woodburn	Chief Executive
Tom Arseneault	President and Chief Executive Officer of BAE Systems, Inc.
Brad Greve	Group Finance Director
Nick Anderson	Non-executive director
Crystal E. Ashby	Non-executive director
Dame Elizabeth Corley	Non-executive director
Jane Griffiths	Non-executive director
Chris Grigg	Non-executive director
Ewan Kirk	Non-executive director
Stephen Pearce	Non-executive director
Nicole Piasecki	Non-executive director

Independent review report to BAE Systems plc

Conclusion

We have been engaged by the company to review the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2022 which comprises the Condensed consolidated income statement, the Condensed consolidated statement of comprehensive income, the Condensed consolidated statement of changes in equity, the Condensed consolidated balance sheet, the Condensed consolidated cash flow statement and related notes 1 to 15.

Based on our review, nothing has come to our attention that causes us to believe that the condensed set of financial statements in the half-yearly financial report for the six months ended 30 June 2022 is not prepared, in all material respects, in accordance with United Kingdom adopted International Accounting Standard 34 and the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

Basis for Conclusion

We conducted our review in accordance with International Standard on Review Engagements (UK) 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Financial Reporting Council for use in the United Kingdom. A review of interim financial information consists of making inquiries, primarily of persons responsible for financial and accounting matters, and applying analytical and other review procedures. A review is substantially less in scope than an audit conducted in accordance with International Standards on Auditing (UK) and consequently does not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. Accordingly, we do not express an audit opinion.

As disclosed in note 1, the annual financial statements of the group will be prepared in accordance with United Kingdom adopted international accounting standards. The condensed set of financial statements included in this half-yearly financial report has been prepared in accordance with United Kingdom adopted International Accounting Standard 34, "Interim Financial Reporting".

Conclusion Relating to Going Concern

Based on our review procedures, which are less extensive than those performed in an audit as described in the Basis for Conclusion section of this report, nothing has come to our attention to suggest that the directors have inappropriately adopted the going concern basis of accounting or that the directors have identified material uncertainties relating to going concern that are not appropriately disclosed.

This conclusion is based on the review procedures performed in accordance with this ISRE (UK), however future events or conditions may cause the entity to cease to continue as a going concern.

Responsibilities of the directors

The directors are responsible for preparing the half-yearly financial report in accordance with the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

In preparing the half-yearly financial report, the directors are responsible for assessing the group's ability to continue as a going concern, disclosing as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the company or to cease operations, or have no realistic alternative but to do so.

Auditor's Responsibilities for the review of the financial information

In reviewing the half-yearly financial report, we are responsible for expressing to the company a conclusion on the condensed set of financial statement in the half-yearly financial report. Our conclusion, including our Conclusions Relating to Going Concern, are based on procedures that are less extensive than audit procedures, as described in the Basis for Conclusion paragraph of this report.

Use of our report

This report is made solely to the company in accordance with International Standard on Review Engagements (UK) 2410 "Review of Interim Financial Information Performed by the Independent Auditor of the Entity" issued by the Financial Reporting Council. Our work has been undertaken so that we might state to the company those matters we are required to state to it in an independent review report and for no other purpose. To the fullest extent permitted by law, we do not accept or assume responsibility to anyone other than the company, for our review work, for this report, or for the conclusions we have formed.

Deloitte LLP
Statutory Auditor
London
United Kingdom

27 July 2022

Condensed consolidated income statement (unaudited)

	Notes	**Six months ended 30 June 2022** £m	**Six months ended 30 June 2022** £m	Six months ended 30 June 2021 £m	Six months ended 30 June 2021 £m
Continuing operations					
Revenue	2		**9,739**		9,339
Operating costs			**(8,816)**		(8,475)
Other income			**58**		403
Share of results of equity accounted investments			**47**		36
Operating profit	2		**1,028**		1,303
Financial income[1]		**13**		13	
Financial expense[1]		**(262)**		(165)	
Net finance costs	3		**(249)**		(152)
Profit before taxation			**779**		1,151
Taxation expense	4		**(132)**		(49)
Profit for the period			**647**		1,102
Attributable to:					
Equity shareholders			**615**		1,000
Non-controlling interests			**32**		102
			647		1,102
Earnings per share	5				
Basic earnings per share			**19.6p**		31.3p
Diluted earnings per share			**19.4p**		31.1p

1. Gains on foreign exchange for the six months ended 30 June 2021 have been reclassified from financial income to financial expense. See note 3 for details.

Condensed consolidated statement of comprehensive income (unaudited)

	Six months ended 30 June 2022			Six months ended 30 June 2021		
	Other reserves £m	**Retained earnings £m**	**Total £m**	Other reserves £m	Retained earnings £m	Total £m
Profit for the period	**–**	**647**	**647**	–	1,102	1,102
Other comprehensive income						
Items that will not be reclassified to the income statement:						
Subsidiaries:						
Remeasurements on post-employment benefit schemes	**–**	**3,142**	**3,142**	–	2,157	2,157
Tax on items that will not be reclassified to the income statement	**–**	**(351)**	**(351)**	–	(320)	(320)
Share of the other comprehensive income of associates and joint ventures accounted for using the equity method (net of tax)	**–**	**100**	**100**	–	55	55
Items that may be reclassified to the income statement:						
Subsidiaries:						
Currency translation on foreign currency net investments	**1,008**	**–**	**1,008**	(111)	–	(111)
Reclassification of cumulative currency translation reserve on disposal	**–**	**–**	**–**	(9)	–	(9)
Fair value losses arising on hedging instruments during the period	**(95)**	**–**	**(95)**	(4)	–	(4)
Cumulative fair value loss/(gain) on hedging instruments reclassified to the income statement	**1**	**–**	**1**	(23)	–	(23)
Tax on items that may be reclassified to the income statement	**24**	**–**	**24**	6	–	6
Share of the other comprehensive income of associates and joint ventures accounted for using the equity method (net of tax)	**20**	**–**	**20**	(9)	–	(9)
Total other comprehensive income/(expense) for the period (net of tax)	**958**	**2,891**	**3,849**	(150)	1,892	1,742
Total comprehensive income/(expense) for the period	**958**	**3,538**	**4,496**	(150)	2,994	2,844
Attributable to:						
Equity shareholders	**937**	**3,493**	**4,430**	(153)	2,892	2,739
Non-controlling interests	**21**	**45**	**66**	3	102	105
	958	**3,538**	**4,496**	(150)	2,994	2,844

Condensed consolidated statement of changes in equity (unaudited)

	Attributable to equity holders of BAE Systems plc						
	Issued share capital £m	Share premium £m	Other reserves £m	Retained earnings £m	Total £m	Non-controlling interests £m	Total equity £m
Balance at 1 January 2022	85	1,252	5,887	212	7,436	232	7,668
Profit for the period	–	–	–	615	615	32	647
Total other comprehensive income for the period	–	–	937	2,878	3,815	34	3,849
Total comprehensive income for the period	–	–	937	3,493	4,430	66	4,496
Share-based payments (inclusive of tax)	–	–	–	66	66	–	66
Cumulative fair value loss on hedging instruments transferred to the balance sheet (net of tax)	–	–	5	–	5	–	5
Ordinary share dividends	–	–	–	(480)	(480)	(75)	(555)
Purchase of own shares	(1)	–	1	(130)	(130)	–	(130)
At 30 June 2022	**84**	**1,252**	**6,830**	**3,161**	**11,327**	**223**	**11,550**
Balance at 1 January 2021	87	1,249	5,923	(2,616)	4,643	278	4,921
Profit for the period	–	–	–	1,000	1,000	102	1,102
Total other comprehensive income for the period	–	–	(153)	1,892	1,739	3	1,742
Total comprehensive income/(expense) for the period	–	–	(153)	2,892	2,739	105	2,844
Share-based payments (inclusive of tax)	–	–	–	44	44	–	44
Cumulative fair value gain on hedging instruments transferred to the balance sheet (net of tax)	–	–	(28)	–	(28)	–	(28)
Ordinary share dividends	–	–	–	(461)	(461)	(172)	(633)
At 30 June 2021	**87**	**1,249**	**5,742**	**(141)**	**6,937**	**211**	**7,148**

Condensed consolidated balance sheet (unaudited)

	Notes	**30 June 2022 £m**	31 December 2021 £m
Non-current assets			
Intangible assets		**12,616**	11,716
Property, plant and equipment		**3,058**	2,852
Right-of-use assets		**1,472**	1,091
Investment property		**65**	67
Equity accounted investments		**634**	554
Other investments		**96**	76
Other receivables		**475**	551
Post-employment benefit surpluses	6	**1,583**	483
Other financial assets		**334**	305
Deferred tax assets		**263**	622
		20,596	18,317
Current assets			
Inventories		**951**	811
Trade, other and contract receivables		**5,930**	4,825
Current tax		**92**	71
Other financial assets		**354**	194
Cash and cash equivalents		**1,956**	2,917
Assets held for sale		**56**	–
		9,339	8,818
Total assets		**29,935**	27,135
Non-current liabilities			
Loans		**(5,136)**	(4,604)
Lease liabilities		**(1,418)**	(1,083)
Contract liabilities		**(466)**	(519)
Other payables		**(1,306)**	(1,248)
Post-employment benefit obligations	6	**(643)**	(2,607)
Other financial liabilities		**(296)**	(302)
Deferred tax liabilities		**–**	(77)
Provisions		**(344)**	(331)
		(9,609)	(10,771)
Current liabilities			
Loans and overdrafts		**(53)**	(457)
Lease liabilities		**(224)**	(212)
Contract liabilities		**(3,036)**	(2,874)
Trade and other payables		**(4,867)**	(4,636)
Other financial liabilities		**(268)**	(214)
Current tax		**(34)**	(27)
Provisions		**(259)**	(276)
Liabilities held for sale		**(35)**	–
		(8,776)	(8,696)
Total liabilities		**(18,385)**	(19,467)
Net assets		**11,550**	7,668
Capital and reserves			
Issued share capital		**84**	85
Share premium		**1,252**	1,252
Other reserves		**6,830**	5,887
Retained earnings		**3,161**	212
Total equity attributable to equity holders of BAE Systems plc		**11,327**	7,436
Non-controlling interests		**223**	232
Total equity		**11,550**	7,668

Condensed consolidated cash flow statement (unaudited)

	Notes	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021 £m
Profit for the period		**647**	1,102
Taxation expense		**132**	49
Adjustment in respect of research and development expenditure credits		**(19)**	(12)
Share of results of equity accounted investments		**(47)**	(36)
Net finance costs		**249**	152
Depreciation, amortisation and impairment		**361**	337
Profit on disposal of property, plant and equipment, and investment property		**(2)**	(181)
Gain on disposal of businesses and non-current other investments		**(7)**	(157)
Cost of equity-settled employee share schemes		**47**	43
Movements in provisions		**(28)**	(62)
Difference between pension funding contributions paid and the pension charge		**25**	7
(Increase)/decrease in working capital:			
Inventories		**(74)**	(26)
Trade, other and contract receivables		**(692)**	(192)
Trade and other payables		**69**	(285)
Taxation paid		**(168)**	(116)
Net cash flow from operating activities		**493**	623
Dividends received from equity accounted investments		**87**	11
Interest received		**9**	12
Principal element of finance lease receipts		**5**	5
Purchases of property, plant and equipment, and investment property		**(176)**	(146)
Purchases of intangible assets		**(28)**	(38)
Purchase of non-current other investments		**(8)**	–
Proceeds from sale of property, plant and equipment, and investment property		**4**	251
Proceeds from sale of non-current other investments		**7**	–
Purchase of subsidiary undertakings, net of cash and cash equivalents acquired	11	**(162)**	(15)
Cash flow in respect of held for sale assets and business disposals, net of cash and cash equivalents disposed	12	**1**	202
Net cash flow from investing activities		**(261)**	282
Interest paid		**(128)**	(129)
Equity dividends paid	7	**(480)**	(461)
Purchase of own shares		**(130)**	–
Dividends paid to non-controlling interests		**(75)**	(172)
Partial disposal of shareholding in subsidiary undertaking		**–**	27
Principal element of lease payments		**(142)**	(128)
Cash inflow from derivative financial instruments (excluding cash flow hedges)		**160**	20
Cash outflow from derivative financial instruments (excluding cash flow hedges)		**(53)**	(101)
Cash flow from movement in cash collateral		**–**	(4)
Cash outflow from repayment of loans		**(400)**	–
Net cash flow from financing activities		**(1,248)**	(948)
Net decrease in cash and cash equivalents		**(1,016)**	(43)
Cash and cash equivalents at 1 January		**2,917**	2,667
Effect of foreign exchange rate changes on cash and cash equivalents		**55**	(15)
Cash and cash equivalents at end of period		**1,956**	2,609
Comprising:			
Cash and cash equivalents		**1,956**	2,611
Overdrafts		**–**	(2)
Cash and cash equivalents at end of period		**1,956**	2,609

Notes to the condensed half-yearly financial statements

1. Preparation

Basis of preparation and statement of compliance

The annual financial statements of the company will be prepared in accordance with United Kingdom adopted international accounting standards (IFRS). The condensed consolidated set of financial statements included in this half-yearly financial report has been prepared in accordance with United Kingdom adopted International Accounting Standard 34, "Interim Financial Reporting". These condensed consolidated half-yearly financial statements do not comprise statutory accounts within the meaning of Section 435 of the Companies Act 2006 and should be read in conjunction with the Annual Report 2021. The comparative figures for the year ended 31 December 2021 are not the Group's statutory accounts for that financial year. Those financial statements have been reported upon by the Group's auditor and delivered to the registrar of companies. The report of the auditor was unqualified, did not include a reference to any matters to which the auditor drew attention by way of emphasis without qualifying their report and did not contain statements under Section 498 (2) or (3) of the Companies Act 2006.

The accounting policies adopted in the preparation of these condensed consolidated half-yearly financial statements to 30 June 2022 are consistent with the accounting policies applied by the Group in its consolidated financial statements as at, and for the year ended, 31 December 2021 as required by the Disclosure Guidance and Transparency Rules of the UK's Financial Conduct Authority.

New and amended standards adopted by the Group

No new or amended standards which became applicable for the current reporting period had a material impact on the Group or required the Group to change its accounting policies.

Key Sources of estimation uncertainty

The application of the Group's accounting policies requires the use of estimates. Recent global macroeconomic events have resulted in increased uncertainty on costs and supply chains. While this uncertainty continues, the Group will need to consider a range of estimates and assumptions in the application of its accounting policies and management's assessment of the carrying values of assets and liabilities. In the event that these estimates or assumptions prove to be incorrect, there may be an adjustment to the carrying values of assets and liabilities within the next year. Potential areas of the Group's financial statements which could be materially impacted may include, but are not limited to:

Revenue and profit recognition on contracts

The Group accounts for revenue in accordance with IFRS 15 Revenue from Contracts with Customers. For most of the Group's contracts, revenue and associated margin are recognised progressively over time as costs are incurred, and as risks have been mitigated or retired.

The ultimate profitability of contracts is based on estimates of revenue and costs, including allowances for technical and other risks which are reliant on the knowledge and experience of the Group's project managers, engineers and finance and commercial professionals. Material changes in these estimates could affect the profitability of individual contracts. Revenue and cost estimates are reviewed and updated at least quarterly, and more frequently as determined by events or circumstances.

The long-term nature of many of the Group's contracts means that judgements are made in estimating future costs on a contract, as well as when risks will be mitigated or retired. The impact of global supply chain issues, volatility in global gas and energy prices, and the ongoing response to climate change, have increased uncertainty in relation to these judgements and estimates. The Group continues to work closely and collaboratively with its key customers to continue to deliver effectively on its contracts and commitments. However, the volume, scale, complexity and long-term nature of its programmes mean that a range of calculated potential sensitivities would be wide-ranging and not practicable to calculate. Owing to the ongoing uncertainty regarding the potential future impact of the current uncertainties, the Group's estimates and assumptions related to revenue recognition could be impacted by issues such as reduced productivity as a result of operation disruption, production delays and increased costs as a result of disruption to the supply chain, changing working practices to move towards net zero, or where there is uncertainty as to the recovery from customers of programme costs incurred.

In 2021, the Group recognised £0.3bn of revenue in respect of performance obligations satisfied or partially satisfied in previous periods (2020 £0.3bn). This continues to provide an approximation of the potential revenue sensitivity arising as a result of management's estimates and assumptions for variable consideration, future costs, and technical and other risks. However this may not reflect the full potential impact on the contract receivables and contract liabilities balances.

Post-employment benefit obligations

A number of actuarial assumptions are made in assessing the value of post-employment benefit obligations, including discount rate, inflation rate, and mortality assumptions. For each of the actuarial assumptions used there is a wide range of possible values. Management estimates a point within that range which most appropriately reflects the Group's circumstances.

If estimates relating to these actuarial assumptions are no longer valid or change due to changing economic and social conditions, then the potential obligations due under these schemes could change significantly.

Discount and inflation rates could change significantly as a result of a prolonged economic downturn, monetary policy decisions and interventions or other macroeconomic issues. The impact of estimates made with regard to mortality projections may also change significantly, given the uncertainty in this area resulting from the COVID-19 pandemic.

Similarly, the values of many assets are subject to estimates and assumptions, in particular those which are held in unquoted pooled investment vehicles. The associated fair value of these unquoted pooled investments is estimated with consideration of the most recently available valuations provided by the investment or fund managers. These valuations inherently incorporate a number of assumptions including the impact of climate change on the underlying investments. The overall level of estimation uncertainty in valuing these assets could therefore give rise to a material change in valuation within the next 12 months.

Furthermore, estimates are required around the Group's ability to access its defined benefit surpluses, and on what basis, which then determines the associated rate of tax to apply. Depending on the outcome, judgement is then required to determine the presentation of any tax payable in recovering a surplus.

Note 6 provides more information on the key assumptions and analysis of their sensitivities.

Critical Judgements made in applying accounting policies

As noted in the 2021 Annual Report, no critical judgements have been made in the process of applying the Group's accounting policies, other than those involving estimates, that have had a significant effect on the amounts recognised in the financial statements.

2. Segmental analysis[1]

Sales[2] and revenue by reporting segment

	Sales[2]		Deduct: Share of revenue of equity accounted investments		Add: Subsidiaries' revenue from equity accounted investments		Revenue	
	Six months ended 30 June 2022 £m	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m
Electronic Systems	**2,276**	2,142	**(27)**	(26)	**27**	26	**2,276**	2,142
Platforms & Services	**1,638**	1,595	**(22)**	(32)	**–**	2	**1,616**	1,565
Air	**3,497**	3,394	**(1,207)**	(1,039)	**573**	491	**2,863**	2,846
Maritime	**2,155**	2,028	**(58)**	(29)	**3**	1	**2,100**	2,000
Cyber & Intelligence	**1,050**	944	**–**	–	**–**	–	**1,050**	944
HQ	**157**	113	**(152)**	(110)	**–**	–	**5**	3
	10,773	10,216	**(1,466)**	(1,236)	**603**	520	**9,910**	9,500
Intra-group sales/revenue	**(192)**	(181)	**7**	3	**14**	17	**(171)**	(161)
	10,581	10,035	**(1,459)**	(1,233)	**617**	537	**9,739**	9,339

	Intra-group revenue		Revenue from external customers	
	Six months ended 30 June 2022 £m	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m
Electronic Systems	**54**	46	**2,222**	2,096
Platforms & Services	**17**	18	**1,599**	1,547
Air	**12**	19	**2,851**	2,827
Maritime	**27**	35	**2,073**	1,965
Cyber & Intelligence	**56**	40	**994**	904
HQ	**5**	3	**–**	–
	171	161	**9,739**	9,339

Sales[2] and revenue by customer location

	Sales[2]		Revenue	
	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021 £m
UK	**2,603**	2,388	**2,036**	1,927
Rest of Europe	**839**	644	**840**	635
US	**4,653**	4,332	**4,648**	4,330
Canada	**57**	70	**57**	70
Saudi Arabia	**1,061**	1,225	**1,069**	1,204
Qatar	**531**	527	**429**	484
Rest of Middle East	**156**	185	**114**	142
Australia	**416**	367	**416**	366
Rest of Asia and Pacific	**209**	220	**112**	172
Africa, and Central and South America	**56**	77	**18**	9
	10,581	10,035	**9,739**	9,339

Revenue from external customers by domain

	Six months ended 30 June 2022					Six months ended 30 June 2021[1]				
	Air £m	**Maritime £m**	**Land £m**	**Cyber £m**	**Total £m**	Air £m	Maritime £m	Land £m	Cyber £m	Total £m
Electronic Systems	**1,993**	**76**	**153**	**–**	**2,222**	1,818	59	219	–	2,096
Platforms & Services	**18**	**474**	**1,107**	**–**	**1,599**	17	494	1,036	–	1,547
Air	**2,835**	**16**	**–**	**–**	**2,851**	2,808	19	–	–	2,827
Maritime	**113**	**1,792**	**168**	**–**	**2,073**	124	1,691	150	–	1,965
Cyber & Intelligence	**131**	**209**	**74**	**580**	**994**	141	213	63	487	904
HQ	**–**	**–**	**–**	**–**	**–**	–	–	–	–	–
	5,090	**2,567**	**1,502**	**580**	**9,739**	4,908	2,476	1,468	487	9,339

Underlying EBIT[2] and operating profit/(loss) by reporting segment

	Underlying EBIT[2]		Non-recurring items[3]		Amortisation of programme, customer-related and other intangible assets		Financial and taxation expense of equity accounted investments		Operating profit/(loss)	
	Six months ended 30 June 2022 £m	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m	**Six months ended 30 June 2022 £m**	Six months ended 30 June 2021[1] £m
Electronic Systems	**359**	335	**–**	33	**(43)**	(41)	**–**	–	**316**	327
Platforms & Services	**146**	109	**–**	–	**–**	–	**(3)**	(2)	**143**	107
Air	**362**	360	**(1)**	131	**–**	–	**(16)**	(15)	**345**	476
Maritime	**182**	184	**–**	–	**–**	–	**(2)**	(2)	**180**	182
Cyber & Intelligence	**123**	97	**(7)**	–	**(8)**	(2)	**–**	–	**108**	95
HQ	**(60)**	(57)	**–**	182	**–**	–	**(4)**	(9)	**(64)**	116
	1,112	1,028	**(8)**	346	**(51)**	(43)	**(25)**	(28)	**1,028**	1,303
Net finance costs									**(249)**	(152)
Profit before taxation									**779**	1,151
Taxation expense									**(132)**	(49)
Profit for the period									**647**	1,102

Performance obligations

The Group's order book[4], reconciled to order backlog as defined by the Group, is shown below.

	30 June 2022 £bn	31 December 2021 £bn
Order backlog as defined by the Group	**52.7**	44.0
Deduct: Unfunded order backlog	**(2.4)**	(2.3)
Deduct: Share of order backlog of equity accounted investments	**(12.0)**	(10.1)
Add: Order backlog in respect of orders from equity accounted investments	**4.2**	3.9
Order book[4]	**42.5**	35.5

Prior year re-presentation

With effect from 2022, the Group has established a new Digital Intelligence business, bringing together our non-US digital and data capabilities to further strengthen how we deliver these services and capabilities for our customers. The new Digital Intelligence business is reported within the Cyber & Intelligence segment. In addition our BAE Systems Australia business transitioned from the Air segment to the Maritime segment. Comparative segmental financial information for 2021 has been re-presented in this report to reflect the new business structures. The tables below outline the impact on the key reported line items:

	Six months ended 30 June 2021					
	Sales[2]			Revenue		
	As reported £m	Adjustment £m	**Re-presented £m**	As reported £m	Adjustment £m	**Re-presented £m**
Electronic Systems	2,142	–	**2,142**	2,142	–	**2,142**
Platforms & Services	1,595	–	**1,595**	1,565	–	**1,565**
Air	3,827	(433)	**3,394**	3,279	(433)	**2,846**
Maritime	1,656	372	**2,028**	1,628	372	**2,000**
Cyber & Intelligence	861	83	**944**	861	83	**944**
HQ	129	(16)	**113**	19	(16)	**3**
	10,210	6	**10,216**	9,494	6	**9,500**
Intra-group sales/revenue	(175)	(6)	**(181)**	(155)	(6)	**(161)**
	10,035	–	**10,035**	9,339	–	**9,339**

	Six months ended 30 June 2021					
	Underlying EBIT[2]			Operating Profit		
	As reported £m	Adjustment £m	**Re-presented £m**	As reported £m	Adjustment £m	**Re-presented £m**
Electronic Systems	335	–	**335**	327	–	**327**
Platforms & Services	109	–	**109**	107	–	**107**
Air	407	(47)	**360**	522	(46)	**476**
Maritime	149	35	**184**	146	36	**182**
Cyber & Intelligence	84	13	**97**	84	11	**95**
HQ	(56)	(1)	**(57)**	117	(1)	**116**
	1,028	–	**1,028**	1,303	–	**1,303**

1. With effect from 2022, the Group has established a new Digital Intelligence business, bringing together our non-US digital and data capabilities to further strengthen how we deliver these services and capabilities for our customers. The new Digital Intelligence business is reported within the Cyber & Intelligence segment. In addition our BAE Systems Australia business transitioned from the Air segment to the Maritime segment. Comparative segmental financial information for 2021 has been re-presented in this report to reflect the new business structures.
2. Sales and underlying EBIT are alternative performance measures defined in the Financial glossary on page 9, they are presented here as our internal measure of segmental performance, to provide additional information on performance to the user, and to reconcile to the equivalent IFRS measure.
3. Non-recurring items in 2022 comprises £8m related to current and historical business transactions. (2021 comprises a £182m gain on disposal of investment property in HQ, a £7m gain in Electronic Systems in relation to a historical acquisition, and £157m from gains on disposal of subsidiaries and equity accounted investments recognised in Electronic Systems (£26m) and Air (£131m). £63m of the gain on disposal of AEC recognised in 2021 is attributable to non-controlling interest, details of which are available in note 12).
4. Order book represents the transaction price allocated to unsatisfied and partially satisfied performance obligations as defined by IFRS 15 Revenue from Contracts with Customers.

3. Net finance costs

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Financial income[1]	**13**	13
Financial expense[1]	**(262)**	(165)
Group net finance costs	**(249)**	(152)
Net finance costs:		
Group	**(249)**	(152)
Share of equity accounted investments	**(9)**	(15)
Total of Group and equity accounted investments' finance costs	**(258)**	(167)
Analysed as:		
Underlying net interest expense[2]:		
Group	**(117)**	(110)
Share of equity accounted investments	**(5)**	(12)
	(122)	(122)
Other:		
Group:		
Net interest expense on post-employment benefit obligations	**(19)**	(33)
Fair value and foreign exchange adjustments on financial instruments and investments	**(113)**	(9)
Share of equity accounted investments:		
Net interest expense on post-employment benefit obligations	**(1)**	(1)
Fair value and foreign exchange adjustments on financial instruments and investments	**(3)**	(2)
Total of Group and equity accounted investments finance costs	**(258)**	(167)

1. £80m of gains on foreign exchange for the six months ended 30 June 2021 have been reclassified from financial income to financial expense, as the gains relate to the same underlying transactions as the fair value loss on remeasurement of financial instruments presented therein.
2. Underlying net interest expense is an alternative performance measure defined in the Financial glossary on page 9, it is presented here to provide additional information on performance to the user, and to reconcile to the equivalent IFRS measure.

4. Taxation

Taxation expense

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Taxation expense	**(132)**	(49)

Calculation of the underlying effective tax rate

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Profit before taxation	**779**	1,151
Add back: Taxation expense of equity accounted investments	**16**	13
Add back / (deduct): Taxable non-recurring items	**1**	(339)
Add back / (deduct): Non-taxable non-recurring items	**7**	(7)
Adjusted profit before tax	**803**	818
Taxation expense	**(132)**	(49)
Taxation expense of equity accounted investments	**(16)**	(13)
Exclude: one-off tax benefit	**–**	(94)
Exclude: tax rate adjustment and taxation adjustments in respect of non-recurring items	**(6)**	6
Adjusted taxation expense (including equity accounted investments)	**(154)**	(150)
Underlying effective tax rate	**19%**	18%

The taxation expense has been determined by calculating an estimated annual tax rate for each country or entity, and then applying those rates to half year profits or losses.

As at 30 June 2022, an increase in the UK current tax rate has been substantively enacted, from 19% to 25% with effect from 1 April 2023. An adjustment has been made to reflect the fact that the UK deferred tax balances are expected to unwind at 25%. This adjustment has been recorded as a non-recurring gain of £6m (2021 £9m) in the condensed consolidated income statement, as a gain of £13m (2021 £101m) in the condensed consolidated statement of comprehensive income, and as a gain of £1m (2021 £nil) in the condensed consolidated statement of changes in equity.

The one-off tax benefit in 2021 of £94m was in respect of agreements reached regarding the exposure arising from the April 2019 European Commission decision regarding the UK’s Controlled Foreign Company regime.

The Group’s underlying effective tax rate is sensitive to the geographic mix of profits and may be impacted when multiple territories implement the Organisation for Economic Co-operation and Development’s Global Anti-Base Erosion Model Rules (Pillar Two). It is not currently possible to accurately assess the impact of the model rules or draft UK legislation, but we will continue to monitor their progress as they proceed towards statutory enactment.

5. Earnings per share

	Six months ended 30 June 2022			Six months ended 30 June 2021		
	£m	Basic pence per share	Diluted pence per share	£m	Basic pence per share	Diluted pence per share
Profit for the period attributable to equity shareholders	**615**	**19.6**	**19.4**	1,000	31.3	31.1
Add back/(deduct):						
Amortisation of programme, customer-related and other intangible assets, post tax[1]	**41**			35		
Net interest expense on post-employment benefit obligations, post tax[1]	**17**			27		
Fair value and foreign exchange adjustments on financial instruments and investments, post tax[1]	**93**			10		
Non-recurring items attributable to shareholders, post tax[2]	**2**			(277)		
Underlying earnings[3] attributable to shareholders, post tax	**768**	**24.5**	**24.3**	795	24.8	24.7
One-off tax benefit	**–**			(94)		
Underlying earnings[3] attributable to shareholders, excluding one-off tax benefit	**768**	**24.5**	**24.3**	701	21.9	21.8

		Millions	Millions		Millions	Millions
Weighted average number of shares used in calculating basic earnings per share		**3,131**	**3,131**		3,200	3,200
Incremental shares in respect of employee share schemes			**32**			19
Weighted average number of shares used in calculating diluted earnings per share			**3,163**			3,219

1. The tax impact, where applicable, is calculated using the underlying effective tax rate of 19% (2021 18%).
2. In 2021, £63m of the gain on disposal of AEC was attributable to non-controlling interest. Therefore, only the gain attributable to shareholders has been removed in calculating the underlying earnings attributable to shareholders. See note 12 for more details. The tax on non-recurring items has been determined using the actual tax due on those items, see note 4 for details.
3. Underlying earnings per share is an alternative performance measure defined in the Financial glossary on page 9, it is presented here to provide additional information on performance to the user, and to reconcile to the equivalent IFRS measure.

6. Post-employment benefits

	UK £m	US and other £m	Total £m
Total net IAS 19 deficit at 1 January 2022	(1,973)	(313)	(2,286)
Actual return on assets excluding amounts included in net interest expense	(2,808)	(978)	(3,786)
Decrease in liabilities due to changes in assumptions and experience	7,236	853	8,089
Contributions in excess of / (below) service cost	(15)	(5)	(20)
Past service cost – plan amendments	–	3	3
Net interest expense	(16)	(3)	(19)
Foreign exchange adjustments	–	(32)	(32)
Movement in other schemes	–	14	14
Withholding tax on surpluses	(889)	–	(889)
Total net IAS 19 surplus/(deficit) at 30 June 2022	**1,535**	**(461)**	**1,074**
Allocated to equity accounted investments	(134)	–	(134)
Group's share of net IAS 19 surplus/(deficit) excluding Group's share of amounts allocated to equity accounted investments at 30 June 2022	**1,401**	**(461)**	**940**
Represented by:			
Post-employment benefit surpluses	1,507	76	1,583
Post-employment benefit obligations	(106)	(537)	(643)
	1,401	**(461)**	**940**

Principal actuarial assumptions

The assumptions used are estimates chosen from a range of possible actuarial assumptions which, due to the long-term nature of the obligation covered, may not necessarily occur in practice.

The Group has used the Continuous Mortality Investigation (CMI) 2021 data for the UK demographic assumptions at 30 June 2022, reflecting the Group's best estimate of mortality at this time. In line with the CMI guidance, the Group has chosen to apply a weighting to the 2021 data, in recognition of the abnormal excess deaths as a result of COVID-19. No further adjustments have been made to the improvements expected in future years. The impacts of COVID-19 will continue to be monitored and assessed at future reporting dates.

	UK		US	
	30 June 2022	31 December 2021	**30 June 2022**	31 December 2021
Financial assumptions				
Discount rate – past service (%)	**3.8**	1.9	**4.6**	2.8
Discount rate – future service (%)	**3.8**	1.9	**4.6**	2.8
Retail Prices Index (RPI) inflation (%)	**2.8**	3.1	**n/a**	n/a
Rate of increase in salaries (%)	**2.8**	3.1	**n/a**	n/a
Rate of increase in deferred pensions (%)	**2.1/2.8**	2.4/3.1	**n/a**	n/a
Rate of increase in pensions in payment (%)	**1.6-3.6**	1.7-3.7	**n/a**	n/a
Demographic assumptions				
Life expectancy of a male currently aged 65 (years)	**86-89**	86-89	**87**	87
Life expectancy of a female currently aged 65 (years)	**88-90**	88-90	**89**	89
Life expectancy of a male currently aged 45 (years)	**87-90**	86-90	**87**	87
Life expectancy of a female currently aged 45 (years)	**89-91**	89-91	**89**	88

Surplus/Deficit allocation

MBDA participates in the Group's defined benefit schemes and, as these are multi-employer schemes, the Group has allocated a share of the IAS 19 pension surpluses and deficits to MBDA based on the relative payroll contributions of active members or actual obligations where known. Whilst this methodology is intended to reflect a reasonable estimate of the share of the deficit, it may not accurately reflect the benefits to, or obligations of, the participating employers.

In the event that an employer who participates in the Group's pension schemes fails or cannot be compelled to fulfil its obligations as a participating employer, the remaining participating employers are obliged to collectively take on its obligations. The Group considers the likelihood of this event arising as remote.

Surplus recognition
A number of schemes are in an accounting surplus position. The surpluses have been recognised on the basis that the future economic benefits are unconditionally available to the Group, which is assumed to be via a refund. These have been recognised after deducting a 35% withholding tax which would be levied prior to the future refunding of any surplus and have been presented on a net basis as this is not deemed to be an income tax of the Group.

Sensitivity analysis
The sensitivity information has been derived using scenario analysis from the actuarial assumptions as at 30 June 2022 and keeping all other assumptions the same.

Financial assumptions
The estimated impact of changes in the discount rate and inflation assumptions on the defined benefit pension obligation, together with the estimated impact on scheme assets, is shown in the table below. The estimated impact on scheme assets takes into account the Group's risk management activities in respect of interest rate and inflation risk. The sensitivity analysis on the defined benefit obligation is measured on an IAS 19 accounting basis and, therefore, does not reflect the natural hedging in the discount rate used for funding valuation purposes.

	Decrease/(increase) in pension obligation[1] £bn	(Decrease)/increase in scheme assets[1] £bn
Discount rate:		
0.1 percentage point increase/decrease	0.3/(0.4)	(0.3)/0.3
0.5 percentage point increase/decrease	1.6/(1.8)	(1.3)/1.4
	(Increase)/decrease in pension obligation[1] £bn	**Increase/(decrease) in scheme assets[1] £bn**
Inflation:		
0.1 percentage point increase/decrease	(0.3)/0.3	0.2/(0.2)
0.5 percentage point increase/decrease	(0.9)/0.9	0.8/(0.7)
1.0 percentage point increase/decrease	(1.8)/1.7	1.7/(1.4)

1. Before allocation to equity accounted investments.

Demographic assumptions
Changes in the life expectancy assumption, including the benefit of longevity swap arrangements, would have the following effect on the total net IAS 19 surplus:

	(Decrease)/increase in net surplus[1] £bn
Life expectancy:	
One-year increase/decrease	(0.9)/0.9

1. Before allocation to equity accounted investments.

7. Equity dividends and share buyback

Equity dividends

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Prior year final 15.2p dividend per ordinary share paid in the period (2021 14.3p)	**480**	461

The directors have declared an interim dividend of 10.4p per ordinary share in respect of the period ended 30 June 2022, totalling approximately £328m. This will be paid on 30 November 2022 to shareholders registered on 21 October 2022. The ex-dividend date is 20 October 2022. This is in line with our usual dividend timetable.

Shareholders who do not at present participate in the Company's Dividend Reinvestment Plan and wish to receive the final dividend in shares rather than cash should complete a mandate form for the Dividend Reinvestment Plan and return it to the registrars for receipt no later than 9 November 2022.

2021 Share buyback

On 29 July 2021 the Company announced the details of a share buyback programme to repurchase up to £500m of its own shares over the following 12 months.

During 2021, 63,272,873 shares were purchased for a total price, including transaction costs, of £371m.

The share buyback programme was completed on 2 February 2022. During 2022, a further 24,253,065 shares were purchased for a total price, including transaction costs, of £132m. In total 87,525,938 shares were repurchased under the scheme for a total price, including transaction costs, of £503m. These shares were subsequently cancelled, with the nominal value of shares cancelled deducted from share capital against the capital redemption reserve.

8. Fair value measurement

Fair value of financial instruments
Certain of the Group's financial instruments are held at fair value.

The fair value of a financial instrument is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the balance sheet date.

The fair values of financial instruments held at fair value have been determined based on available market information at the balance sheet date, and the valuation methodologies listed below:

– the fair values of forward foreign exchange contracts are calculated by discounting the contracted forward values and translating at the appropriate balance sheet rates;

– the fair values of both interest rate and cross-currency swaps are calculated by discounting expected future principal and interest cash flows and translating at the appropriate balance sheet rates; and

– the fair values of money market funds are calculated by multiplying the net asset value per share by the investment held at the balance sheet date.

Due to the variability of the valuation factors, the fair values presented at 30 June may not be indicative of the amounts the Group would expect to realise in the current market environment.

Fair value hierarchy
The fair value measurement hierarchy is as follows:

– Level 1 – Quoted prices (unadjusted) in active markets for identical assets or liabilities;

– Level 2 – Inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (i.e. as prices) or indirectly (i.e. derived from prices); and

– Level 3 – Inputs for the asset or liability that are not based on observable market data (i.e. unobservable inputs).

Carrying amounts and fair values of certain financial instruments

	30 June 2022		31 December 2021	
	Carrying amount £m	**Fair value £m**	Carrying amount £m	Fair value £m
Financial instruments measured at fair value:				
Non-current				
Other investments at fair value through profit and loss	**96**	**96**	76	76
Other financial assets	**334**	**334**	305	305
Other financial liabilities	**(296)**	**(296)**	(302)	(302)
Current				
Other financial assets	**354**	**354**	194	194
Money market funds	**462**	**462**	1,171	1,171
Other financial liabilities	**(268)**	**(268)**	(214)	(214)
Financial instruments not measured at fair value:				
Non-current				
Loans	**(5,136)**	**(4,718)**	(4,604)	(5,045)
Current				
Cash and cash equivalents (excluding money market funds)	**1,494**	**1,494**	1,746	1,746
Loans and overdrafts	**(53)**	**(53)**	(457)	(462)

All of the financial assets and liabilities measured at fair value are classified as level 2 using the fair value hierarchy, except for money market funds, which are classified as level 1, and other investments, which are at a combination of level 1 and level 3. The total value of investments classified as level 3 are immaterial. There were no transfers between levels during the period.

Financial assets and liabilities in the Group's consolidated balance sheet are either held at fair value or their carrying value approximates to fair value, with the exception of loans, which are held at amortised cost. The fair value of loans presented in the table above is derived from market prices, classified as level 1 using the fair value hierarchy.

9. Financial risk management

Currency risk

The Group's objective is to reduce its exposure to transactional volatility in earnings and cash flows from movements in foreign currency exchange rates, mainly the US dollar, euro, Saudi riyal and Australian dollar.

The Group is exposed to movements in foreign currency exchange rates in respect of foreign currency denominated transactions. All material firm transactional exposures are hedged and the Group aims, where possible, to apply hedge accounting to these transactions.

The Group is exposed to movements in foreign currency exchange rates in respect of the translation of net assets and income statements of foreign subsidiaries and equity accounted investments. The Group does not hedge the translation effect of exchange rate movements on the income statements or balance sheets of foreign subsidiaries and equity accounted investments it regards as long-term investments.

Credit risk

For trade receivables, contract receivables, amounts due from equity accounted investments and finance lease receivables, the Group measures a provision for expected credit losses at an amount equal to lifetime expected credit losses, estimated by reference to past experience and relevant forward-looking factors.

The Group's assessment is that credit risk in relation to defence-related sales to government customers or subcontractors to governments is extremely low as the probability of default is insignificant; therefore the provision for expected credit losses is immaterial in respect of receivables from these customers. For all non-government commercial customers, the Group assesses expected credit losses, including risks arising from global macroeconomic events; however this is not considered material to the financial statements. The Group considers that default has occurred when a non-government commercial receivable is past 180 days overdue, because historical experience indicates that these receivables are generally not recoverable. The Group recognises a provision of 100% against all such receivables over 180 days past due unless there is evidence that individual receivables in this category are recoverable.

For contract receivables, amounts due from equity accounted investments and finance lease receivables the expected credit loss provision is immaterial as the probability of default is insignificant.

Cash management and borrowing facilities

Cash flow forecasting is performed by the businesses on a monthly basis. The Group monitors a rolling forecast of its liquidity requirements to ensure that there is sufficient cash to meet operational needs and maintain adequate headroom.

The Group aims to maintain adequate undrawn committed borrowing facilities. At 30 June 2022, the Group had a committed Revolving Credit Facility (RCF) of £2.0bn (31 December 2021 £2.0bn). The RCF was undrawn throughout the period. The RCF also acts as a backstop to Commercial Paper issued by the Group. At 30 June 2022, the Group had £nil of Commercial Paper in issue (31 December 2021 £nil).

10. Related party transactions

Transactions with related parties occur in the normal course of business, are priced on an arm's-length basis and settled on normal trade terms. The transactions with related parties include sales and purchases to entities in which BAE Systems holds an equity accounted investment.

Transactions with related parties are shown on page 261 of the Annual Report 2021.

	Six months ended 30 June 2022 £m	Six months ended 30 June 2021 £m
Sales to related parties	**617**	530
Purchases from related parties	**223**	186

	30 June 2022 £m	31 December 2021 £m
Amounts owed by related parties	**47**	34
Amounts owed to related parties	**1,345**	1,137

11. Acquisitions

Businesses acquired during the six month period ended 30 June 2022

On 11 November 2021, the Group announced its intention to acquire 100% of the share capital of BIS Invest S.a.r.l. and its subsidiaries, together the Bohemia Interactive Simulations Group (BISim Group) for a consideration of $200m (£151m). On 4 March 2022 this deal passed all required pre-closing activities, and the acquisition was completed. Using the latest game-based technology, the experienced BISim team of engineers develops high-fidelity, cost-effective training and simulation software products and components to meet the growing demand for defence applications. BISim is part of the Cyber & Intelligence segment.

The results and financial position of the acquired business have been consolidated from the date of acquisition.

Provisional purchase consideration and fair value of net assets acquired

	£m
Intangible assets	72
Property, plant and equipment	1
Right of use assets	1
Receivables	10
Deferred tax assets	1
Lease liabilities	(1)
Payables	(8)
Deferred tax liabilities	(14)
Provisions	(6)
Cash and cash equivalents	5
Net identifiable assets acquired	**61**
Goodwill	90
Net assets acquired	**151**
Satisfied by:	
Cash consideration	151
Total consideration	**151**

The net outflow of cash in respect of the purchase of BISim is as follows:

	£m
Cash consideration	151
Cash and cash equivalents acquired	(5)
Net cash outflow in respect of the purchase of the business	**146**

The goodwill recognised is primarily attributable to expected synergies. No goodwill is expected to be deductible for tax purposes. Goodwill has been allocated to the Intelligence and Security business. No impairment losses have been recognised in respect of goodwill in the period ended 30 June 2022.

The acquisition contributed £19m to the Group's revenue and £9m to the Group's underlying EBIT[1] between the date of acquisition and 30 June 2022. If it had been completed on 1 January 2022, the Group's revenue from the acquisition would have been £23m, and the Group's underlying EBIT[1] would have been £9m for the period ended 30 June 2022.

Contractual cash flows on trade, other and contract receivables are recognised net of expected credit losses. No contingent liabilities have been recognised or require disclosure in respect of these acquisitions.

1. Underlying EBIT is an alternative performance measure defined in the glossary on page 9, it is presented here to provide additional information on performance to the user.

Businesses acquired during the six month period ended 30 June 2021

On 4 March 2021, the Group acquired 100% of the share capital of Pulse Power and Measurement Limited for a consideration of £21m. The net assets acquired, including intangible assets identified, have been valued at £11m, resulting in a goodwill of £10m. The provisional goodwill was finalised within the period.

12. Assets held for sale and business disposals

Assets held for sale as at 30 June 2022 and business disposals in the six month period ended 30 June 2022

On 9 July 2022 the Group entered into an agreement for the sale of BAE Systems' financial crime detection business from the Digital Intelligence business in our Cyber & Intelligence segment. This sale is subject to regulatory and government approvals, and is expected to complete in the next few months. Therefore, as at half year the assets and liabilities of this disposal group have been recognised as held for sale.

Assets and liabilities presented as held for sale comprise:

	£m
Intangible assets including goodwill	23
Property, plant and equipment	1
Right of use assets	3
Trade, other and contract receivables	20
Cash and cash equivalents	9
Total assets held for sale	**56**
Lease liabilities	(3)
Contract liabilities	(15)
Trade and other payables	(15)
Provisions	(2)
Total liabilities held for sale	**(35)**
Net assets held for sale	**21**

There were no business disposals in the six months to 30 June 2022.

Assets held for sale as at 30 June 2021 and business disposals in the six month period ended 30 June 2021

In December 2020, the Group's Overhaul and Maintenance Company (OMC) entered into a heads of terms for the sale of its 50% shareholding in Advanced Electronics Company Limited (AEC) to Saudi Arabian Military Industries, and was reported in the financial statements for the year ending 31 December 2020 as assets held for sale. The sale was completed on 23 February 2021. AEC was included in the Air segment.

The gain recognised on disposal was as follows:

	£m
Cash received or receivable:	
Cash	180
Deferred consideration	32
Total disposal consideration	**212**
Carrying amount of net assets sold (see below)	(90)
Gain on sale before tax and reclassification of foreign currency translation reserve	**122**
Reclassification of foreign currency translation reserve	9
Gain on sale before tax	**131**
Attributable to:	
Equity shareholders	68
Non-controlling interest	63

Net cash inflow arising on disposal:	
Cash consideration received	180
Less: cash and cash equivalents disposed	–
	180

Of the total consideration receivable, £32m is deferred and will be received over the 18 months following disposal. The gain on disposal has been included in the profit for the period from continuing operations as a component of Other income, and recognised as a non-recurring item.

The Group's share of the net assets of AEC as at the date of disposal was as follows:

	£m
Intangible assets including goodwill	16
Property, plant and equipment	8
Equity accounted investments	66
Net assets disposed	90

On 1 April 2021 BAE Systems agreed the sale of BAE Systems Rokar International Limited (Rokar) for $31m (£22m) net of cash held by Rokar. This resulted in consideration received of $47m (£34m), a disposal of net assets of $12m (£8m), including $16m (£12m) of cash, and a gain before tax on disposal of $35m (£26m) which has been included in the profit for the period from continuing operations as a component of Other income, and recognised as a non-recurring item. Rokar was within the Electronic Systems segment.

There were no assets held for sale as at 30 June 2021.

13. Contingent liabilities

The Group has entered into a number of guarantee and performance bond arrangements in the normal course of business. From time to time various Group undertakings are parties to legal actions, investigations and claims which arise in the normal course of business. Provision is made for any amounts that the directors consider may become payable. The Group takes legal advice as to the likelihood of success of claims and actions and no provision is made where the directors consider, based on that advice, that the action is unlikely to succeed, or that the Group cannot make a sufficiently reliable estimate of the potential obligation.

14. Events after the reporting period

On 9 July 2022 the Group entered into an agreement for the sale of BAE Systems' financial crime detection business from Cyber & Intelligence. This sale is subject to regulatory and government approvals, and is expected to complete in the next few months. Therefore, as at half year the assets and liabilities of this disposal group have been recognised as held for sale.

15. Shareholder information

The Annual General Meeting of BAE Systems plc will be held on 4 May 2023.

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Registered in England and Wales, No 01470151

Cautionary statement:

All statements other than statements of historical fact included in this document, including, without limitation, those regarding the financial condition, results, operations and businesses of BAE Systems and its strategy, plans and objectives and the markets and economies in which it operates, are forward-looking statements. Such forward-looking statements which reflect management's assumptions made on the basis of information available to it at this time, involve known and unknown risks, uncertainties and other important factors which could cause the actual results, performance or achievements of BAE Systems or the markets and economies in which BAE Systems operates to be materially different from future results, performance or achievements expressed or implied by such forward-looking statements. BAE Systems plc and its directors accept no liability to third parties in respect of this report save as would arise under English law. Accordingly, any liability to a person who has demonstrated reliance on any untrue or misleading statement or omission shall be determined in accordance with Schedule 10A of the Financial Services and Markets Act 2000. It should be noted that Schedule 10A contains limits on the liability of the directors of BAE Systems plc so that their liability is solely to BAE Systems plc.