

BAE SYSTEMS



Half-yearly
Report
2020

BAE Systems plc Half-yearly Report 2020

Results in brief

Financial performance measures as defined by the Group¹

	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019
Sales	£9,871m	£9,416m	£20,109m
Underlying EBITA	£895m	£999m	£2,117m
Underlying earnings per share			
excluding one-off tax benefit (2019 only)	18.7p	21.9p	45.8p
including one-off tax benefit (2019 only)	18.7p	26.9p	50.8p
Operating business cash flow			
excluding £1bn pension contribution (2020 only)	£120m	£(309)m	£1,307m
including £1bn pension contribution (2020 only)	£(880)m	£(309)m	£1,307m
Net debt	£(2,038)m	£(1,889)m	£(743)m
Order intake	£9,339m	£8,418m	£18,447m
Order backlog	£46.1bn	£47.4bn	£45.4bn

Dividend and post-employment benefits

	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019
Dividend per share	9.4p³	9.4p ³	9.4p ³
Dividend per share – in respect of 2019 performance	13.8p³	–	–
Group's share of the net post-employment benefits deficit	£(6.0)bn	£(4.3)bn	£(4.5)bn

Financial performance measures defined in IFRS²

	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019
Revenue	£9,180m	£8,674m	£18,305m
Operating profit	£808m	£896m	£1,899m
Basic earnings per share	16.7p	25.0p	46.4p
Net cash flow from operating activities	£(727)m	£(232)m	£1,597m

Charles Woodburn, Chief Executive, said: "We have delivered a robust performance in the first half of the year, thanks to the efforts of all of our employees. We started the year from a strong position and we have taken actions to enhance our resilience, ensuring we continued to deliver against our customer priorities, whilst keeping our employees safe.

"Assuming no significant COVID-19 resurgence, we expect a good second half to the year. Demand for our capabilities remains high and we recognise our role not only in supporting national security, but also in contributing to the economies of the countries in which we operate."

Guidance for 2020

Whilst the Group is subject to geopolitical uncertainties and there remains considerable uncertainty in respect of COVID-19, the following guidance is provided on current expected operational performance under new working practices introduced in recent months.

Including the two acquisitions, we expect the Group's sales to increase by a low-single digit percentage compared to last year, as we see increased volumes in F-35, Combat Vehicles and growth in the electronic defence portfolio, offsetting the shortfall in commercial businesses.

We expect the Group's underlying earnings per share to be a mid-single digit percentage lower than last year's 45.8p, assuming a US\$1.25 to sterling exchange rate and at a tax rate now expected to be 19%, in line with last year. The final rate is dependent on the geographic mix of profits.

In 2020 the Group now expects free cash flow as defined by the Group, excluding the £1bn pension payment, to be approximately £800m for the full year, close to our original guidance allowing for the lower earnings.

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 defined in

International Financial Reporting Standards for the six months ended 30 June 2020 are provided in the Group financial review on pages 12 to 18.

Financial highlights

Financial performance measures as defined by the Group¹

- Sales increased by 4% on a constant currency basis⁴ and excluding the impact of acquisitions⁵, to £9.9bn.
- Underlying EBITA of £895m decreased by 11% on a constant currency basis⁴ and excluding the impact of acquisitions⁵.
- Underlying earnings per share decreased by 15% to 18.7p, excluding the impact in 2019 of the one-off tax benefit. The Group's underlying effective tax rate for the first half of the year was 19%.
- Operating business cash outflow of £880m, including the impact of the £1bn injection into the UK pension scheme.
- Net debt at £2,038m (£743m at 31 December 2019) following the £1bn bond issuance to fund the UK pension deficit, and the acquisition of the Airborne Tactical Radios business for cash of £217m.
- Order backlog has increased in the first half of the year to £46.1bn. Trading on multi-year, long-term contracts in the Air sector was offset by a 7% increase in our US business and a foreign exchange benefit.

Financial performance measures defined in IFRS²

- Revenue increased by 6% to £9.2bn.
- Operating profit decreased by 10% to £808m.
- Basic EPS decreased to 16.7p, down 33%.

Dividend

- The directors have declared an interim dividend of 13.8p per share in respect of the year ended 31 December 2019, payable in September, being the value of the dividend proposed but subsequently deferred earlier in the year.
- In addition, the directors have also declared an interim dividend of 9.4p per share in respect of the half year ended 30 June 2020. This dividend will be payable in November assuming that there are no major additional or unforeseen pandemic-related disruptions.

Post-employment benefits deficit

- The Group's share of the pre-tax accounting post-employment benefits deficit increased to £6.0bn (31 December 2019 £4.5bn). A £1bn payment was made by the Group into the UK scheme in April 2020.

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 10.
2. International Financial Reporting Standards.
3. Interim dividends declared (see note 7).
4. Current period compared with prior period translated at current period exchange rates.
5. The impact of acquisitions is excluded to enable a like-for-like comparison of financial performance (see note 11).

Operational and strategic key points

COVID-19

Given the critical nature of the products and services that we provide to a number of nations, the important role we play in national economies and the local communities in which we operate, the Group has remained focused during the COVID-19 pandemic on its near-term priorities:

- Protecting the well-being of our employees.
- Meeting customer priorities as they face unique challenges.
- Supporting our supply chain in dealing with pandemic-related disruption.
- Preserving and protecting our capabilities and the strength of the Group's business, which is underpinned by our c.£46bn order backlog and programme positions.
- Ensuring that we maintain appropriate liquidity and balance sheet strength.

Air

- The Qatar Typhoon programme achieved key milestones ahead of schedule.
- Production of F-35 rear fuselage assemblies will ramp up to full rate by 2021. 50 assemblies have been delivered in the period.
- The sector continues to work closely with industry partners and the UK government to continue to fulfil contractual support arrangements in Saudi Arabia on the key European collaboration programmes.
- Negotiations for the transition through to mid-2022 to a reduced scope support solution for the Omani Typhoon fleet are ongoing and expected to conclude early in the second half of the year.
- The next phase of the Tempest next-generation Future Combat Air programme continues.
- In Australia the Hunter Class frigate programme is progressing to plan and ASC Shipbuilding has been integrated into our Australian operations.

Maritime and Land UK

- The build phase of the River Class Offshore Patrol Vessel programme remains on target for completion in 2020, with the fourth vessel, HMS Tamar, accepted by the customer in the period.
- Construction of the first two City Class Type 26 frigates for the Royal Navy continues to progress.
- The fourth Astute Class submarine, HMS Audacious, was accepted and left our Barrow site in April to begin sea trials with the Royal Navy.
- Construction of the first two Dreadnought Class submarines continues to advance.
- An 18-month extension to the Maritime Support Delivery Framework (MSDF) to provide engineering and support services to Portsmouth Naval Base and the Portsmouth flotilla was signed in March.
- Ship support maintained at Portsmouth Naval Base under challenging COVID-19 conditions.
- RBSL is expected to secure the contract for its share of work on the Mechanised Infantry Vehicle programme in the second half of the year.

Electronic Systems

- F-35 electronic warfare systems deliveries for Lot 12 completed, with over 650 electronic warfare systems delivered to date.
- Successful demonstration of APKWS® ground-launch capability.
- Terminal High Altitude Area Defense (THAAD) seeker is executing at full rate production and received an additional order to design and manufacture next-generation infrared seekers.
- The business continues to experience growth in classified work.
- Demand in the commercial business lines of Controls & Avionics Solutions, and Power & Propulsion Solutions, has been impacted by COVID-19.
- Acquired the Airborne Tactical Radios business from Raytheon Technologies Corporation, expanding our full spectrum communications portfolio with multi-band radios and advanced cryptographic technologies.

Platforms & Services (US)

- Implementation of process and automation improvements is under way in Combat Mission Systems production.
- M109A7 vehicle consistently delivering at full rate production levels.

- Armored Multi-Purpose Vehicle Low-Rate Initial Production under way, with the first vehicle to be completed in the second half of the year.
- Amphibious Combat Vehicle Low-Rate Initial Production continues along with design development of two new mission variants.
- Bradley award for \$267m (£216m) received in June.
- The US Ship Repair business received orders totalling \$430m (£348m) in the period, including a \$200m (£162m) award to service the USS Boxer in San Diego.
- US Navy awards totalling \$166m (£134m) for the production of missile canisters supporting the Vertical Launching System, with a maximum value of up to \$955m (£773m) over five years if all options are exercised.

Cyber & Intelligence

- The US-based Intelligence & Security business continues to increase its bid pipeline, perform on existing contracts and win new orders.
- Exit from the loss-making UK-based Enterprise Managed Security Services business was completed.
- Discussions regarding the sale of the Applied Intelligence US-based software-as-a-service business are continuing.
- Applied Intelligence’s Government business continues to perform well, and the Financial Services business delivered growth in order intake in the period despite COVID-19 disruption.

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Analyst and investor presentation

A presentation, for analysts and investors, of the Group’s first half results for 2020 will be available via webex at 9.00am today (30 July 2020).

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 88,400 people¹ 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

In the first half of the year we delivered order intake and sales growth and improved underlying cash flow versus the same period last year, demonstrating that BAE Systems is a resilient business with enduring and strong customer relationships.

Our response to the COVID-19 crisis dominated the first half of 2020 and impacted our financial results for the half-year. During that time we focused on our short-term objectives as the pandemic unfolded, whilst also ensuring we built further resilience into our operations. Additionally, we advanced the key actions for the long-term strength of the business of progressing the two US acquisitions announced earlier this year (one of which completed in May), raising and injecting £1bn into the UK pension scheme and investing in new facilities to meet the growth profile in a number of sectors.

COVID-19 has clearly had a short-term impact and its long-term impact remains uncertain, however the business fundamentals of our defence businesses remain strong and the existing Group strategy remains highly relevant. Given the current threat environment, governments in key markets continue to prioritise defence and security, and there is a strong demand for the Group's capabilities, products and services.

BAE Systems is a resilient company with long-term strengths, from its programmes, technologies, customer relationships, balance between production and aftermarket services and sustainability agenda.

Execution on the key strategic objectives of operational excellence, competitiveness and technological innovation remains vital for the successful delivery of the order backlog and delivery of future growth.

Operationally, programme performance remains the focus, and we saw, aside from COVID-19 disruption, underlying improvements in Maritime and US combat vehicles continue in the first half of the year. The business will continue to drive programme performance to ensure successful delivery of its order backlog and the expected improvements in long-term cash generation. We continue to look to further increase technology funding in the coming years, especially in Air and Electronic Systems, to maintain and enhance our long-term strategic positions, and are progressing the capital investments that support the growth outlook in a number of our markets. We shall continue to drive competitiveness to ensure we deliver value for money for our customers in what are likely to be difficult financial conditions in the near-term as the impacts of the pandemic are felt.

In support of our strategy, two technology-focused acquisitions will further bolster the Group's capabilities. The Airborne Tactical Radios business was acquired from Raytheon Technologies Corporation and completed on 4 May, and the transaction to acquire Collins Aerospace's Military Global Positioning System business is due to complete shortly. Both of these businesses will enhance the Electronic Systems portfolio.

Impact in the half year of COVID-19

As expected, the pandemic has impacted the business in the second quarter, with sites in the Air and Maritime sectors and our US commercial avionics and Power & Propulsion Solutions businesses within the Electronic Systems sector being most affected. However, as a result of the actions taken, productivity levels in June improved within our defence businesses (which account for over 90% of the Group's revenue). As at the end of July, many of these operations have well over 90% of employees working. This includes a high proportion working from home and critical on-site workers having returned under adjusted protective safety measures in response to the pandemic. In parallel the business continues to implement cost control measures.

Within our UK-based Air and Maritime sectors, second quarter disruptions have particularly impacted cost recoveries and sales volumes, offset to some degree by strong underlying performance and cost control measures.

In Electronic Systems, our US-based Controls and Avionics business has been impacted for the near-term, especially in the commercial aftermarket and product delivery lines, and the Power & Propulsion Solutions business has been impacted by the reduced demand for mass transit in recent months. In Applied Intelligence, our commercial cyber operations have also seen reduced trading levels.

In the US, our defence manufacturing facilities and shipyards have continued to operate following implementation of appropriate safe working measures. There has been some disruption to manufacturing operations primarily due to the pandemic's impact on the supply chain, as well as some intermittent production delays in our own lines where precautionary measures to reduce COVID-19 exposure were necessary.

Strategic response to COVID-19

Supporting governments and communities in our key markets

Throughout the crisis, we have supported governments and communities in the countries where we operate as they respond to the COVID-19 pandemic. We have deployed our 3D printing capabilities and collaborated with our supply chain to donate more than 150,000 items of Personal Protective Equipment (PPE) to healthcare workers in the US and the UK. We are proud to support ventilator production as part of the VentilatorChallengeUK consortium. We are also supporting our communities in the US, UK, Australia and Saudi Arabia through the provision of online educational resources for young people as well as financial support to healthcare providers and local charities to enable them to provide care packages and food relief to the most vulnerable. Much of our outreach work has been supported by our employees who have volunteered their time and skills to help local relief efforts. We are also delighted to be proceeding with our plans to recruit a record number of apprentices, some 800 in total across a wide number of our sites.

Resilience built into business

From the start of the pandemic disruptions, the professionalism, agility and understanding of our employees, customers, trades unions and suppliers has been outstanding, as we embarked on implementing new working practices such as home working capabilities, reconfiguring floorplans, shift patterns, enhanced cleaning regimes and appropriate safe working measures.

By taking all these measured actions to build in resilience for a prolonged period of disruption, we have continued to deliver critical work for our customers and, where operations were impacted, ensured that site critical workers have now been able to safely return to work where possible.

Support for the defence industry from the governments in our key markets has been exceptional around prioritisation of capabilities, cash flows, recognising the need to maintain a strong supply chain and working collaboratively to maintain critical defence and security programmes.

We have in turn looked to help our customers by being agile in our working practices to deliver critical work and, where needed, prioritising the social needs for our governments and communities as we all responded to the challenges arising from the pandemic.

Improvement learnings in work practices

There are a number of areas where the enforced changes in working practices may be able to provide learning and improvements to future business operations, all contributing to our strategic priority of competitiveness and providing value for money for our customers and shareholders. Areas highlighted to date would be around streamlining of processes, general and administration cost savings, footprint requirements, flexible working practices and how we can be more agile and adaptable to deliver our commitments in different ways.

US Market

The Group's US-based portfolio remains well aligned with customer priorities and the key focus areas outlined in the US National Defense Strategy. The passage and signing of the fiscal year 2020 Defense Appropriations Act maintained funding support for key BAE Systems programmes, including combat vehicles, F-35, electronic warfare programmes, and current and next-generation precision weapon systems.

The fiscal year 2020 includes a top line budget of \$738bn for defence, a 3% increase over 2019, and lawmakers have already agreed to a bipartisan deal setting the defence spending cap for fiscal year 2021 at \$740.5bn. Whilst the Group continues to closely monitor the budget process, the significant COVID-19 related relief spending, coupled with the national election in November, may impact the fiscal year 2021 defence budget and the timely passage of appropriations legislation.

Our US electronics business closed with a record order backlog and the outlook for all of its defence-focused divisions is positive with the portfolio well positioned to address key growth areas. We are also leveraging these capabilities on international as well as domestic programmes. The business remains focused on investment in emerging technologies and leveraging customer funding to maintain, develop and grow our strong market positions. Within our commercial operations, the commercial avionics business has been impacted especially in the aftermarket and product delivery lines, and the power and propulsion business has been impacted by the reduced demand for mass transit in recent months.

Platforms & Services (US) work is predominantly on military contracts. While the pandemic has made some schedule adjustments necessary, our combat vehicles business continues to make progress towards achieving consistent quality and production throughput across multiple programmes. The M109A7 programme is now delivering consistently at full rate levels. The Amphibious Combat Vehicle (ACV) and Armored Multi-Purpose Vehicle (AMPV) programmes continue to progress through low rate initial production, and the initial AMPV delivery is to take place in the second half of the year. We secured new awards in the period to continue to strengthen the order backlog. Looking forward, the business will have three vehicle upgrade and three new-build vehicle programmes being delivered through its facilities.

The sector continued to shape its market-leading US naval ship repair business, maintaining a strong bid pipeline for repair and modernisation services, and working with the US Navy to improve utilisation levels. The first destroyer tandem docking in the Group's San Diego facility was completed and we received a number of significant awards in the first half of the year. The ship repair and naval guns franchises are well supported by the growth outlook in the US Navy budget and projected fleet size.

Our US-based Intelligence & Security business is maintaining a high level of bid activity and a strong pipeline despite a highly competitive and evolving market. The business is delivering on contracts with good programme and financial performance in the half year.

UK Market

Defence and security remains a priority for the UK government. The government has stated its commitment to meeting the NATO target of spending at least 2% of Gross Domestic Product on defence and to increasing the defence budget by at least 0.5% above inflation in every year of the current parliament. The government has now recommenced its Integrated Foreign Policy, Defence and Security Review.

Our work under the Team Tempest contract to develop next-generation combat air technologies, skills and expertise, in collaboration with UK government and industry partners, continues towards the outline business case. International studies are progressing with Sweden and Italy as well as discussions with other prospective partner nations.

Focus continues to be on the execution of the Group's long-term contracted positions in Air and Maritime.

Production of rear fuselage assemblies for the F-35 Lightning II aircraft programme progresses towards full rate production levels now targeted in 2021. As the UK and global fleets grow, securing a long-term support position on F-35 Lightning II remains a key focus for our Air business.

Typhoon support in the UK continues to meet operational performance levels. Typhoon production is currently focused on sub-assembly and major unit build on the Kuwait programme and the Qatar programme, which sustains production revenues for the coming years. The potential pipeline for Typhoon additional orders remains positive, with opportunities both with partner nations and through exports with existing and new customers. Securing additional orders would extend current production revenue levels.

Astute Boat 4, HMS Audacious, was accepted by the customer and exited Barrow for Faslane in April. The remaining three boats are at an advanced stage of construction. Activity on the Dreadnought programme continues following the initial COVID-19 disruption, with revenues now exceeding those on the Astute programme. The associated major programme of building works has also recommenced and is continuing to progress.

Manufacturing work on the Type 26 programme in the UK continues to increase with the first two ships, HMS Glasgow and HMS Cardiff, in production.

On the Offshore Patrol Vessels programme, the fourth ship, HMS Tamar, was accepted by the customer in February and the fifth and final ship, HMS Spey, is due to complete later this year.

BAE Systems will support the UK government in resetting the position of the UK in European security and defence post-Brexit and in strengthening bilateral relationships with key partners in Europe. This will be important for ongoing and future collaboration in the development of key defence capabilities.

The Group has relatively limited UK-EU trading and the majority of persons employed in the UK are UK nationals, with only limited movement of EU nationals into and out of the Group's UK businesses. Accordingly, the resulting Brexit near-term impacts across the business are likely to be limited.

International Markets

In an uncertain global environment with complex threats, our defence and security capabilities remain highly relevant. There are good prospects in existing and new international markets for our products and services in air, maritime, land and cyber with defence and security high on national agendas with the need in many cases to recapitalise or upgrade ageing equipment.

In Saudi Arabia, BAE Systems continues to work closely with industry partners and the UK government to ensure that the export licences required to enable the Group to fulfil its contractual obligations in the Kingdom are in place. On the Hawk programme, the in-Kingdom final assembly aircraft continue to be delivered and entered into service.

BAE Systems continues to address current and potential new requirements as part of long-standing agreements between the UK government and the Saudi Arabian government as the Group continues to work on the localisation of defence capabilities in Saudi Arabia, in support of the Saudi Arabian government's National Transformation Plan and Vision 2030. Over many years, the Group has developed and taken shareholdings in local Saudi businesses. The Group is restructuring its portfolio of interests in these businesses. The Group's Overhaul and Maintenance Company subsidiary entered into a heads of terms for the sale of its 50% shareholding in Advanced Electronics Company to Saudi Arabian Military Industries, and negotiations are continuing with the transaction expected to take place before year end.

In Qatar, we continue to build our relationship through performance on existing contracts across the Group and are progressing a number of opportunities. The 24 Typhoon and nine Hawk aircraft and associated support and training contract progresses well, with milestones achieved as planned.

During the first half of the year, the Group was asked to enter into negotiations with the Omani customer regarding a transition to a reduced scope support solution for the Typhoon fleet. These negotiations remain ongoing, and are expected to conclude early in the second half of 2020.

In Australia, the government has recommitted to growing its defence budget and major defence programmes as it looks to further its sovereign defence capabilities. A key part is the Hunter Class frigate programme, and our design and production contract is progressing to plan. As the programme moves through prototyping and into the production phase, our Australian business will continue to grow in the coming years.

On the Canadian Surface Combatant programme, we are working on the preliminary design phase with Lockheed Martin Canada and Irving Shipbuilding Inc.

Whilst operating under a difficult geopolitical and COVID-19 backdrop, the MBDA joint venture has continued to win orders in both domestic and export markets and with a strong order backlog supporting revenue in the coming years. The business continues to invest in new products and has several key bids underway, positioning it to benefit from defence spend increases in a number of European countries and from export opportunities.

Cyber security domain

In Applied Intelligence, the UK Government business continues to perform well. The Group has exited the UK-based Enterprise Managed Security Services business and discussions regarding the sale of the Applied Intelligence US-based software-as-a-service business are continuing. Cyber security is an

increasingly important part of government security and a core element of stewardship for companies in a sophisticated and persistent threat environment. The services and products we offer in the remaining core business, including the Financial Services division, are expected to drive growth and improved returns as the market continues to develop, although given the commercial exposure of the division, we are expecting some COVID-19 related contraction in demand in the near term.

Balance sheet and capital allocation

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. Consistent with this approach, 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. Investment in value-enhancing acquisitions and returns to shareholders through a share buyback will be considered in line with our clear and consistent strategy and capital allocation policy.

A \$1.3bn (£1.0bn), ten-year term, 3.4% bond was raised in April 2020, in order for the Group to inject £1bn into the UK pension scheme.

Post-employment benefits schemes

The Group's share of the pre-tax accounting net post-employment benefits deficit increased to £6.0bn (31 December 2019 £4.5bn). The increase was mainly driven by the impact of lower discount rates which increased liabilities, partially offset by contributions paid (including the Group's injection of £1bn into the scheme), a gain from lower inflation expectations and asset returns. The deficit funding programme will complete in 2021 with the final £250m payment, ahead of the next triennial valuation exercise.

Directors and the Board

Tom Arseneault and Brad Greve joined the Board on 1 April 2020; Tom succeeded Jerry DeMuro as President & CEO of BAE Systems, Inc., and Brad succeeded Peter Lynas as Group Finance Director.

With effect from 1 April 2020, Jane Griffiths was appointed to the Board as a non-executive director and Nick Rose agreed to extend his term of appointment as a non-executive director of the Company for up to one further year, in order to support the Company through a challenging period associated with the COVID-19 crisis. With effect from 25 June 2020, Revathi Advaiti decided to step down from her role as non-executive director.

Summary

Whilst there has been some short-term impact to operations in respect of the COVID-19 pandemic, the Company has rapidly adopted, and built in resilience to, new working practices across many of our sites. The underlying fundamentals of our business remain strong, and the strategy of the Group is unchanged. 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 continue to prioritise defence and security, with strong demand for our capabilities. Through execution of our strategy, BAE Systems is well placed to maximise opportunities, deal with the challenges and continue to generate good shareholder returns.

Dividend and executive pay

The Board has declared an interim dividend of 13.8p in respect of the year ended 31 December 2019 – that being the value of the dividend proposed but subsequently deferred earlier in the year. This dividend will be paid on 14 September 2020.

In addition, the Board has also declared an interim dividend of 9.4p in respect of the half-year ended 30 June 2020. This will be paid on 30 November 2020 in line with our usual dividend timetable, assuming that there are no major additional or unforeseen pandemic-related disruptions.

The business is performing well in a challenging environment and has resumed dividend payments. In accordance with the Company's Remuneration Policy, the Board will review executive pay in the first quarter of next year, when complete information on the Group's operational and financial performance for 2020 is available.

Glossary

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.

	Definition	Purpose
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.	Allows management to monitor the revenue performance of subsidiaries and equity accounted investments.
Underlying EBITA	Operating profit excluding amortisation and impairment of intangible assets, finance costs and taxation expense of equity accounted investments (EBITA) and non-recurring items ¹ .	Provides a measure of operating profitability that is comparable over time.
Return on sales	Underlying EBITA as a percentage of sales	Provides a measure of operating profitability that is comparable over time.
Underlying earnings per share	Basic earnings per share excluding amortisation and impairment of intangible assets, non-cash finance movements on pensions and financial derivatives, and non-recurring items ¹ .	Provides a measure of underlying performance that is comparable over time.
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.	Allows management to monitor the operational cash generation of the Group.
Free cash flow	Operating business cash flow less interest paid (net) and taxation.	Allows management to monitor utilisation of cash in line with the Group's capital allocation policy.
Net debt	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 the indebtedness of the Group.
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 subsidiaries and equity accounted investments.
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.

1. 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, 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. The Group does not recognise any non-recurring adjustments which look to normalise business performance by excluding the estimated impact of the COVID-19 pandemic. Note 2 Segmental analysis includes more information on those items reported as non-recurring in the period.

	Definition	Purpose
Financial performance measures derived under IFRS		
Revenue	Income derived from the provision of goods and services by the Company and its subsidiary undertakings.	N/a
Operating profit	Profit for the period before finance costs and taxation expense. This measure includes finance costs and taxation expense of equity accounted investments.	N/a
Return on revenue	Operating profit as a percentage of revenue.	N/a
Basic earnings per share	Basic earnings per share in accordance with International Accounting Standard 33 Earnings per Share.	N/a
Net cash flow from operating activities	Net cash flow from operating activities in accordance with International Accounting Standard 7 Statement of Cash Flows.	N/a
Other financial measures		
Net post-employment benefits deficit	Net International Accounting Standard 19 Employee Benefits deficit excluding amounts allocated to equity accounted investments.	N/a
Dividend per share	Interim dividend paid and final dividend proposed per share.	N/a

Financial performance

Income statement

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Financial performance measures as defined by the Group¹		
Sales	9,871	9,416
Underlying EBITA	895	999
Return on sales	9.1%	10.6%
Financial performance measures defined in IFRS²		
Revenue	9,180	8,674
Operating profit	808	896
Return on revenue	8.8%	10.3%
Reconciliation of sales to revenue		
Sales	9,871	9,416
<i>Deduct</i> Share of sales by equity accounted investments	(1,208)	(1,271)
<i>Add</i> Sales to equity accounted investments	517	529
Revenue	9,180	8,674
Reconciliation of underlying EBITA to operating profit and profit for the period		
Underlying EBITA	895	999
Non-recurring items	(21)	(28)
Amortisation of intangible assets	(49)	(49)
Financial expense of equity accounted investments	(15)	(10)
Taxation expense of equity accounted investments	(2)	(16)
Operating profit	808	896
Net finance costs	(119)	(120)
Taxation (expense) / credit	(130)	41
Profit for the period	559	817

Segmental analysis

Financial performance measures as defined by the Group¹

	Sales		Underlying EBITA	
	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Electronic Systems	2,203	2,142	291	316
Cyber & Intelligence	913	853	59	25
Platforms & Services (US)	1,718	1,522	121	135
Air	3,610	3,366	356	438
Maritime	1,505	1,525	122	133
HQ	102	163	(54)	(48)
Deduct Intra-group	(180)	(155)	–	–
	9,871	9,416	895	999

Financial performance measures defined in IFRS²

	Revenue		Operating profit / (loss)	
	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Electronic Systems	2,203	2,142	281	308
Cyber & Intelligence	913	853	56	22
Platforms & Services (US)	1,688	1,459	105	130
Air	3,029	2,824	324	379
Maritime	1,478	1,512	108	120
HQ	26	23	(66)	(63)
Deduct Intra-group	(157)	(139)	–	–
	9,180	8,674	808	896

Exchange rates

	Six months ended 30 June 2020	Six months ended 30 June 2019
Average		
£/\$	1.260	1.294
£/€	1.144	1.146
£/A\$	1.920	1.832
Period end	30 June 2020	30 June 2019
£/\$	1.236	1.272
£/€	1.100	1.117
£/A\$	1.794	1.813
Year end		31 December 2019
£/\$		1.324
£/€		1.180
£/A\$		1.884
Sensitivity analysis		£m
Estimated impact on annual sales of a ten cent movement in the average exchange rate:		
\$		700
€		100
A\$		40

Sales in the first half increased to £9.9bn (2019 £9.4bn), up 4% on a constant currency basis³ and excluding the impact of acquisitions⁴.

Underlying EBITA was £895m (2019 £999m), down 10% on last year, or 11% on a constant currency basis³ and excluding the impact of acquisitions⁴.

Revenue increased to £9.2bn (2019 £8.7bn), up 5% on a constant currency basis³ and excluding the impact of acquisitions⁴.

Operating profit was £808m (2019 £896m), down 10% on last year, or 11% on a constant currency basis³ and excluding the impact of acquisitions⁴.

Non-recurring items in 2020 comprises a £14m impairment charge relating to Platform & Services' legacy Commercial Shipbuilding business which the business exited in 2018, and advisory fees of £7m relating to the Group's acquisition and disposal activities. The 2019 expense of £28m represented a £36m charge relating to the derecognition of Enterprise Resource Planning software intangible assets in the Air sector and a gain of £8m relating to the disposal of the Aircraft Accessories and Components Company.

Amortisation of intangible assets was £49m (2019 £49m).

Net finance costs were £119m (2019 £120m). The underlying interest charge, excluding pension accounting, and fair value and foreign exchange adjustments on financial instruments and investments, was £127m (2019 £130m). There was a credit of £42m (2019 credit of £61m) 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 £132m (2019 taxation credit of £25m) reflects the Group's underlying effective tax rate for the period of 19% (2019 17%). The prior year amount included a £161m credit in respect of one-off items, which is excluded from the 2019 underlying effective tax rate.

The underlying effective tax rate for the full year is expected to be around 19% with the final rate dependent on the geographical mix of profits.

1. For alternative performance measure definitions see glossary on page 10.
2. International Financial Reporting Standards.
3. Current period compared with prior period translated at current period exchange rates.
4. The impact of acquisitions is excluded to enable a like-for-like comparison of financial performance (see note 11).

Earnings per share

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Financial performance measures as defined by the Group¹		
Underlying earnings (2019 excluding the one-off tax benefit)	595	696
Underlying earnings per share (2019 excluding the one-off tax benefit)	18.7p	21.9p
Underlying earnings (2019 including the one-off tax benefit)	595	857
Underlying earnings per share (2019 including the one-off tax benefit)	18.7p	26.9p
Financial performance measures defined in IFRS²		
Profit for the period attributable to equity shareholders	532	795
Basic earnings per share	16.7p	25.0p
Reconciliation of underlying earnings to profit for the period		
Underlying earnings (2019 excluding the one-off tax benefit)	595	696
Non-recurring items, post tax	(18)	(22)
Amortisation of intangible assets, post tax	(40)	(40)
Net interest expense on retirement benefit obligations, post tax	(35)	(50)
Fair value and foreign exchange adjustments on financial instruments and investments, post tax	30	50
One-off tax benefit	–	161
Profit for the period attributable to equity shareholders	532	795
Non-controlling interests	27	22
Profit for the period	559	817

Underlying earnings per share for the period decreased by 15% to 18.7p (2019 21.9p, excluding the one-off tax benefit).

Basic earnings per share for the period decreased by 33% to 16.7p (2019 25.0p). The decrease is primarily a result of the lower operating profit, as well as the one-off tax credit in the prior year.

1. For alternative performance measure definitions see glossary on page 10.
2. International Financial Reporting Standards.

Cash flow

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 ¹ £m
Financial performance measures as defined by the Group²		
Operating business cash flow	(880)	(309)
Financial performance measures defined in IFRS³		
Net cash flow from operating activities	(727)	(232)
Reconciliation from operating business cash flow to net cash flow from operating activities		
Operating business cash flow	(880)	(309)
<i>Add back</i> Net capital expenditure and financial investment	189	201
<i>Add back</i> Principal element of lease payments and receipts	116	114
<i>Deduct</i> Dividends received from equity accounted investments	(24)	(90)
<i>Deduct</i> Taxation	(128)	(148)
Net cash flow from operating activities	(727)	(232)
Net capital expenditure and financial investment	(189)	(201)
Principal element of finance lease receipts	4	5
Dividends received from equity accounted investments	24	90
Interest received	12	17
Cash flow in respect of acquisitions, disposals and held for sale assets	(217)	17
Net cash flow from investing activities	(366)	(72)
Interest paid	(114)	(134)
Equity dividends paid	–	(423)
Dividends paid to non-controlling interests	(3)	(26)
Partial disposal of shareholding in subsidiary undertaking	–	14
Principal element of lease payments	(120)	(119)
Cash flow from matured derivative financial instruments	72	47
Cash flow from cash collateral	14	4
Cash flow from loans	1,136	(773)
Net cash flow from financing activities	985	(1,410)
Net decrease in cash and cash equivalents	(108)	(1,714)
Foreign exchange translation	(193)	(8)
Other non-cash movements	142	(36)
<i>(Deduct) / add back</i> cash flow from loans	(1,136)	773
Increase in net debt	(1,295)	(985)
Opening net debt	(743)	(904)
Net debt	(2,038)	(1,889)
Operating business cash flow	(880)	(309)
Interest paid, net of interest received	(102)	(117)
Taxation	(128)	(148)
Free cash flow (as defined by the Group)²	(1,110)	(574)

- 2019 comparatives have been reclassified to present a cash inflow of £14m in respect of a partial disposal of the Group's shareholding in a subsidiary undertaking within financing activities. This cash flow was previously presented in investing activities.
- For alternative performance measure definitions see glossary on page 10.
- International Financial Reporting Standards.

Segmental analysis

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Financial performance measures as defined by the Group¹		
Electronic Systems	64	137
Cyber & Intelligence	107	23
Platforms & Services (US)	143	5
Air	17	(163)
Maritime	(67)	(92)
HQ	(1,144)	(219)
Operating business cash flow	(880)	(309)
Financial performance measures defined in IFRS²		
Electronic Systems	163	213
Cyber & Intelligence	120	38
Platforms & Services (US)	164	25
Air	100	(132)
Maritime	(35)	(45)
HQ	(1,111)	(183)
Deduct Taxation ³	(128)	(148)
Net cash flow from operating activities	(727)	(232)

Operating business cash outflow was £880m (2019 outflow £309m). The outflow includes the impact of the Group's £1bn contribution into the UK pension scheme. The remaining inflow of £120m reflects our strong focus on liquidity and proactive efforts from governments in our major markets.

Net cash outflow from operating activities was £727m (2019 outflow £232m).

Taxation payments decreased to £128m (2019 £148m).

Net capital expenditure and financial investment increased to £189m (2019 £201m).

Dividends received from equity accounted investments of £24m (2019 £90m) is primarily receipts from FNSS (£13m) and Eurofighter (£6m).

Cash flows in respect of acquisitions, disposals and held for sale assets represent the acquisition in May of the Airborne Tactical Radios business from Raytheon Technologies Corporation.

The **2019 final proposed dividend** was deferred as a result of the uncertainty regarding the COVID-19 pandemic.

There was a **cash inflow from matured derivative financial instruments** of £72m (2019 inflow £47m) 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. For alternative performance measure definitions see glossary on page 10.
2. International Financial Reporting Standards.
3. Taxation is managed on a Group basis.

Net debt

	30 June 2020 £m	31 December 2019 £m
Components of net debt		
Cash and cash equivalents	2,523	2,587
Debt-related derivative financial instrument assets – non-current	230	103
Debt-related derivative financial instrument assets – current	26	–
Loans – non-current	(4,251)	(3,020)
Loans and overdrafts – current	(525)	(377)
Debt-related derivative financial instrument liabilities – non-current	(41)	(6)
Debt-related derivative financial instrument liabilities – current	–	(30)
Net debt	(2,038)	(743)

The Group's **net debt** at 30 June 2020 is £2,038m, a net increase of £1.3bn from the net debt position of £743m at the start of the year. In April, the Group raised \$1.3bn (£1.0bn) via a ten-year, 3.4% bond issue which was used to contribute £1bn into the UK pension scheme.

Cash and cash equivalents of £2,523m (31 December 2019 £2,587m) are held primarily for the repayment of debt securities, post-employment benefits deficit funding, payment of the 2020 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.

While there remains significant uncertainty as to the future impact of the COVID-19 pandemic, the Group continues to conduct ongoing risk assessments of the potential impact of the pandemic on its business operations and liquidity. Demand from the Group's key customers remains high with a strong order book, as well as ongoing customer engagement on programmes in order to ensure their requirements continue to be met. The Group also continues to work with and support its supply chain to actively address the risk of disruption.

The Group has taken actions to enhance its operational resilience and position the business towards a return to full operational tempo. In many of our defence operations, the number of employees now working has progressed to near normal levels, whether through working on site in accordance with adjusted protective safety measures or through working remotely from home. Further improvements are expected to be progressively achieved during the third quarter. In parallel, the business continues to drive cost control measures.

Despite the impact of the pandemic, the Group's liquidity is expected to remain strong, as we continue 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

The Group's principal risks and uncertainties at 31 December 2019 were detailed on pages 78 to 81 of the Annual Report 2019, and related to the following areas: defence spending; government customers; international markets; competition in international markets; laws and regulations; contract risk and execution; contract awards and cash profiles; pension funding; information technology security; people; and acquisitions.

Since the Annual Report 2019, and with the advent of the COVID-19 coronavirus pandemic, the Group has identified the following new risk.

The outbreak of contagious diseases may have an adverse effect on the Company's business, financial condition and results of operations.

Contagious diseases can have an adverse effect on the Group's business, financial condition and results of operations. There is currently a COVID-19 coronavirus pandemic across the world and governments are taking a number of steps to mitigate the impact of this pandemic. Many people have contracted the disease across the world and many deaths have occurred. It is not clear for how long this pandemic will last or how much more extensive it will become, or the further measures that will be taken by governments and others to seek to control this pandemic and its impact.

Since the outbreak of the COVID-19 coronavirus pandemic, the Group has taken a number of responsive measures including reducing site operational levels and introducing new cleaning regimes, safe working distance measures and protective equipment for its employees. A significant proportion of the Group's employees are working from home. While the Group is liaising closely with its customers and suppliers to understand any changes in requirements and priorities during this time, the uncertainties surrounding the development of this pandemic make it difficult to predict the extent to which the Group may be affected.

The COVID-19 coronavirus pandemic could also result in changes to the outlook in the Group's markets. Areas of the Group's business that could be impacted include a decrease in spending by the Group's major defence and commercial customers, the failure to obtain awards for defence and commercial contracts, the failure of suppliers to deliver parts to the Group, the requirement for the Group or its suppliers to reduce site operational levels or close sites, the inability of the Group to meet contractual delivery requirements on time, the inability to adequately staff and manage the business, and an increase in the cost or lack of availability of funding. If the Group were unable to obtain appropriate funding, it could be forced to make reductions in spending, seek to extend payment terms with suppliers and / or suspend or curtail planned programmes. Any of the above could have a material adverse effect on the Group's business, financial condition and results of operations.

Segmental performance: Electronic Systems

Electronic Systems, with 16,300 employees¹, comprises the US- and UK-based electronics activities, including electronic warfare 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 and hybrid electric drive systems.

Financial performance

	Financial performance measures as defined by the Group ²			Financial performance measures defined in IFRS ³			
	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019	
Sales	£2,203m	£2,142m	£4,439m	Revenue	£2,203m	£2,142m	£4,439m
Underlying EBITA	£291m	£316m	£687m	Operating profit	£281m	£308m	£672m
Return on sales	13.2%	14.8%	15.5%	Return on revenue	12.8%	14.4%	15.1%
Operating business cash flow	£64m	£137m	£672m	Cash flow from operating activities	£163m	£213m	£833m
Order intake	£2,820m	£2,227m	£5,023m				
Order backlog	£7.3bn	£6.0bn	£6.0bn				

- Sales of \$2.8bn (£2.2bn) are in line with last year, excluding the impact of the acquisition. Growth in the defence business of 9% was driven by the F-35 programme, Compass Call and increased classified activity, offset by lower commercial volumes.
- Return on sales was 13.2%, reflecting the impact of the higher margin commercial sales decline.
- First half cash conversion of EBITA⁴ reflects the usual second half bias along with some working capital build as the defence business grew and with investment in facility expansions to support growth. A higher cash conversion level is expected over the full year.
- Order backlog grew to another record high of \$9.0bn (£7.3bn), with a book-to-bill ratio⁵ of 1.28 driven by significant awards on F-35, APKWS[®] and Threat Detection Solutions.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 10.
3. International Financial Reporting Standards.
4. Operating business cash flow as a percentage of Underlying EBITA.
5. Ratio of Order intake to Sales.

Operational performance

Whilst Electronic Systems closed the first quarter with solid performance, the onset of the pandemic over the course of the second quarter caused some production and supply chain disruptions. Two of the segment's businesses were more notably impacted by the pandemic, stemming from the significant economic downturns in the commercial air travel and mass transit markets. Cost reduction actions have been implemented across the sector, and some workforce adjustments have been necessary to adjust to changes in demand across impacted businesses.

In Controls & Avionics Solutions, reduced demand for electronic controls in Original Equipment Manufacturer deliveries as well as aftermarket services have impacted our commercial business. As a result, the US business furloughed approximately 700 employees for up to two months and reduced the workforce by approximately 250 employees in the first half of the year. While the impact is being realised in the near-term, the underlying need for new aircraft in the long-term is not expected to change. As the market recovers, we would expect a return of overall demand, for which the business is well positioned.

In Power & Propulsion Solutions, declines in mass transit and bus travel caused five of our seven bus-manufacturing customers to shut down operations for six to eight weeks. They have resumed operations, and we are coming back online to meet restored requirements.

In the first half of the year, we introduced two business areas: Countermeasure & Electromagnetic Attack Solutions; and Precision Strike & Sensing Solutions. These businesses and the retained Electronic

Combat Solutions, C4ISR Systems, Controls & Avionics Solutions, and Power & Propulsion Solutions were structured with a sharpened focus on three prime capabilities: radio frequency electronic warfare; precision guided munitions; and countermeasures.

Electronic Combat Solutions

The F-35 Lightning II programme completed deliveries for Lot 12 and has delivered over 650 electronic warfare systems to date. We also continue to support the Block 4 modernisation efforts under multiple contracts worth more than \$400m (£324m), and we continue to operate under a five-year Performance-Based Logistics contract to provide material availability and support for the F-35 sustainment programme.

Executing on our current contract from Boeing, we continue to deliver our next-generation electronic warfare Eagle Passive Active Warning Survivability System to support the upgrade of the US Air Force F-15 platform, and recently began system testing on F-15E test aircraft at both Eglin and Edwards Air Force Bases. To provide advanced electronic warfare capability, we are also under contract to install the Digital Electronic Warfare System on new and existing F-15 aircraft, and provide spare units and modules for domestic and international customers, to include the provision of hardware and software to support the first successful flight of the F-15QA fighter under a Qatar Foreign Military Sale programme.

Under a \$140m (£113m) contract with Lockheed Martin for Lots 2 and 3, we are producing the sensor technology for the Long Range Anti-Ship Missile (LRASM). We are also executing a Diminishing Material Sources contract for the next configuration of LRASM and have reached final negotiations for the LRASM Improvement Program to enhance the overall performance of the missile.

Due to the sensitive nature of electronic combat systems and technology, many of our programmes are classified. As a world leader in electronic warfare, we continue to provide next-generation technologies in support of the warfighter.

Countermeasure & Electromagnetic Attack Solutions

The Compass Call programme is currently executing contracts worth in excess of \$600m (£485m). The team continues to sustain and upgrade prime mission equipment on the existing EC-130H fleet, and is progressing the cross-decking of the mission system to a special-mission Gulfstream G550 jet. This aircraft will be designated as the EC-37B and is targeted to field in 2023.

We received \$179m (£145m) in US Army funding for the Limited Interim Missile Warning System programme for the first two production lot orders, and advance efforts to enable fielding on other Army rotary-wing aircraft. We completed contractor qualification and continue to support government testing.

Precision Strike & Sensing Solutions

The APKWS[®] laser-guided rocket programme provides guidance sections for 70mm rockets for US military rotary- and fixed-wing platforms. In addition to generating strong international interest, the programme has announced a successful demonstration of ground-launch capability. The programme is executing at full rate production under two Indefinite Delivery contracts, with awards totalling \$355m (£287m) in the period.

The Terminal High Altitude Area Defense (THAAD) seeker programme is executing at full rate production and was awarded a contract to design and manufacture next-generation infrared seekers, providing critical targeting technology that helps to protect the US and its allies from ballistic missiles.

C4ISR Systems

In May, we acquired the assets of the Airborne Tactical Radios business, advancing our strategic objective to pursue and deliver long-term growth and expand our full spectrum communications portfolio with multi-band radios and advanced cryptographic technologies. We affirmed our position as a leader in Link 16 technology, receiving a contract worth up to nearly \$1bn (£0.8bn) to produce, retrofit, and sustain joint tactical radios for the US Navy through our Data Link Solutions venture with Collins Aerospace.

We are experiencing steady growth in signals intelligence, where we captured a development and production programme worth up to \$190m (£154m) for a new mission, advanced SIGINT payload. In the space domain, we remain a leading provider of resilient, space-qualified subsystems and components.

Controls & Avionics Solutions

Whilst the industry works to recover from the pandemic, we continue to develop the integrated flight control electronics and remote electronic units for Boeing's next-generation 777X family. Following a successful first flight in January, we are continuing software updates and systems verification testing in support of aircraft certification. Our deliveries on the 737 MAX have restarted.

Our active inceptors received certification and are now in service on the Gulfstream G500 and G600, with initial production and flight testing ongoing for the G700. A derivative, LinkEdge™ (Active Parallel Actuation Subsystem), is being developed for the Chinook CH-47.

Our engine control product line continues to perform well across our legacy portfolio with FADEC International and FADEC Alliance, a joint venture between GE Aviation and FADEC International (our joint venture with Safran Electronics & Defense). The next-generation engine control for the engine that powers the 777X aircraft continues to progress through the flight test programme.

Development of the F-35 vehicle management computer technology refresh is proceeding to plan, and we are actively working toward a sustainment contract for the active inceptor systems.

Power & Propulsion Solutions

Adding to our more than 12,000 electric drive vehicles in service, Alexander Dennis Limited selected BAE Systems' clean propulsion systems to power up to 600 buses for the new fleet of the Republic of Ireland's National Transport Authority. Further, New York City Transit solidified its commitment to green technology by maximising the full order of 435 BAE Systems electric drive buses, and our Series-ER solution is helping San Francisco set up green zones in population-dense areas affected by air pollution. In Groningen, Netherlands and Paris, France, our Series-EV full battery electric system is attaining zero exhaust emissions 100% of the time. In addition, the business has begun to address emerging demand for similar technology in the marine sector.

Looking forward

Electronic Systems is well positioned to address current and evolving US defence priority programmes from our strong franchise positions in electronic warfare, precision guidance and seeker solutions. Electronic Systems has a long-standing programme of research and development. Our 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, we are well positioned for the medium term with strong, significant roles on F-35 Lightning II, F-15 upgrade and classified programmes, as well as with specific products such as APKWS®. Over the longer term and furthered by the acquisitions we are on track to complete in 2020, the business is poised to leverage its technology strength in emerging areas of demand, such as precision weaponry, space resilience, hyper-velocity projectiles, secure communications and autonomous vehicles.

In the commercial aviation market, Electronic Systems' technology innovations are enabling the business to maintain its long-standing customer positions. The demand profile, especially in aftermarket services and original equipment production will be affected in the mid-term by the COVID-19 pandemic impacts on civil aviation. Within our electric and hybrid-electric propulsion capability, whilst short-term impacts will be felt by the recent bus manufacturing shutdowns and the reduced demand for mass transit, we are well placed to continue to address the need for low- and zero-emission technology.

Segmental performance: Cyber & Intelligence

Cyber & Intelligence, with 9,900 employees¹, comprises the US-based Intelligence & Security business and UK-headquartered Applied Intelligence business, and covers the Group's cyber security, secure government and commercial financial security activities.

Financial performance

	Financial performance measures as defined by the Group ²			Financial performance measures defined in IFRS ³			
	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019	
Sales	£913m	£853m	£1,732m	Revenue	£913m	£853m	£1,732m
Underlying EBITA	£59m	£25m	£91m	Operating profit	£56m	£22m	£80m
Return on sales	6.5%	2.9%	5.3%	Return on revenue	6.1%	2.6%	4.6%
Operating business cash flow	£107m	£23m	£68m	Cash flow from operating activities	£120m	£38m	£99m
Order intake	£1,007m	£966m	£1,846m				
Order backlog	£1.7bn	£1.9bn	£1.8bn				

- In aggregate, sales of \$1.2bn (£0.9bn) were up 5% on a constant currency basis⁴, with the growth led by the Intelligence & Security business.
- Return on sales in the US business at 8.5% remained strong, based on good programme performance.
- Within Applied Intelligence, the exit from the loss-making UK-based Enterprise Managed Security Services business was completed in April. Overall Applied Intelligence made a small profit, an improvement on previous years as the strategic actions started last year take hold, following the restructuring charge of £25m in the first half of 2019.
- Cash conversion was very strong in the Intelligence & Security business on accelerated collections on a number of government contracts.
- The book-to-bill ratio⁵ of 1.1 reflected growth expectations in Intelligence & Security and continued strong demand in the Applied Intelligence Government business.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 10.
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

Intelligence & Security

The US-based Intelligence & Security business continues to maintain its bid pipeline, perform on existing contracts, and win new orders, although a number of new awards and programme opportunities have been delayed due to the COVID-19 pandemic. The financial impact on contract performance has been minimal to date, supported by the implementation of targeted business cost reductions. Further offsets have resulted from six- to 12-month extensions on several Intelligence Solutions programmes that are pushing their re-competes to 2021, and the business is seeking recovery of costs under the US CARES Act Section 3610 for employees who are on standby and ready to work.

Air Force Solutions

We received \$23m (£19m) in orders in the first half of the year on the Instrumentation Radar Support Programme (IRSP) to provide logistics sustainment support to the US Space Force for instrumentation tracking (radar, telemetry and optics) systems located around the world. Under IRSP, we have been a radar sustainment contractor of choice since 1985, providing support, sustainment and maintenance services for instrumentation systems at test ranges around the world.

On the US Air Force Intercontinental Ballistic Missile Integration Support Contractor programme, we continue to provide programme management, systems engineering, integration and testing,

sustainment and cyber defence support, and cumulative funding is approaching the \$1.1bn (£0.9bn) contractual ceiling.

We were awarded a multi-year Indefinite Delivery, Indefinite Quantity contract with an expected lifecycle value of \$474m (£383m) to provide electronic hardware and engineering services for a US government customer.

Our Enterprise IT Solutions business won a re-compete for a five-year \$85m (£69m) contract with the Air Force Research Laboratories for systems engineering, evaluation, and analysis.

We also won a multi-year US Navy award worth \$50m (£40m) for KC-130J Large Aircraft Infrared Countermeasures installations.

Integrated Defense Solutions

We are executing the fourth year of a five-year, \$368m (£298m) sole-source contract to support weapon systems on board US Ohio and UK Vanguard Class submarines, as well as future US Columbia Class and UK Dreadnought Class submarines.

The business was awarded a five-year, \$188m (£152m) US Navy contract to provide critical large-scale system engineering, integration and testing expertise for the AEGIS Weapons and Combat Systems aboard the Navy's surface combatant ships.

The US Navy awarded us a prime position on a ten-year, Indefinite Delivery, Indefinite Quantity contract with an expected lifecycle value of \$150m (£121m) to provide full rate production of mission system avionics and aircraft components, and production and installation of modification kits for the Naval Air Warfare Center Aircraft Division.

We were awarded a ten-year renewal of our Bankruptcy Noticing Center contract with a lifecycle value of \$106m (£86m) to distribute documents for the US Bankruptcy Courts to creditors.

Intelligence Solutions

We were selected as a subcontractor to support prime teams for two new opportunities: the seven-year Federal Systems Integration and Management Center Pathfinder contract with an expected lifecycle value of \$50m (£40m) to provide professional services for operations and intelligence support and management; and the five-year Joint Artificial Intelligence Center Joint Warfighting National Mission Initiative contract with an expected lifecycle value of \$90m (£73m) to provide a full spectrum of technical support and deliver AI-enabled systems.

After a year of strong performance on one of our prime contracts, we secured a \$25m (£20m) engineering change proposal to provide new application development for the federal agency customer.

Applied Intelligence

Applied Intelligence saw improved performance in the first half driven by the continued focus on operational efficiency and the benefits of restructuring of the legacy Technology & Commercial business in the second half of 2019. Negotiations regarding the sale of the US-based software-as-a-service business have continued despite the temporary market uncertainty caused by the pandemic, while the divestment of the Enterprise Managed Security Services business was completed in April 2020. The underlying core business delivered modest revenue growth in the first half of the year. Overall profitability benefited from the optimisation of business development expenditure and transformation activities in central functions.

The business has continued to operate at full capacity during the pandemic but the adverse macroeconomic situation is creating risk in terms of the ability to complete international deals and uncertainty regarding levels of customer spending that remain under review.

Government

The Government business has delivered increased order intake in the first half of the year driven by a particularly strong performance with International customers. Revenue growth has been driven by a strong performance in the National Security area following the trading of the large order backlog secured last year.

Financial Services

The Financial Services business has delivered growth in order intake in the first half driven by the North America and Asia Pacific regions. Revenue grew in Continental Europe and Asia Pacific following double digit order intake growth in 2019, but this was offset by declines in revenue in North America and the UK. Given the commercial exposure of the business we are expecting some COVID-19 related contraction in demand in the near term.

Looking forward

Intelligence & Security

The outlook for the US government services sector is stable, although market conditions remain highly competitive and dynamic. 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 re-competed contracts and new business across its portfolio of sustainment, integration and modernisation solutions for military and intelligence customers.

Applied Intelligence

The services and products we offer in our Government business ensure that we are well placed to deliver growth as cyber security becomes an increasingly important part of a nation's security. We continue to shape the Financial Services division to deliver sustainable demand and increased profitability given cyber is, and will continue to be, a core element of stewardship for companies in a sophisticated and persistent threat environment.

Segmental performance: Platforms & Services (US)

Platforms & Services (US), with 12,600 employees¹, has operations in the US, UK and Sweden. It manufactures 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				Financial performance measures defined in IFRS ³			
	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019		Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019
Sales	£1,718m	£1,522m	£3,337m	Revenue	£1,688m	£1,459m	£3,185m
Underlying EBITA	£121m	£135m	£267m	Operating profit	£105m	£130m	£239m
Return on sales	7.0%	8.9%	8.0%	Return on revenue	6.2%	8.9%	7.5%
Operating business cash flow	£143m	£5m	£241m	Cash flow from operating activities	£164m	£25m	£305m
Order intake	£2,069m	£1,810m	£4,020m				
Order backlog	£6.5bn	£5.6bn	£5.8bn				

- Sales were up 10% to \$2.2bn (£1.7bn) driven by the ramp up of US combat vehicle production, as the M109 delivered at consistent full rate production levels, and activity on the Armored Multi-Purpose Vehicle (AMPV), Bradley and Mobile Protected Firepower programmes increased.
- Return on sales performance for the half year was 7.0%. This was impacted by some COVID-19 related under-recoveries and supply chain interruptions. As outlined at the start of the year and reflecting the higher Combat Vehicle sales, margin is being traded on the AMPV and Amphibious Combat Vehicle programmes at an initial low level as is typical with projects at similar maturity levels.
- First half cash flow performance was very strong as vehicle production deliveries increased and working capital improved. Additionally, the business benefited from COVID-19 related customer actions on higher progress payments and lower customer retentions in Ship Repair.
- Strong demand and growth in this business is evidenced by the book-to-bill ratio⁴ of 1.2 and the order backlog increasing to \$8.0bn (£6.5bn) as significant awards were received on M109, Bradley and AMPV.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 10.
3. International Financial Reporting Standards.
4. Ratio of Order intake to Sales.

Operational performance

Platforms & Services' work is almost exclusively on military contracts, which has enabled the business to temper impacts of the COVID-19 pandemic on revenues. However, operational disruptions have resulted in delivery delays on most vehicle programmes, some stemming from a temporary pause in manufacturing operations at our York, Pennsylvania manufacturing hub to implement expanded preventative measures. Overall, our manufacturing facilities and shipyards have continued to operate with the implementation of safety measures, including social distancing where possible, use of masks, and temperature screenings.

Whilst the majority of office-based employees are working remotely from home, employee furloughs have occurred where work on programmes has slowed, and a small number of reductions in workforce unrelated to the pandemic were made in the naval weapons line of the US business. We are working with our customers to meet ongoing demand, and when there is a COVID-19 impact, we are working quickly to determine levels of disruption and maintaining open dialogues to establish new delivery timeframes as appropriate.

Combat Mission Systems

In January, we announced the merger of the legacy Combat Vehicles and Weapon Systems US business areas into Combat Mission Systems, while separating out two other businesses to become Weapon Systems Sweden and Weapon Systems UK.

While the pandemic has made some schedule adjustments necessary, Combat Mission Systems continues to make progress towards achieving consistent quality and production throughput across multiple programmes. This has been achieved by investing in modernising facilities and implementing improved manufacturing technologies, including automation and robotic welding, which are bringing long-term benefits across our vehicle programmes.

We continue to deliver Amphibious Combat Vehicles (ACVs) to the US Marine Corps and received another Low-Rate Initial Production contract in February, bringing the total value to \$599m (£485m) for 116 vehicles. We have begun design and development activities on two new ACV mission variants and recently selected a 30mm gun system for the ACV-30 weapons variant. The ACV programme is currently undergoing Initial Operational Test and Evaluation, the last major test to determine whether systems are operational and effective for full-rate production.

As one of two competitors, we continue to work on the US Army's Mobile Protected Firepower programme under a \$376m (£304m) contract for the engineering and manufacturing development phase for rapid prototyping efforts.

We continue to work on the US Army's Armored Multi-Purpose Vehicle programme under contracts worth \$1.3bn (£1.1bn). Initial vehicle delivery is scheduled to begin in the second half of the year.

We continue to progress the production phase of the M109A7 programme under cumulative awards totalling approximately \$1.5bn (£1.2bn) for 204 vehicle sets. The decision to proceed to full-rate production was made in the first quarter, and we received a \$339m (£274m) contract in March for 48 vehicle sets. We are also working to support the integration of the Extended Range Cannon Artillery on the M109A7 to double the range of the gun system.

Work has begun to upgrade 332 Bradley vehicles to the A4 configuration on contracts valued at \$578m (£468m), and in June we received a \$267m (£216m) contract for an additional 159 vehicles.

We continue to produce and sustain the US Army's M88 recovery vehicles, including under a contract valued at \$148m (£120m) to upgrade 43 vehicles from the M88A1 to the M88A2 HERCULES configuration, and a \$318m (£257m) contract for upgrades to the next-generation M88A3 configuration to restore single-vehicle recovery.

Internationally, we delivered the first two Assault Amphibious Vehicles of the 36 ordered under a contract with Taiwan.

In the guns and weapon systems product line, we received a US Navy contract with initial awards totalling \$166m (£134m) for the production of missile canisters supporting the Vertical Launching System. The contract could reach a maximum value of \$955m (£773m) over five years if all options are exercised.

We are working on 2019 orders totalling \$85m (£69m) from the US Navy to deliver six Mk45 Mod 4 gun systems.

We are producing 28 more Virginia Payload Module tubes, for a total of 37 tubes for the US Navy's Block V Virginia-class submarines.

On the Maritime Indirect Fire System contract with the Group's UK Maritime sector as the prime for the UK Royal Navy's Type 26 frigate programme, we continue to perform on a \$183m (£148m) contract which includes Mk45 Mod 4 gun systems, automated ammunition handling systems and gun fire control systems.

Ordnance Systems

We have continued to operate and modernise the US Army's Radford and Holston munitions facilities with the implementation of safety guidelines during the pandemic, with minor schedule and cost impacts being managed in consultation with the customer.

Modernisation activities at Holston continue under multiple contracts for a natural gas-fired steam facility, a waste water management facility, and the design, construction and commissioning of new production facilities.

At Radford, work continues on the construction of a modernised nitrocellulose facility, and we are actively managing ongoing subcontractor performance issues, cost and schedule overruns, and related disputes.

US Ship Repair

Our maintenance and modernisation shipyards continue to monitor volume and timing impacts related to COVID-19, to include delays in excess of 60 days for contract awards or commencement of work per the US Navy's pandemic response. In the first half of the year, we secured orders totalling approximately \$430m (£348m), including a \$200m (£162m) award to service the USS Boxer in San Diego and \$38m (£31m) in contracts to service the USS Lassen and USS Farragut in Jacksonville, Florida.

In June we completed the first tandem drydocking work for two large warships in our San Diego shipyard under contracts totalling \$170m (£138m), though the USS Stethem and USS Decatur will remain in the shipyard for post-drydocking work.

Our plan remains to cease operations at our Pearl Harbor, Hawaii, facility by early 2021. This decision follows a thorough analysis of the Multiple Award Contract structure for new maintenance and modernisation work in Hawaii.

BAE Systems Hägglunds

We continue to pursue CV90 opportunities, including the Czech Republic's competition for a new fleet of infantry combat vehicles. Existing customers have expressed interest in the platform, and negotiations are maturing.

Work is progressing to refurbish Swedish CV90s, and deliveries continue on the integration of 40 Mjölner mortar systems. Under a Dutch Army contract, we are working to integrate the Elbit Systems' Iron Fist Active Protection System on CV90s. In addition, we have successfully tested an Anti-Tank Guided-Missile system for potential integration on customers' CV90s.

Weapon Systems Sweden

We continue to execute on Swedish Army and US Army contracts for 155mm BONUS ammunition, including an additional US Army contract received in the first half of the year. We are working to complete the 24 additional ARCHER systems for the Swedish government, and we are under multiple export contracts to deliver 40 Mk4 and 57 Mk3 naval gun systems. We are also delivering 57mm Mk110 gun systems to the US Navy and Coast Guard.

Weapon Systems UK

Production of 145 M777s for the Indian Army continues under a \$542m (£439m) Foreign Military Sales contract. The initial guns are being built in our UK facility, with at least 120 subsequent systems to be assembled in India at Mahindra Defence Systems' new facility. Production resumed in the UK after a brief pause due to the pandemic.

FNSS

FNSS, our land systems joint venture based in Turkey, continues to produce 8x8 wheeled armoured vehicles for the Royal Malaysian Army. Deliveries continue under a contract with Oman for PARS wheeled armoured vehicles in 8x8 and 6x6 configurations. In late 2019, FNSS signed a contract for the supply of Medium Weight Tanks to Indonesia.

Work progresses under multiple contracts for the Turkish Armed Forces, including a €278m (£253m) contract for 260 anti-tank vehicles, an €84m (£76m) contract for air defence vehicles, a €155m (£141m) contract for 27 assault amphibious vehicles, and a €154m (£140m) contract for 100 special purpose 8x8 and 6x6 vehicles, while also modernising 133 Turkish Armed Forces amphibious vehicles.

Looking forward

Combat Mission Systems 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 export programmes from BAE Systems Hägglunds. 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 business well placed for growth in the medium term through domestic and international prospects. The team is working on, and is closely following, the US Army's acquisition plans for its next generation of combat vehicles, in particular the mobile protected firepower and optionally manned fighting vehicle.

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 homeports. This capitalised infrastructure represents a material barrier to entry, and the business remains well aligned to the US Navy's operational strategy. 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 28,800 employees¹, comprises the Group's UK-based air activities for European and International markets and US Programmes, and its businesses in Saudi Arabia and Australia, together with a 37.5% interest in the European MBDA joint venture.

Financial performance

	Financial performance measures as defined by the Group ²			Financial performance measures defined in IFRS ³			
	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019	
Sales	£3,610m	£3,366m	£7,457m	Revenue	£3,029m	£2,824m	£6,153m
Underlying EBITA	£356m	£438m	£887m	Operating profit	£324m	£379m	£777m
Return on sales	9.9%	13.0%	11.9%	Return on revenue	10.7%	13.4%	12.6%
Operating business cash flow	£17m	£(163)m	£408m	Cash flow from operating activities	£100m	£(132)m	£497m
Order intake	£2,482m	£2,046m	£4,594m				
Order backlog	£23.2bn	£25.9bn	£23.9bn				

- Sales of £3.6bn were up 8% on a constant currency basis⁴. As expected, year-on-year there was higher production activity on the Typhoon programme for Qatar and F-35. In addition, MBDA sales grew on deliveries to Qatar and India.
- The return on sales of 9.9% was down against original expectations for the first half due to the COVID-19 impact of unrecovered costs. As expected there was a year-on-year increase in self-funded research and development expenditure on the Tempest future combat air development programme, and return on sales remains lower as the business is still in the early phase of the Qatar programme.
- Cash flow largely reflects the utilisation of advances on a number of Middle East programmes.
- Order backlog reduced to £23.2bn, primarily due to the trading on multi-year orders, received in prior years, for Saudi support and the Qatar programme, partially offset by funding on the F-35 Lot 14.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 10.
3. International Financial Reporting Standards.
4. Current period compared with prior period translated at current period exchange rates.

Operational performance

The COVID-19 pandemic has impacted across all markets and countries in the Air sector, and the priority throughout has been and remains the delivery of customer critical activity whilst ensuring the safety of our employees. Swift enactment of business continuity plans has enabled some mitigation against the adverse financial effects of the pandemic, ensuring continuity of cash flow both from our customers and into the supply chain.

In the UK, following a temporary suspension of operations, on-site facilities have been extensively re-configured to enable social distancing and enhanced cleaning regimes have been implemented. Whilst a majority of employees continue to work remotely, a sizeable population has returned to site operating under newly established safe systems of work.

In Saudi Arabia, access to customer sites has at times been limited, and our ability to deliver training impacted due to the enforced closure of our teaching and training facilities. The business has however continued to operate throughout the disruption in line with Saudi government-issued regulations.

In Australia, the impact on the business has not been significant to date, however the majority of personnel are working remotely with only those performing critical roles which cannot be undertaken remotely attending sites.

In MBDA, although productivity levels have been impacted, the business has continued with deliveries to both domestic and export customers, and all of MBDA's European sites remain operational with appropriate safe and remote working practices in place.

European & International markets

Activity on the 24 Typhoon and nine Hawk aircraft and associated support and training contract for the Government of the State of Qatar progresses well, with milestones achieved.

Three deliveries of major units under the Kuwait Typhoon contract, secured by Italian Eurofighter partner Leonardo, occurred in the period. The remaining deliveries are planned by 2022.

The final Italian Typhoon of the 88 aircraft Tranche 3 contract is planned to be delivered in the second half of the year. BAE Systems is supporting Eurofighter in its bid for 38 aircraft to replace the original Typhoon Batch 1 aircraft of the German Air Force.

We continue to support the UK Typhoon fleet under a ten-year partnership arrangement to achieve the contracted flying hours. BAE Systems continues to support the European Partner Nations' own support arrangements. During the first half of the year, the Group was asked to enter into negotiations with the Omani customer regarding a transition to a reduced scope support solution for the Typhoon fleet. These negotiations remain ongoing, and are expected to conclude early in the second half of 2020.

Support to the Royal Air Force's UK fleet of Hawk fast jet trainer aircraft continues through the long-term availability contract, with negotiations ongoing for a 13-year follow-on arrangement. Support to users of Hawk trainer aircraft around the world also continues.

The future electronically scanned European Common Radar Solution is progressing with initial entry into service contracted on Kuwait and Qatar aircraft. German and Spanish Air Forces have awarded contracts to enhance the capability of their in-service aircraft by upgrading some of their fleet with the new radar standard. The UK continues to fund activity for future UK standard of radar.

The next phase of the Tempest technology maturation programme is progressing well with an outline business case submission expected by the end of 2020. The Swedish and Italian governments are engaged with the UK government to develop next-generation combat air capability.

The Company continues to invest in promising unmanned and communication technologies for the future. The PHASA-35[®] solar-electric powered unmanned aircraft successfully completed its maiden flight in February. Designed to operate unmanned in the stratosphere, above the weather and conventional air traffic, it plugs the gap between aircraft and satellite technology. Discussions with a range of customers continue in the development of this technology and a range of services.

There are now 85 employees engaged on the collaboration for the design and development phase of an indigenous fifth-generation fighter jet for the Turkish Air Force.

US Programmes

The production of rear fuselage assemblies will ramp up to full rate by 2021. In the period, 50 rear fuselage assemblies were delivered on the production contracts across Lots 11 to 13, falling slightly below the planned level as a result of the COVID-19 disruption. Deliveries in the second half are forecast to recover, with the full year position expected to be in line with our contractual requirement. The Lots 15 to 17 negotiations are expected to commence during the second half of the year and are likely to conclude during 2021.

The Company continues to support the Royal Navy and Royal Air Force in integrating the F-35 aircraft into its operational fleet and forward deployments.

BAE Systems continues to play a significant role on the F-35 sustainment programme including the supply of spares and technical support, software products, upgrades and specialist manpower services.

Saudi Arabia

The Group is reliant on the continued approval of export licences by a number of governments in order to continue supplies to the Kingdom of Saudi Arabia. Following updates from the German government regarding export licences, we are working closely with industry partners and the UK government to continue to fulfil the contractual support arrangements in Saudi Arabia on the key European collaboration programmes.

BAE Systems continues to perform on the contract secured in 2018 to provide Typhoon support services to the Royal Saudi Air Force through to 2022. Through this contract the business also supports the Industrialisation of Defence capabilities in Saudi Arabia. In March 2018, the UK and the Kingdom of Saudi Arabia signed a Memorandum of Intent for the supply of a further 48 Typhoon aircraft, support and transfer of technology and capability. Final assembly of all 48 Typhoon aircraft would be in-Kingdom.

The Saudi British Defence Co-operation Programme five-year funding agreement through 2021 comprises a number of contracts, including support to the Tornado fleet and provision of Officer, Aircrew and Groundcrew Training for the Royal Saudi Air Force, as well as engineering and logistics services for the Royal Saudi Naval Forces. While the Company continues to meet the majority of its contractual obligations under these contracts, there has been some disruption as a result of the COVID-19 pandemic.

A total of seven Hawk aircraft assembled in-Kingdom have now been completed and entered service with the Royal Saudi Air Force, including three in the period. The Company has delivered all 22 major units to meet this final assembly programme.

We continued to reorganise our portfolio of interests in a number of industrial companies in Saudi Arabia. Riyadh Wings Aviation Academy LLC increased its ownership to 26.53% in the Group's Overhaul and Maintenance Company (OMC) subsidiary, under a contract to acquire an interest of 49%.

The sale of OMC's 50% shareholding in Advanced Electronics Company to Saudi Arabian Military Industries (SAMI) is expected to conclude in the second half of the year.

Through the restructuring of the Group's portfolio of interests in its Kingdom of Saudi Arabia industrial companies, the Company is working in partnership with SAMI to explore how we can collaborate to deliver further In-Kingdom Industrial Participation, in line with the Kingdom's National Transformation Plan and Vision 2030.

Australia

The initial design and production readiness phase of the Hunter Class programme for the Royal Australian Navy is progressing to plan, and ASC Shipbuilding has been integrated into our Australian operations. The first Integrated Baseline Review for the programme occurred in March as planned and handover of the new shipyard commenced as planned in July. The next major milestone due to commence is prototyping, which remains on target for December 2020.

The Jindalee Operational Radar Network continues to meet operational targets and the upgrade schedule is under joint review with the Commonwealth of Australia, to optimise the project delivery strategy to mitigate late delivery of a design milestone.

Final acceptance of the Royal Australian Navy's two Landing Helicopter Docks, is expected in the second half of the year.

Supply chain quality issues have affected the Hawk Mk127 Lead-In Fighter aircraft availability, however pilot training for the Australian Defence Force has not been impacted. Plans have been enacted within the supply chain which are returning availability to required levels.

Sustainment activity continues for the regional F-35 fleet at our Williamstown facility, with 17 aircraft now on base.

Research and development activity in Australia has increased, with progress made supporting the Boeing Australia Loyal Wingman programme and the Australian Army assessment of autonomous M113 armoured personnel carriers.

MBDA

During the first half of 2020, MBDA continued to win domestic and export orders. The business is well placed to benefit from defence spending in a number of European countries and International opportunities with several significant bids underway.

In the period, new contracts were signed, including the Brimstone Capability Upgrade Programme for the UK Armed Forces air platforms, and for the mid-life update of the Aster Air Defence missile for the French customer. The Assessment Phase contract for the Future Cruise / Anti-Ship Weapon (the Anglo /

French co-operation programme to replace Storm Shadow / Harpoon in the UK and SCALP / Exocet in France) is expected to be awarded in the second half of 2020.

The MBDA / Lockheed Martin consortium is preparing its response to the German customer's renewed request for a further proposal iteration for TLVS (Ground-Based Air Defence System), with contract award now anticipated in 2021. Good progress has been made on a number of development programmes including 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 will increase in 2021 to reach the expected peak rate for the decade. The business plays a significant role in the F-35 sustainment programme in support of Lockheed Martin, and revenues are set 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. 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.

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 is expected to drive growth in the coming years.

MBDA has a strong order backlog supporting future years' sales. Development programmes continue to improve the long-term capabilities of the business, and as European nations embark on new combat air systems development, MBDA will be well placed to provide the system solutions and technologies required to deliver efficient and competitive common effects for these platforms.

In the medium to longer term, future defence expenditure in a number of our markets could be impacted as governments seek to rebalance their budgets due to financial impacts in response to the COVID-19 pandemic and any sustained reduction in oil prices.

Segmental performance: Maritime

Maritime, with 16,600 employees¹, comprises the Group's UK-based maritime and land activities.

Financial performance

Financial performance measures as defined by the Group ²				Financial performance measures defined in IFRS ³			
	Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019		Six months ended 30 June 2020	Six months ended 30 June 2019	Year ended 31 December 2019
Sales	£1,505m	£1,525m	£3,116m	Revenue	£1,478m	£1,512m	£3,071m
Underlying EBITA	£122m	£133m	£268m	Operating profit	£108m	£120m	£253m
Return on sales	8.1%	8.7%	8.6%	Return on revenue	7.3%	7.9%	8.2%
Operating business cash flow	£(67)m	£(92)m	£150m	Cash flow from operating activities	£(35)m	£(45)m	£289m
Order intake	£1,035m	£1,334m	£2,875m				
Order backlog	£8.1bn	£8.7bn	£8.6bn				

- Sales were broadly unchanged at £1.5bn.
- Return on sales was at 8.1%, slightly lower than the prior year owing to COVID-19 related costs.
- The operating business cash outflow of £67m reflects utilisation of advances on a number of programmes and the usual first half timing profile. Second half cash conversion is expected to be stronger and the annual funding on the UK munitions supply contract as usual is scheduled for December.
- Order backlog as expected has reduced to £8.1bn, reflecting trading on the long-term contracts for the Astute and Type 26 programmes.

1. Including share of equity accounted investments.
2. For alternative performance measure definitions see glossary on page 10.
3. International Financial Reporting Standards.

Operational performance

Following formal declaration of the COVID-19 pandemic, we made significant changes to our facilities and working practices to ensure a safe system of work to provide critical services in support of national security and defence contracts.

We executed robust business continuity plans at pace with the majority of our employees quickly enabled to work from home. At HM Naval Base Portsmouth, arrangements were put in place to ensure that the majority of employees, who could not carry out their roles from home, were able to continue to work on site. At our other sites, the majority of employees unable to work from home have returned to our sites to deliver our critical operations following a thorough COVID-19 safety induction. In order to ensure the health and safety of those working from our sites, new working arrangements have been introduced which comply with government safety guidelines. Measures include the reconfiguration of offices and workshops to support social distancing, additional hand washing and hygiene facilities, enhanced cleaning regimes and, where appropriate, the use of additional personal protective equipment.

We have worked closely with our main customer, the UK Ministry of Defence, to understand and respond to the impacts of the pandemic on our sector. On our major programmes, we have sought and agreed interim payment mechanisms to secure and maintain cash flow. In addition, we have increased engagement with our supply chain to ensure that pressures as a consequence of the pandemic are managed closely to limit programme impacts.

Maritime Naval Ships

Four of the five River Class Offshore Patrol Vessels have now been accepted by the Ministry of Defence, with the fourth ship, HMS Tamar, leaving Glasgow and arriving at her home port of Portsmouth Naval Base in March. We are working to a schedule which would see programme completion in 2020.

The first three City Class Type 26 frigates are on contract with construction underway on the first two ships. The programme continues to see strong progress with all 57 units of the first of class, HMS Glasgow, in construction, of which approximately 40% are being integrated to form the ship. She remains on track to be delivered to the Royal Navy in the mid-2020s. The second ship, HMS Cardiff, entered the manufacturing phase in August 2019 following the ceremonial cut steel ceremony at BAE Systems' Govan yard in Glasgow with approximately 10% of her units in construction.

Following the selection of the Type 26 platform design by the Commonwealth of Australia for its own future frigate programme, the knowledge transfer programme between teams in the UK and Australia is now in place with critical data being exchanged to support the Hunter Class build strategy. Preparations have also commenced for the Hunter Class Frigate programme's prototyping phase where we will build five test blocks and test the entire value chain.

We are now in the preliminary design phase for the Canadian Surface Combatant working with Lockheed Martin Canada and Irving Shipbuilding Inc. With the signing of our Support Services contract with Irving Shipbuilding in the second quarter, we will start to see opportunities to transfer product and process knowledge and share experience of complex operations.

Submarines

BAE Systems is a member of the Dreadnought Alliance, working alongside the Submarine Delivery Agency and Rolls-Royce to deliver a replacement for the Royal Navy's Vanguard class, which carries the UK's independent nuclear deterrent. The value of the Dreadnought programme to the Company to date is £5.6bn, with contract funding of £0.2bn received in 2020 so far. Four Dreadnought Class submarines are planned to be built in Barrow, with the first of these due to be in operational service in the early 2030s. Construction of the first two submarines continues to advance. The major programme of investment to redevelop the Barrow site to support the delivery of Dreadnought is progressing, with a number of new facilities complete and in operation.

The first four Astute Class submarines have now been delivered to the Royal Navy, while the remaining three boats are at an advanced stage of construction.

Maritime Services

Our Maritime Services business is responsible for management and maintenance of HM Naval Base Portsmouth and supports the Royal Navy's Portsmouth-based surface fleet, including the Type 45 destroyers, Queen Elizabeth Class aircraft carriers, Type 23 frigates and Hunt Class mine countermeasure vessels through the Maritime Support Delivery Framework (MSDF) contract. An 18-month extension to the MSDF contract was signed in March.

The upkeep of HMS Dauntless was completed in May and the ship is the first Type 45 to enter the Power Improvement Programme, being delivered by BAE Systems, Cammell Laird and BMT.

We continue to deliver the Torpedo Repair and Maintenance contract. Progress continued on the £270m Spearfish torpedo upgrade programme, with the demonstration phase forecast to complete later in 2020.

We secured a contract to deliver an autonomous version of our Pacific 24 sea boat under the NavyX autonomy and lethality programme.

Land UK

Our Munitions business provides UK and international customers with a wide range of light and heavy munitions, as well as offering complementary support services for development, testing and evaluation.

The business continues to work with the UK Ministry of Defence to agree its Next Generation Munitions Solution, which is the proposed replacement to the existing Munitions Acquisition Supply Solution partnering agreement.

RBSL is expected to secure the contract for its share of work on the Mechanised Infantry Vehicle programme in the second half of the year.

Looking forward

Maritime

Overall the outlook is stable based on long-term contracted positions. Within Submarines, the business is executing the Astute Class programme, with four boats delivered and three boats in build. On the Dreadnought programme manufacturing activities continue on the first and second boats. Investment continues in the Barrow facilities in order to provide the capabilities to deliver this long-term programme through the next decade and beyond. In shipbuilding, sales are underpinned by the manufacture of Type 26 frigates. Through life support of surface ship platforms, capability upgrades for radars and in-service support for torpedoes form the basis of Maritime Services sales in the coming years.

Land UK

Munitions supply continues under the Munitions Acquisition Supply Solution partnering agreement secured in 2008, with a view to transitioning towards a new agreement. Future RBSL work is expected to be underpinned by existing support contracts and workshare on the Mechanised Infantry Vehicle programme.

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 IAS 34 Interim Financial Reporting, as adopted by the European Union.
- The interim management report on pages 1 to 36 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
29 July 2020

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
Elizabeth Corley	Non-executive director
Jane Griffiths	Non-executive director
Chris Grigg	Non-executive director
Stephen Pearce	Non-executive director
Nicole Piasecki	Non-executive director
Nick Rose	Non-executive director
Paula Rosput Reynolds	Non-executive director
Ian Tyler	Non-executive director

Independent review report to BAE Systems plc

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 2020 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 the related explanatory notes 1-14. We have read the other information contained in the half-yearly financial report and considered whether it contains any apparent misstatements or material inconsistencies with the information in the condensed set of financial statements.

This report is made solely to the company in accordance with International Standard on Review Engagements (UK and Ireland) 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.

Directors' responsibilities

The half-yearly financial report is the responsibility of, and has been approved by, 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.

As disclosed in note 1, the annual financial statements of the Group are prepared in accordance with IFRSs as adopted by the European Union. The condensed set of financial statements included in this half-yearly financial report has been prepared in accordance with International Accounting Standard 34 "Interim Financial Reporting" as adopted by the European Union.

Our responsibility

Our responsibility is to express to the Company a conclusion on the condensed set of financial statements in the half-yearly financial report based on our review.

Scope of review

We conducted our review in accordance with International Standard on Review Engagements (UK and Ireland) 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.

Conclusion

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 2020 is not prepared, in all material respects, in accordance with International Accounting Standard 34 as adopted by the European Union and the Disclosure Guidance and Transparency Rules of the United Kingdom's Financial Conduct Authority.

Deloitte LLP

Statutory Auditor

London

United Kingdom

29 July 2020

Condensed consolidated income statement (unaudited)

	Notes	Six months ended 30 June 2020		Six months ended 30 June 2019	
		£m	£m	£m	£m
Continuing operations					
Sales	2	9,871		9,416	
<i>Deduct</i> Share of revenue of equity accounted investments		(1,208)		(1,271)	
<i>Add</i> Subsidiaries' revenue from equity accounted investments		517		529	
Revenue	2	9,180			8,674
Operating costs		(8,452)			(7,896)
Other income		73			58
Group operating profit		801			836
Share of results of equity accounted investments		7			60
<i>Underlying EBITA</i>	2	895		999	
<i>Non-recurring items</i>	2	(21)		(28)	
<i>EBITA</i>		874		971	
<i>Amortisation of intangible assets</i>		(49)		(49)	
<i>Financial expense of equity accounted investments</i>		(15)		(10)	
<i>Taxation expense of equity accounted investments</i>		(2)		(16)	
Operating profit	2	808			896
<i>Financial income¹</i>		12		16	
<i>Financial expense¹</i>		(131)		(136)	
Net finance costs	3	(119)			(120)
Profit before taxation		689			776
Taxation (expense) / credit	4	(130)			41
Profit for the period		559			817
Attributable to:					
Equity shareholders		532			795
Non-controlling interests		27			22
		559			817
Earnings per share					
	5				
Basic earnings per share		16.7p			25.0p
Diluted earnings per share		16.6p			24.9p

- Gains on remeasurement of financial instruments at fair value through profit or loss of £82m and foreign exchange gains of £15m were previously presented within financial income in 2019. The Group believes it is more representative to present these items net within financial expense, since the gains and losses relate to the same underlying transactions. Accordingly, amounts previously included within financial income in 2019 have been reclassified to financial expense.

Condensed consolidated statement of comprehensive income (unaudited)

	Six months ended 30 June 2020			Six months ended 30 June 2019		
	Other reserves £m	Retained earnings £m	Total £m	Other reserves £m	Retained earnings £m	Total £m
Profit for the period	–	559	559	–	817	817
Other comprehensive income						
Items that will not be reclassified to the income statement:						
Subsidiaries:						
Remeasurements on post-employment benefit schemes	–	(2,510)	(2,510)	–	(487)	(487)
Tax on items that will not be reclassified to the income statement	–	575	575	–	56	56
Equity accounted investments (net of tax)	–	(68)	(68)	–	(16)	(16)
Items that may be reclassified to the income statement:						
Subsidiaries:						
Currency translation on foreign currency net investments	582	–	582	18	–	18
Reclassification of cumulative currency translation reserve on disposal	–	–	–	(8)	–	(8)
Fair value gain arising on hedging instruments during the period	23	–	23	13	–	13
Cumulative fair value gain on hedging instruments reclassified to the income statement	(10)	–	(10)	(57)	–	(57)
Tax on items that may be reclassified to the income statement	–	–	–	8	–	8
Equity accounted investments (net of tax)	28	–	28	8	–	8
Total other comprehensive income for the period (net of tax)	623	(2,003)	(1,380)	(18)	(447)	(465)
Total comprehensive income for the period	623	(1,444)	(821)	(18)	370	352
Attributable to:						
Equity shareholders	615	(1,471)	(856)	(18)	348	330
Non-controlling interests	8	27	35	–	22	22
	623	(1,444)	(821)	(18)	370	352

Condensed consolidated statement of changes in equity (unaudited)

	Attributable to equity holders of BAE Systems plc						Non-controlling interests £m	Total equity £m
	Issued share capital £m	Share premium £m	Other reserves £m	Retained earnings £m	Total £m			
Balance at 1 January 2020	87	1,249	6,156	(2,085)	5,407	104	5,511	
<i>Profit for the period</i>	–	–	–	532	532	27	559	
<i>Total other comprehensive income for the period</i>	–	–	615	(2,003)	(1,388)	8	(1,380)	
Total comprehensive income for the period	–	–	615	(1,471)	(856)	35	(821)	
Share-based payments (inclusive of tax)	–	–	–	28	28	–	28	
Partial disposal of shareholding in subsidiary undertaking	–	–	–	(6)	(6)	12	6	
Cumulative fair value gain on hedging instruments transferred to the balance sheet (net of tax)	–	–	(23)	–	(23)	–	(23)	
Ordinary share dividends	–	–	–	–	–	(3)	(3)	
At 30 June 2020	87	1,249	6,748	(3,534)	4,550	148	4,698	
Balance at 1 January 2019 (post-IFRS 16 transition)	87	1,249	6,481	(2,363)	5,454	72	5,526	
<i>Profit for the period</i>	–	–	–	795	795	22	817	
<i>Total other comprehensive income for the period</i>	–	–	(18)	(447)	(465)	–	(465)	
Total comprehensive income for the period	–	–	(18)	348	330	22	352	
Share-based payments (inclusive of tax)	–	–	–	37	37	–	37	
Partial disposal of shareholding in subsidiary undertaking	–	–	–	(6)	(6)	20	14	
Cumulative fair value loss on hedging instruments transferred to the balance sheet (net of tax)	–	–	34	–	34	–	34	
Ordinary share dividends	–	–	–	(423)	(423)	(26)	(449)	
At 30 June 2019	87	1,249	6,497	(2,407)	5,426	88	5,514	

Condensed consolidated balance sheet (unaudited)

	Notes	30 June 2020 £m	31 December 2019 £m
Non-current assets			
Intangible assets		10,992	10,371
Property, plant and equipment		2,611	2,437
Right-of-use assets		1,144	1,138
Investment property		137	137
Equity accounted investments		362	428
Other investments		18	13
Other receivables		520	484
Post-employment benefit surpluses	6	253	302
Other financial assets		497	350
Deferred tax assets		1,274	726
		17,808	16,386
Current assets			
Inventories		951	835
Trade, other and contract receivables		5,737	5,458
Current tax		5	19
Other financial assets		230	210
Cash and cash equivalents		2,523	2,587
Assets held for sale		148	135
		9,594	9,244
Total assets		27,402	25,630
Non-current liabilities			
Loans		(4,251)	(3,020)
Lease liabilities		(1,106)	(1,116)
Other payables		(1,578)	(1,481)
Post-employment benefit obligations	6	(6,223)	(4,757)
Other financial liabilities		(183)	(227)
Provisions		(391)	(385)
		(13,732)	(10,986)
Current liabilities			
Loans and overdrafts		(525)	(377)
Lease liabilities		(257)	(238)
Trade and other payables		(7,527)	(7,926)
Other financial liabilities		(153)	(232)
Current tax		(170)	(55)
Provisions		(334)	(300)
Liabilities held for sale		(6)	(5)
		(8,972)	(9,133)
Total liabilities		(22,704)	(20,119)
Net assets		4,698	5,511
Capital and reserves			
Issued share capital		87	87
Share premium		1,249	1,249
Other reserves		6,748	6,156
Retained earnings – deficit		(3,534)	(2,085)
Total equity attributable to equity holders of BAE Systems plc		4,550	5,407
Non-controlling interests		148	104
Total equity		4,698	5,511

Condensed consolidated cash flow statement (unaudited)

	Notes	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 ¹ £m
Profit for the period		559	817
Taxation expense / (credit)		130	(41)
Adjustment in respect of research and development expenditure credits		150	(8)
Share of results of equity accounted investments		(7)	(60)
Net finance costs		119	120
Depreciation, amortisation, impairment and derecognition		312	330
Profit on disposal of property, plant and equipment, and investment property		(5)	(3)
Gain on investment revaluation		(5)	–
Gain on disposal of businesses		–	(8)
Cost of equity-settled employee share schemes		29	38
Movements in provisions		8	(38)
Contributions to post-employment benefit schemes in excess of service cost		(1,086)	(169)
Increase in working capital:			
Inventories		(72)	(70)
Trade, other and contract receivables		(46)	(885)
Trade and other payables		(685)	(107)
Taxation paid		(128)	(148)
Net cash flow from operating activities		(727)	(232)
Dividends received from equity accounted investments		24	90
Interest received		12	17
Principal element of finance lease receipts		4	5
Purchases of property, plant and equipment, and investment property		(159)	(142)
Purchases of intangible assets		(42)	(58)
Proceeds from sale of property, plant and equipment, and investment property		12	4
Acquisition of subsidiaries		(217)	(9)
Proceeds from sale of subsidiary undertakings		–	26
Equity accounted investment funding		–	(5)
Net cash flow from investing activities		(366)	(72)
Interest paid		(114)	(134)
Equity dividends paid	7	–	(423)
Dividends paid to non-controlling interests		(3)	(26)
Partial disposal of shareholding in subsidiary undertaking		–	14
Principal element of lease payments		(120)	(119)
Cash flow from matured derivative financial instruments		72	47
Cash flow from cash collateral		14	4
Cash inflow from loans		1,136	463
Cash outflow from repayment of loans		–	(1,236)
Net cash flow from financing activities		985	(1,410)
Net decrease in cash and cash equivalents		(108)	(1,714)
Cash and cash equivalents at 1 January		2,587	3,232
Effect of foreign exchange rate changes on cash and cash equivalents		44	(17)
Cash and cash equivalents at end of period		2,523	1,501

1. 2019 comparatives have been reclassified to present a cash inflow of £14m in respect of a partial disposal of the Group's shareholding in a subsidiary undertaking within financing activities. This cash flow was previously presented in investing activities.

Notes to the condensed half-yearly financial statements

1. Preparation

Basis of preparation and statement of compliance

These condensed consolidated half-yearly financial statements of BAE Systems plc (the Group) have been prepared in accordance with International Accounting Standard (IAS) 34 Interim Financial Reporting. The annual consolidated financial statements of the Group are prepared in accordance with EU-endorsed International Financial Reporting Standards (IFRSs). 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 2019. The comparative figures for the year ended 31 December 2019 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 2020 are consistent with the accounting policies applied by the Group in its consolidated financial statements as at, and for the year ended, 31 December 2019 as required by the Disclosure Guidance and Transparency Rules of the UK's Financial Conduct Authority, with the exception of income tax and the adoption of new and amended standards as set out below.

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.

Sources of estimation uncertainty

The full impact of the COVID-19 pandemic on medium- and long-term economic activity is not yet known, although could be significant. The Group continues to monitor the impact on its business and conduct ongoing risk assessments which consider a range of potential outcomes, however while the 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 margin recognition on contracts. These are based on constraints on variable consideration, estimates of future costs and an assessment of technical and other risks. 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 the COVID-19 pandemic may increase uncertainty in relation to these judgements and estimates. The Group continues to work closely and collaboratively with its key customers 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. The Group's estimates and assumptions relating to revenue could be impacted by issues such as reduced productivity as a result of altered working practices to comply with safety and social distancing requirements, or production delays and increased costs as a result of disruption to the supply chain. In the 2019 Annual Report, note 1 provided a sensitivity indicator regarding revenue recognised in respect of performance obligations satisfied or partially satisfied in previous periods. 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, although given its inherent uncertainty, it may not reflect the full potential impact of the pandemic;
- The valuation of post-retirement benefit obligations and related deferred tax balances, if estimates relating to actuarial assumptions (including discount rate, inflation rate assumptions) are no longer valid or change significantly as the economic impact of the pandemic develops. Discount and inflation rates could change significantly as a result of an economic downturn, monetary policy decisions and interventions or other macro-economic issues resulting from the pandemic. Note 6 provides information on the key assumptions and analysis of their sensitivities. Pension asset values could also be impacted by the economic uncertainty, for example if there is a longer term impact on equity market returns, or in relation to the valuation of assets for which there is no observable market value;

- The carrying value of goodwill, if areas of estimation and judgement detailed under revenue and margin recognition on contracts above crystallise, or if there are changes in customer demand as a result of potential reductions in defence budgets or lower demand in areas such as commercial aerospace. These may impact upon estimated future cash flows for value-in-use assessments and therefore potentially lead to the impairment of goodwill. Note 8 of the 2019 Annual Report provides information on the sensitivity of impairment to changes in assumptions, although given its inherent uncertainty, this range of assumptions may not reflect the potential impact of the pandemic; and
- The carrying value of property, plant and equipment, right-of-use assets, investment property and equity accounted investments could potentially be impacted in the event of a prolonged economic downturn, significant reductions in customer defence spending and orders, or fundamental and enduring changes in working practices.

As the potential range of impacts of the pandemic is inherently uncertain and could be significant, it is not practicable at this time to assign a range of sensitivities relating to the pandemic to some of these potential sources of estimation uncertainty.

Judgements made in applying accounting policies

In the course of preparing the financial statements and when applying its accounting policies, the Group has been required to make judgements with regard to its assessment of customers' ongoing requirements, as well as how the Group will continue to be able to operate in response to the limitations imposed upon the business and its operations by the COVID-19 pandemic. As noted in the 2019 Annual Report, no 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.

Separate from accounting policy judgements, assessments have been made by each business sector to consider the potential timing and extent of their return to normal operations. These judgements are based on considerations such as, but not limited to: local operational restrictions and the ability of sites and facilities to adopt safe and socially distanced working practices; customer instructions, requirements and guidance on progression of essential programmes; potential disruption to elements of the Group's supply chain; and possible changes in customer demand in commercial lines of business.

It should be noted that these assessments are part of a broader range of scenario planning undertaken by the business in the face of the COVID-19 pandemic, rather than as a formal forecasting process. The pandemic is an inherently uncertain event with future developments which cannot be predicted, and the Group will therefore continue to monitor its impact on the business, undertake risk assessments, and amend these judgements as required.

2. Segmental analysis

Sales and revenue by reporting segment

	Sales ¹		Deduct: Share of revenue of equity accounted investments		Add: Subsidiaries' revenue from equity accounted investments		Revenue	
	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
	Electronic Systems	2,203	2,142	(18)	(61)	18	61	2,203
Cyber & Intelligence	913	853	–	–	–	–	913	853
Platforms & Services (US)	1,718	1,522	(33)	(63)	3	–	1,688	1,459
Air	3,610	3,366	(1,056)	(994)	475	452	3,029	2,824
Maritime	1,505	1,525	(28)	(13)	1	–	1,478	1,512
HQ	102	163	(76)	(140)	–	–	26	23
	10,051	9,571	(1,211)	(1,271)	497	513	9,337	8,813
Intra-group sales / revenue	(180)	(155)	3	–	20	16	(157)	(139)
	9,871	9,416	(1,208)	(1,271)	517	529	9,180	8,674

Underlying EBITA and operating profit / (loss) by reporting segment

	Underlying EBITA ¹		Non-recurring items ²		Amortisation of intangible assets		Financial and taxation expense of equity accounted investments		Operating profit / (loss)	
	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
	Electronic Systems	291	316	(3)	–	(7)	(8)	–	–	281
Cyber & Intelligence	59	25	(2)	–	(1)	(3)	–	–	56	22
Platforms & Services (US)	121	135	(14)	–	(3)	(5)	1	–	105	130
Air	356	438	–	(28)	(16)	(14)	(16)	(17)	324	379
Maritime	122	133	–	–	(13)	(12)	(1)	(1)	108	120
HQ	(54)	(48)	(2)	–	(9)	(7)	(1)	(8)	(66)	(63)
	895	999	(21)	(28)	(49)	(49)	(17)	(26)	808	896
Net finance costs									(119)	(120)
Profit before taxation									689	776
Taxation (expense) / credit									(130)	41
Profit for the period									559	817

- The totals of these measures are not defined in International Financial Reporting Standards (IFRS) and, therefore, are considered to be non-GAAP (Generally Accepted Accounting Principles) measures. For alternative performance measure definitions see glossary on page 10.
- Non-recurring items in 2020 comprises a £14m impairment charge relating to Platform & Services' legacy Commercial Shipbuilding business which the business exited in 2018, and advisory fees of £7m relating to the Group's acquisition and disposal activities (2019 comprises a £36m charge relating to the derecognition of Enterprise Resource Planning software intangible assets in the Air sector and an £8m gain on disposal of Aircraft Accessories and Components Company).

Underlying EBITA is the Group's measure of profit / (loss) for each reportable segment. The table above is provided to reconcile the total of the reportable segments' underlying EBITA to the Group's profit for the period.

3. Net finance costs

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Net finance costs:		
Group	(119)	(120)
Share of equity accounted investments	(15)	(10)
	(134)	(130)
Analysed as:		
Underlying interest expense:		
Group	(118)	(123)
Share of equity accounted investments	(9)	(7)
	(127)	(130)
Other:		
Group:		
Net interest expense on post-employment benefit obligations	(43)	(58)
Fair value and foreign exchange adjustments on financial instruments and investments	42	61
Share of equity accounted investments:		
Net interest expense on post-employment benefit obligations	(1)	(2)
Fair value and foreign exchange adjustments on financial instruments and investments	(5)	(1)
	(134)	(130)

4. Taxation

Taxation (expense) / credit

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Taxation expense excluding one-off items	(130)	(120)
One-off tax benefit	–	161
Taxation (expense) / credit	(130)	41

Calculation of the underlying effective tax rate

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Profit before taxation	689	776
Add back: Taxation expense of equity accounted investments	2	16
Add back / (deduct): Non-taxable non-recurring items	7	(8)
Adjusted profit before tax	698	784
Taxation (expense) / credit	(130)	41
Taxation expense of equity accounted investments	(2)	(16)
Exclude: One-off tax benefit	–	(161)
Adjusted taxation expense (including equity accounted investments)	(132)	(136)
Underlying effective tax rate	19%	17%

5. Earnings per share

	Six months ended 30 June 2020			Six months ended 30 June 2019		
	£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	532	16.7	16.6	795	25.0	24.9
Add back / (deduct):						
Non-recurring items, post tax ¹	18			22		
Amortisation of intangible assets, post tax ¹	40			40		
Net interest expense on post-employment benefit obligations, post tax ¹	35			50		
Fair value and foreign exchange adjustments on financial instruments and investments, post tax ¹	(30)			(50)		
Underlying earnings, post tax	595	18.7	18.5	857	26.9	26.8
One-off tax benefit	–			(161)		
Underlying earnings, excluding one-off tax benefit	595	18.7	18.5	696	21.9	21.8
		Millions	Millions		Millions	Millions
Weighted average number of shares used in calculating basic earnings per share		3,189	3,189	3,180	3,180	
Incremental shares in respect of employee share schemes			19			14
Weighted average number of shares used in calculating diluted earnings per share			3,208			3,194

1. The tax impact, where applicable, is calculated using the underlying effective tax rate of 19% (2019 17%).

6. Post-employment benefits

	UK £m	US and other £m	Total £m
Total net IAS 19 deficit at 1 January 2020	(4,111)	(668)	(4,779)
Actual return on assets excluding amounts included in net interest expense	126	132	258
Increase in liabilities due to changes in assumptions and experience	(2,607)	(348)	(2,955)
Contributions in excess of / (below) service cost	1,202	(6)	1,196
Past service cost – plan amendments	(2)	–	(2)
Net interest expense	(36)	(10)	(46)
Foreign exchange adjustments	–	(52)	(52)
Movement in other schemes	–	(30)	(30)
Total net IAS 19 deficit at 30 June 2020	(5,428)	(982)	(6,410)
Allocated to equity accounted investments	440	–	440
Group's share of net IAS 19 deficit excluding Group's share of amounts allocated to equity accounted investments at 30 June 2020	(4,988)	(982)	(5,970)
Represented by:			
Post-employment benefit surpluses	202	51	253
Post-employment benefit obligations	(5,190)	(1,033)	(6,223)
	(4,988)	(982)	(5,970)

Contributions in excess of service cost for the UK above include a £1bn payment as part of the new deficit recovery plan.

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 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.

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.

	UK		US	
	30 June 2020	31 December 2019	30 June 2020	31 December 2019
Financial assumptions				
Discount rate – past service (%)	1.5	2.1	2.6	3.1
Discount rate – future service (%)	1.6	2.2	2.6	3.1
Retail Prices Index (RPI) inflation (%)	2.7	2.8	n/a	n/a
Rate of increase in salaries (%)	2.7	2.8	n/a	n/a
Rate of increase in deferred pensions (%)	1.9/2.7	2.0/2.8	n/a	n/a
Rate of increase in pensions in payment (%)	1.5-3.5	1.5-3.6	n/a	n/a
Demographic assumptions				
Life expectancy of a male currently aged 65 (years)	87-88	87-88	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)	88-89	88-89	87	87
Life expectancy of a female currently aged 45 (years)	89-91	89-91	89	89

The Group has continued to use the Continuous Mortality Investigation (CMI) 2018 data for the UK demographic assumptions at 30 June 2020, reflecting the Group's best estimate of mortality at this time. This will be reviewed for the year end.

Sensitivity analysis

The sensitivity information has been derived using scenario analysis from the actuarial assumptions as at 30 June 2020 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.

	(Increase)/ decrease in pension obligation ¹ £bn	Increase/ (decrease) in scheme assets ¹ £bn
Discount rate:		
0.1 percentage point increase	0.6	(0.3)
0.1 percentage point decrease	(0.6)	0.3
Inflation:		
0.1 percentage point increase	(0.5)	0.2
0.1 percentage point decrease	0.5	(0.2)

1. Before allocation to equity accounted investments.

The sensitivity of the valuation of the liabilities to changes in the inflation assumption presented above assumes that a 0.1 percentage point change to expectations of future inflation results in a 0.1 percentage point change to all inflation-related assumptions (rate of increase in salaries, rate of increase in deferred pensions and rate of increase in pensions in payment) used to value the liabilities. However, upper and lower limits exist on the majority of inflation-related benefits such that a change in expectations of future inflation may not have the same impact on the inflation-related benefits, and hence will result in a smaller change to the valuation of the liabilities. Accordingly, extrapolation of the above results beyond the specific sensitivity figures shown may not be appropriate. To illustrate this, the (increase) / decrease in the defined benefit pension obligation before allocation to equity accounted investments resulting from larger changes in the inflation assumption would be as follows:

	(Increase)/ decrease in pension obligation ¹ £bn
Inflation:	
0.5 percentage point increase	(1.8)
0.5 percentage point decrease	1.5
1.0 percentage point increase	(3.6)
1.0 percentage point decrease	3.0

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 deficit:

	(Increase)/ decrease in net deficit ¹ £bn
Life expectancy:	
One-year increase	(1.5)
One-year decrease	1.4

1. Before allocation to equity accounted investments.

7. Equity dividends

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Prior year final dividend per ordinary share paid in the period (2019 13.2p)	–	423

The directors have declared an interim dividend of 13.8p per ordinary share in respect of the year ended 31 December 2019, totalling approximately £444m – that being the value of the dividend per share proposed but subsequently deferred earlier in the year. The dividend will be paid on 14 September 2020 to shareholders registered on 7 August 2020. The ex-dividend date is 6 August 2020.

In addition the directors have also declared an interim dividend of 9.4p per ordinary share in respect of the period ended 30 June 2020, totalling approximately £302m. This will be paid on 30 November 2020 to shareholders registered on 23 October 2020, assuming that there are no major additional or unforeseen pandemic-related disruptions. The ex-dividend date is 22 October 2020. This is in line with our usual dividend timetable.

The 2019 interim dividend was 9.4p per ordinary share, totalling £301m.

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 21 August for the first interim dividend, and no later than 9 November 2020 for the second interim dividend.

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 2020		31 December 2019	
	Carrying amount £m	Fair value £m	Carrying amount £m	Fair value £m
Financial instruments measured at fair value:				
Non-current				
Equity investments at fair value through profit and loss	18	18	13	13
Other financial assets	497	497	350	350
Other financial liabilities	(183)	(183)	(227)	(227)
Current				
Other financial assets	230	230	210	210
Money market funds	903	903	680	680
Other financial liabilities	(153)	(153)	(232)	(232)

Financial instruments not measured at fair value:

Non-current				
Loans	(4,251)	(4,911)	(3,020)	(3,315)
Current				
Cash and cash equivalents (excluding money market funds)	1,620	1,620	1,907	1,907
Loans and overdrafts	(525)	(530)	(377)	(380)

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. 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.

Despite the COVID-19 pandemic, the Group's assessment is that credit risk in relation to defence-related sales to government customers or sub-contractors 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 customers, the Group assesses expected credit losses, however this is not considered material to the financial statements. The Group considers that default has occurred when a 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 receivables over 180 days past due unless there is objective 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 2020, the Group had a committed Revolving Credit Facility (RCF) of £2bn (31 December 2019 £2bn). The RCF was undrawn throughout the period. The RCF also acts as a backstop to Commercial Paper issued by the Group. At 30 June 2020, the Group had £123m of Commercial Paper in issue (31 December 2019 £nil), which matures in September 2020.

10. Related party transactions

Transactions with related parties are shown on page 218 of the Annual Report 2019.

	Six months ended 30 June 2020 £m	Six months ended 30 June 2019 £m
Sales to related parties	517	529
Purchases from related parties ¹	423	235

	30 June 2020 £m	31 December 2019 £m
Amounts owed by related parties	142	53
Amounts owed to related parties	1,450	1,359

1. 2019 purchases from related parties have been restated to include £119m of purchases from Eurofighter Jagdflugzeug GmbH.

11. Acquisitions

On 4 May 2020, the Group completed the acquisition of the assets and liabilities of Raytheon Technologies Corporation's Airborne Tactical Radios business for consideration of £217m. The acquisition is expected to augment the Group's portfolio in airborne communications with broad-spectrum, multi-band, multi-channel radios that feature robust anti-jamming and encryption capabilities.

The assets, liabilities, workforce and ongoing trade of the Airborne Tactical Radios business were legally transferred in full to the Group as of 4 May 2020 and this was the point at which control of the business was established. The acquisition of this business has therefore been accounted for as a business combination and its results and financial position have been consolidated from the date of acquisition.

Purchase consideration and fair value of net assets acquired

The consideration transferred of £217m consisted entirely of cash.

The fair values of the assets and liabilities of the Airborne Radios business at the date of acquisition remain under review and have not yet been finalised, in part as a result of limitations arising from the COVID-19 pandemic, however the provisionally determined fair values are as follows:

	£m
Identifiable intangible assets	84
Property, plant and equipment	8
Right-of-use assets	3
Inventories	5
Trade, other and contract receivables	47
Lease liabilities	(3)
Trade and other payables	(42)
Net identifiable assets acquired	102
Add: goodwill	115
Net assets acquired	217

The goodwill recognised is primarily attributable to expected synergies. Coupled with the Group's Electronic Systems sector, the Airborne Tactical Radios business will enhance its positions in airborne communications with broad spectrum, multi-band, multi-channel radios including battle proven, robust, anti-jam, and encryption capabilities. The Airborne Tactical Radios business brings both complementary waveform expertise and a long trusted partnership with the US Army. The Group will achieve operating synergies by expanding capacity in its existing Fort Wayne facility for all Airborne Tactical Radios manufacturing operations. Forecasted revenue synergy opportunities include the capture of future radio new starts and upgrade programmes with enhanced competitiveness through the ability to offer a more complete radio system with a broad selection of communication and networking waveforms.

Goodwill of at least £74m is expected to be deductible for tax purposes.

No impairment losses have been recognised in respect of goodwill in the period ending 30 June 2020.

Since the acquisition date, revenue of £12m and an EBITA loss of £1m have been recognised in relation to the Airborne Tactical Radios business in the reporting period.

If the Airborne Tactical Radios business had been acquired at 1 January 2020, the Group's revenue and EBITA would have been £9,214m and £903m, respectively, for the period ending 30 June 2020.

Acquisition-related costs of £5m have been included in operating costs in the income statement for the period ending 30 June 2020.

Contractual cash flows on trade, other and contract receivables are expected to be collected in full.

No contingent liabilities have been recognised or require disclosure in respect of this business acquisition.

12. Contingent liabilities

The Group has entered into a number of guarantee and performance bond arrangements in the normal course of business and regards these as insurance contracts. 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.

13. Events after the reporting period

There were no material events after the balance sheet date requiring disclosure.

14. Shareholder information

The Annual General Meeting of BAE Systems plc will be held on 6 May 2021.

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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.