## 2024 Annual Economic Report

Capturing and quantifying the contribution of the defence sector to the UK economy



#### Foreword

This third Annual Economic Report published by the Joint Economic Data Hub (JEDHub) highlights the defence sector's significant contribution to the UK economy alongside providing essential capabilities to our Armed Forces and those of our allies and partners. The 2024 report builds on the success of previous reports, supporting both the Defence and Security Industrial Strategy and the 2023 Defence Command Paper Refresh.

Based in the UK Defence Solutions Centre (UKDSC), the JEDHub is a joint endeavour between the Government and the Defence Growth Partnership (DGP) aimed at growing our understanding of the economic contribution of the defence sector to the UK through better, consistent and impartial data. The JEDHub works collaboratively with stakeholders across Government, industry, trade bodies and academia to improve the economic data available and enable the JEDHub to gain important new insights in areas such as skills, capabilities, supply chain and research & development.

This report focuses on 2021 and 2022, a period where the defence sector was recovering from the effects of COVID-19. Despite this the report captures a growth in defence jobs by 1.7% over this period, with the median defence annual salary being £41,791 - significantly higher than the manufacturing median salary. The report highlights several other insights, including that the Middle East and Europe continue to be the largest recipient of UK exports and Combat Air the most valuable capability, with total revenue reaching £7.9bn in 2022. An additional insight provided in this year's report is the significant investment made in defence-related research and development - particularly in the Air and Maritime domains.

We are grateful to all who have supported this year's work, in particular the survey respondents from across industry and volunteers from academia for their important reviews (Professor Trevor Taylor at the Royal United Services Institute; Emeritus Professor of Economics Keith Hartley, University of York; and Professor Ron Smith of Birkbeck, University of London). We look forward to continuing the important work that JEDHub delivers in demonstrating the value and importance of the UK defence sector.



**Barney Kistruck** Director, MOD Industrial Strategy and Exports



**Chris Nunn** Chief Executive Officer, UK Defence Solutions Centre

#### **Executive Summary**

Highlights from the 2024 JEDHub Annual Economic Report:



#### People in Defence

*National and Regional Employment* (pg.3)

The defence sector continues to support jobs across all nations and regions of the UK.

Rise in defence recruitment between 2021&2022

17.8%

Investment in Skills

*Recruitment and Trainees (pg.6)* This ensures that the defence workforce can help meet skill requirements of future production needs. Increase in defence revenue between 2021&2022 **3.5%** 

#### **Defence Value**

Defence Customers (pg.11) Defence revenue continues to grow, largely driven by an 8.9% increase in the value of sales to the MOD, which continues to be the industry's most valuable customer. More spending on the production of defence goods and services



#### Defence Supply Chain

Defence suppliers Spend (pg.17) A rise in the production of defence goods and services has pushed up demand for the intermediate goods required to produce them.

### Introduction

The 2024 report represents a significant milestone in the development of the JEDHub project, overseen by our partners both in government and industry, and building on the successes and lessons from the previous two reports.

The statistics presented in this year's report are largely based on responses to the 2023 JEDHub Industry Survey, which primarily covered calendar years 2021 and 2022. JEDHub statistics are supplemented and supported by data from other sources throughout the report.

The report is broken down into the following chapters:





2. Investment and Skills



3. Defence Value



- 4. Defence Trade
- 5. Defence Supply Chain

The defence sector referred to in this report encompasses the UK defence industrial base, and so the JEDHub industry survey gathers data directly from companies across the defence sector. Ranging from revenue to demographics to R&D, the data's aim is to clarify the composition, impact, and importance of the defence industry within the UK economy. This year's JEDHub survey covers the period from 2021-22, but other data sources used go as far back as 2013, allowing for some long-run trend analysis.

The 22 companies sampled for this year's report are not identical to those surveyed in previous years, a full list of respondents can be found in the conclusion on slide 31. Additionally, response rates to the survey have varied across questions and across years. As a result, **the figures in this year's report are not directly comparable to those in previous reports**. Year on year comparisons in this report are primarily based on two years of economic data collected in the 2023 JEDHub Industry Survey. Instead, readers wishing to compare to previous reports should focus on trend analysis. By looking at growth rates across years, it is possible to discern what the underlying economic trends in the defence sector are. Additionally, some companies do not readily have access to the required data, as a result, not all survey questions received a full response. Response rates can be found in the accompanying data tables. **All monetary values are at in period price levels**.



# 1. People in Defence

2003

### **National and Regional Employment**

Distribution of surveyed defence FTEs by International Territorial Level (ITL)1 Regions, 2022

83,889 Surveyed defence FTEs for 2022, a 1.7% growth on 2021<sup>1</sup>

## Of these, **5<u>3,689</u>**

FTEs were supported by **domestic** revenue (64%)

The remaining **30,200** 

FTEs were supported by international revenue (36%)<sup>2</sup>

## 88,575

Estimated total indirect jobs supported by **DGP** member companies in 2022, representing a 2.34% growth from the previous year <sup>3</sup>



Notes and Sources: Unless stated otherw ise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables.<sup>1</sup>Grow th calculated for 19 companies that provided returns to both years. <sup>2</sup>Calculations based on ratio of domestic/international revenue from JEDHub 2023 survey responses. <sup>3</sup>9 of 11 DGP companies gave full responses to employment data in the 2022 survey, this analysis has been calculated from their data as well as estimations for the remaining two companies, based on averages from the other DGP companies, as well as past survey responses. This excludes so-called "induced" jobs supported by the spending of employees of a sector within the economy. Further detail can be found in the methodology.

### **Demographics**

21.8%

Female

5.4%





Notes and Sources: Unless stated otherw ise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables. <sup>1</sup>Non-binary, Prefer not to say, and Other FTEs accounted for 0.07% of all surveyed FTEs by gender. <sup>2</sup>Earnings and hours w orked, UK region by industry by tw o-digit SIC: ASHE Table 5 - Office for National Statistics (ons.gov.uk) – Table 5.9a, FTEs calculated on 37-hour w orking w eek basis. <sup>3</sup>Data here represents survey submissions from 12 of the surveyed companies and represents 51.8% of total surveyed FTEs.

22%

22%

■ 16-21 ■ 22-29 ■ 30-39 ■ 40-49 ■ 50-59 ■ 60+

23.6%

5.2%

38.7

**49%** to **50.8%**, and the median age fell from **40.4** to

### Pay Breakdown



£50,795 Surveyed <u>mean</u> salary for defence FTEs in 2022 A growth of **5.96%** from £47,937 in

A growth of **5.96%** from £47,937 in 2021

The UK manufacturing mean full-time salary was **£32,553** in 2022



£41,791

Estimated <u>median</u> salary for defence FTEs in 2022<sup>1</sup>

A 4.7% decrease from £43,864 in 2021

The median salary for all manufacturing jobs was £31,262 in 2022<sup>1</sup>

Surveyed Male and Female FTEs by Wage Bracket, 2022



**46.0%** of Male FTEs were in high wage brackets (£45,001+) in 2022, a fall of **3.3** percentage points from 2021

**38.9%** of Female FTEs were in higher wage brackets (£45,001+) in 2022, a decrease of **2.8** percentage points from 2021

A young female workforce (**27% aged 16-29 compared to 22.6% for males**) may partially explain the differences in the male/female wage distribution

Notes and Sources: Unless stated otherw ise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables. <sup>1</sup>The median salary is take to be more representative of the average w orker than the mean. <sup>2</sup>Earnings and hours w orked, UK region by industry by tw o-digit SIC: ASHE Table 5 - Office for National Statistics (ons.gov.uk) – Table 5.7a

## 2. Investment and Skills

APPENDING TRANSPORT

### **Recruitment and Trainees**



#### Total Surveyed Defence Apprentice and Graduate Trainee Employment, 2021 & 2022:



Total apprentices and graduates on trainee programmes increased by **2.24%** between 2021 and 2022, from **6,332** trainees to **6,474** 

Most of this growth came from apprentice employment, which increased by **3%** from **2021** to **2022** 

As the employment of graduate trainees remained roughly constant, apprentice employment increased as a share of total trainee employment, from **73.6%** to **74.2%** 



#### Surveyed Defence Recruitment, 2021 & 2022:

### In 2022, total defence recruitment increased by **17.8%**, from **10,754** to **12,644**

**24.8%** of new apprentices hired in defence roles were female (same as 2021)

**23%** of new graduate trainees hired in defence roles were female (26.7% in 2021)

**29.5%** of new experienced and other surveyed defence hires were female (21.8% in 2021)

#### **High Skill Sector**

#### Defence Employment by Product Lifecycle Activity, 2022<sup>1</sup>

**19.2%** Surveyed defence activity in **Research & Development**, 21.5% in 2021 **36.4%** Surveyed defence activity in **Manufacturing & Production**, 34.0% in 2021

24.3% Surveyed defence activity in Customer Services, Training and Support, 29.9% in 2021

#### Defence Employment by Job Function, 2022<sup>2,3</sup>



Notes and Sources: Unless stated otherw ise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables.<sup>1</sup> Excludes "Other" lifecycle activities, which accounted for 20.2% of lifecycle activity in 2022. <sup>2</sup> No job function saw a percentage point change greater than 1 betw een 2021 and 2022. <sup>3</sup> Excludes "Other/Unattributable" genders, which accounted for less than 1% of surveyed FTEs for this data in 2022. <sup>4</sup> STEM-related employment: Employment in Engineer, Scientist, Researcher, Technician and Technologist roles.

### **Funding Defence R&D**





#### Surveyed R&D Activity (£m):

#### From 2020 to 2022, total R&D activity by the surveyed companies increased by **9.1%**, from **£1.3bn** to **£1.4bn**

### Over the same period, defence R&D activity increased by **3.7%**, from **£812m** to **£842m**

Defence R&D accounted for **60.5%** of surveyed R&D activity in 2022, and **63.8%** of all R&D activity from 2020-2022

#### Top 3 Surveyed Funding Sources for Defence R&D (£m):



From 2020 to 2022, total funding for defence R&D increased by £32m, or
3.9%, from £810m to £842m. The UK government was the largest source of defence funding, accounting for 69.8% of all defence funding across the three years. Funding from the companies themselves accounted for the largest growth, with a growth of £58.8m, from £112.4m to £171.2m.

In 2022 the JEDHub survey captures approximately **27%** of defence research and development spending captured by the ONS<sup>1</sup>. JEDHub surveyed companies obtain a larger proportion of their funding from overseas, or the UK government compared to the wider industry, which is more reliant on self-funding and funding from other UK businesses.

Notes and Sources: Unless stated otherw ise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables. 1
Business enterprise research and development, UK (designated as national statistics) - Office for National Statistics (ons.gov.uk) – Table 6

### **R&D by Domain**



**Defence R&D Spending by Capability Area** 



(£m):



Air capabilities were the largest recipient of R&D investment, accounting for £949.9m of the £2.5bn total defence R&D investment across the three years

Air also had the highest growth in nominal investment, with a growth of £25.2m, from £303m to £328.2m across the three years



Maritime was the second largest domain with R&D investment totalling £825m over the three-year period

However, yearly maritime R&D investment declined from £265.2m in 2020 to £239.5m in 2022

Notes and Sources: Unless stated otherwise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables. The capability areas belonging to each domain can be found in Annex E of the accompanying methodology document. Rest of Defence includes the Cyber, Space, and Other domains.

## 3. Defence Value

### **A High Productivity Sector**





Despite an overall growth in revenue, GVA declined from 2021-22 due to an increase in operating costs.

This drove a subsequent fall in GVA per FTE.

By comparison, the ONS reported a UK manufacturing average annual productivity of £81,062 in 2022<sup>2</sup>

Notes and Sources: Unless stated otherw ise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables. GVA per FTE figures account for £9.4bn of GVA in 2021 and £9.2bn of GVA in 2022. 1 Industry Facts & Figures - ADS Group reports that GVA for the whole UK defence industry w as approximately £10.1bn in 2021, falling to £9.8bn in 2022. This suggests the surveyed companies represent roughly 97% of industry GVA.2. Output per job, UK - Office for National Statistics (ons.gov.uk) – Table 12 (GVA per job). Whilst not directly comparable to GVA per FTE, GVA per job is the closest estimate provided by the ONS

### **Defence Customers**

£601m





government departments, an

increase of 7.2% on 2021

of defence revenue came from sales to international customers in 2022 A 3% decrease from £8.1bn in 2021

**International Revenue** 

## £1.8bn

governments accounted for 73% of international revenue. Revenue from foreign governments was down **3.5%** on

#### North America was the second most valuable region by revenue, with revenue up 3.9% from 2021. **£1.4bn** of sales to North America were to overseas businesses

£2.1bn

Overseas businesses accounted for 27% of foreign revenue. **Overseas** business evenue was down 1.6% on 2021

£3.9bn The Middle Eastwas the largest international region by revenue; however, revenue was **9.5%** lower than in 2021.

Europe was the third £1.6bn largest region by revenue. It had the highest year on year growth, £131m.

### **Defence Capabilities**



#### The 6 Largest Capability Areas by Surveyed Total Revenue, 2022:

Air: Combat Air	28%		72%		£7.9bn (36.5%)
Maritime: Sub-surface	99%	% 1%	£3.8bn (17.7%)		
Maritime: Surface	87%	13% £2.6bn (17	1.9%)		
Weapons and ammunition (including missile systems)	67% 33%	£2bn (9.3%)			
Land	87% 13 <mark>%</mark>	£1.6bn (7.2%)			
Air: Rotary Wing	57% <mark>43%</mark> £1	.2bn (5.4%)			
Other	78%	22% £2.6bn (12	.0%)		
Domestic revenue					

Notes and Sources: Unless stated otherwise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data tables. List of all 11 capability areas used in the JEDHub survey can be found in the methodology.

#### £20.6bn

Surveyed revenue by capability in 2021

£21.7bn

Surveyed revenue by capability in 2022

In 2022, the 6 largest capability areas each had revenues over **£1bn**, the remaining 5 capability areas accounted for a combined revenue of **£2.6bn**.

In both 2021 and 2022, Combat Air accounted for both the largest total and international revenues. Total Combat Air revenue grew by 5% between 2021 and 2022 (**from £7.6bn to £7.9bn**) and it continues to be one of the most important capabilities to the UK's defence industrial base.

Maritime: Sub-surface was the second largest capability by total revenue and largest by domestic revenue in both years. Maritime: Sub-surface revenue grew by £310m (8.6%) between years, this was driven by growth in domestic revenue, which increased by £340m (9.9%).

Land was the capability area which saw the largest growth between years, with a increase in value of **£425m**. Domestic and international land revenue grew by **£369** and **£56m** respectively.

Military C3 saw the largest relative growth between years, as total revenue grew by **64%** from **£230m** to **£370m**.

# 4. Defence Trade

### **UK Export Orders**

As defence exports have a tendency to be volatile, with high variations between years, **UK Defence and Security Exports** (UKDSE) report on the value of orders placed using **a 10-year rolling average**. This aims to smooth the sharp peaks in value when new contracts are placed. The key findings from this data are presented on this slide.

On slides 20 and 21, the JEDHub has analysed data from **Janes**, which aims to provide a closer estimate of the value of *deliveries* in each year. These methodological and reporting variances result in the difference in observed findings.

Between 2021 and 2022, the value of UK defence export orders grew by £4.6bn (69.9%), from **£6.6bn** to **£11.2bn** 

For comparison, over the period from 2013 to 2022, the UK had an average annual export order value of **\$9.1bn**,

for comparison, France and the USA had averages of \$10.9bn and \$46.1bn respectively. To compare Defence exports, the Aerospace sector has consistently proven to be the most important sector for UK exports and was the largest sector by export order value in every year from 2013 to 2022. The aerospace sector also experienced the largest growth in 2022, with an increase of **£4.1bn (134.8%)** to £7.1bn in 2022.

Aerospace accounted for £64.3bn (71.1%) of the £90.5bn total orders placed over the 10-year period from 2013 to 2022.



In 2022 the Middle East accounted for **£3.8bn** worth of UK defence export orders, **33.8%** of all orders by value, and was the largest destination region. The increase in export value of **£2.6bn** was the largest growth in any region between years and made the Middle East the most valuable region in 2022.

Europe accounted for £3.0bn (26.9%) of export orders in 2022 and was the second largest destination region. Orders to Europe increased by £1.0bn from 2021, when it was the largest destination by export order value.

#### Imports

The following two slides (20 & 21) analyse data from Janes Global Platforms & Systems database, which aims to estimate the value of delivered imports and exports in a given year.

Whilst not directly comparable to other data sources within the report, the Janes data has been included in an effort to make both *international and cross capability comparisons*.

#### Import Capability Snapshot:

In 2022, Weapons (33.2%), Non-Platform Systems (33.6%), and Aircraft (22.0%) accounted for the majority of imports by value



The remaining capability areas (Ground Forces, Ships and Submarines, and Space Systems) accounted for **11.2% of imports**.

The last **5** years there has seen consistent growth in Aircraft and Non-Platform systems imports, which have **increased by £243m and £1,270m** respectively.

The value of Weapon imports was much more volatile over the period, with a  $\pounds1.4bn$  increase in imports from 2019 to 2020, followed by a  $\pounds600m$  decrease from 2021 to 2022. As a result of this decrease, Weapon imports moved behind Non-Platform systems as the most valuable import.

#### Total UK Defence Imports (\$bn):





From 2021 to 2022, overall imports fell from \$8.8bn to \$8.3bn, (a year-on-year fall of 6.6%). The fall in imports from 2021 to 2022 marks a departure from the consistent growth in previous years. The total growth in imports from 2018 to 2022 was 56.8%.



**The USA** has consistently been the largest provider of UK defence imports, accounting for **55.8%** of the 2022 total. France and Germany were also significant importers of defence capability into the UK in 2022<sup>1</sup>.

Notes and Sources: The Janes Global Platforms & Systems (GPS) database assesses markets on a deliveries basis in USD, using system level data. This data captures sub-tier activity and business-to-business activity (e.g. the Eurofighter Typhoon, aspects of w hich account for both imports and exports), rather than solely end-product level data. Space, Services and Infrastructure-related data are limited in the database.

All statistics are based on UKDSC analysis of Janes GPS data. Further information on the Janes GPS methodology can be found in the methodology. 1A significant number of the UK's defence imports do not have their region of origin publicly released.

### **Exports**

For the export data presented on this slide, Janes aims to assess the value of deliveries made in a given year, in contrast with UKDSE's approach of measuring the value of orders placed. Additionally, it should be noted that not all international revenue will be classed as an export. As such, its **export value figures are not comparable to the value of international revenue surveyed by the JEDHub** on slide 16. These methodological and reporting variances explain the difference in observed findings across sources



Total UK Defence Exports (\$bn):

The total value of the UK's defence exports fell from **\$5.1bn** in 2021 to **\$4.8bn** in 2022. This presents a deviation from the long-run trend, which has seen exports gradually increasing.

2022 saw the value of exported ships and submarines grow by **15.2%** overtaking weapons technology as the UK's second most valuable defence export capability. Aerospace continues to be the most dominant export capability, accounting for **\$3.48bn of** 

#### revenue

#### Defence Exports by Top 3 Countries (\$m) USA Kuwait Germany



The greatest rise in export value to an individual market was Germany, which grew from **\$388.0m** to **\$482.0m**, overtaking both Kuwait and the United States to become the largest export market for the UK in 2022.

The greatest fall in export value to an individual market was Kuwait, dropping from **\$716.8m** in 2021 to **\$314.6m** in 2022.

Notes and Sources: The Janes Global Platforms & Systems (GPS) database assesses markets on a deliveries basis in USD, using systemlevel data. This data captures sub-tier activity and business-to-business activity (e.g. the Eurofighter Typhoon, aspects of which account for both imports and exports), rather than solely end-product level data. Space, Services and Infrastructure-related data are limited in the database.

All statistics are based on UKDSC analysis of Janes GPS data. Further information on the Janes GPS methodology can be found in the report methodology. 21

## 5. Defence Supply Chain

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### **Defence Suppliers Spend**



Total value of intermediate goods purchased to produce defence goods and services in 2022

An **increase** of **9.5%** from **£10.9bn** in 2021

Over the same period, supply chain spending for all activities increased by **8.3%**, from **£14.7bn** to **£15.9bn** 

Companies with over £1bn in revenue were the main drivers of increased defence activity

These companies **increased** spending on defence production by **13.7%**, from **£9.4bn** to **£10.7bn** 

Companies with less than £1bn in revenue reduced spending on defence production by 17%, from £1.5bn to £1.2bn



Spending in the UK

Median number of UK based direct suppliers in 2022 a growth of **10%** from **490** in 2021. This suggests a diversifying UK defence supply chain

Over the same period, the median number of non-UK direct suppliers held constant at **120** 

**£8.2bn** Direct spend with UK suppliers on intermediate goods and services used to produce defence capabilities

A 7.2% increase from £7.6bn in 2021

For every **£1** spent by the surveyed companies, **70p** was spent with UK suppliers to produce defence goods and services

Notes and Sources: Unless stated otherwise, all data presented reflects findings from the 2023 JEDHub Industry Survey, though may not include responses from all 22 companies, full response counts can be found in the accompanying data

### **MOD Contracts and Expenditure**

Total MOD Core Department Expenditure by Competition Type (£bn):



From 2021/22 to 2022/23, total MOD direct core department expenditure increased by **£4.3bn** from **£28.6bn** to **£33.0bn**, a growth of **15.2%**.

Contracts which were issued non-competitively accounted for the greatest contributor to this growth, with an increase of **£2.1bn**, from **£10.7bn** to **£12.9bn**. As a result, the proportion of expenditure on non-competitive contracts increased from **37.5%** to **39.0%**.

Competitive contracts grew by **£1.3bn** and provided the second largest growth. Lastly, contracts sourced through other procurement methods grew by **£914m** and in both 2021/22 and 2022/23 they accounted for the smallest proportion of expenditure, at **24.0%** and **23.6%** respectively.

#### New MOD Contracts by Competition Type, 2022/23:



The total value of new contracts placed in 2022/23 fell by **£5.3bn (28.7%)**, from **£18.5bn** to **£13.2bn**, when compared to the previous financial year.

While the value of new contracts for every competition type decreased, the largest fall was in non-competitive contracts, which saw a **£2.8bn (34.5%)** decline, this led to a fall in the share of new contracts issued non-competitively.

The value of new contracts sourced competitively fell by £2.1bn (21.6%), and the value of contracts issued through other methods declined by £442m (53.3%). As a result of these changes, competitive contracts accounted for a larger share of contracts issued, and so should increase as a proportion of MOD expenditure in the future.

### **UK Defence Manufacturers**

The ONS UK Manufacturers' Sales by Product (PRODCOM) data measures sales of products by UK manufacturers classified by SIC Codes.<sup>1</sup> Much of the manufacturing activity in the defence supply chain is captured by four military codes in the ONS PRODCOM data: we apons, ships and vessels, aircraft, and fighting vehicles. This data is analysed below.<sup>1,2</sup>

#### £13.3bn

### Total sales turnover of the four PRODCOM military codes, 2022<sup>1</sup>

Overall sales turnover in military codes has **risen 3%** compared to 2021 data.

Military vessels saw a 25% increase in sales turnover when compared to 2021.



#### 159 Unique enterprises identified<sup>3</sup> 66% of enterprises identified in PRODCOM microdata manufacture military aircraft, which was also the main area in 2021.



### 73%

### sales turnover shared by biggest 5 identified enterprises in 2022

The sales turnover share is a **4% increase** from the 2021 data.

**86%** of enterprises operate in one military code. This remains the same as 2021.



Sources and Notes: Full details can be found in the methodology associated with this report. <sup>1</sup>The latest PRODCOM data can be found here: <u>UK manufacturers' sales by product</u>. <sup>2</sup>The military codes used are: 30309999 Manufacture, installation and repair of military aircraft and parts thereof, 30119999 Manufacture, installation and repair of military vessels and parts thereof, 25408999 Manufacture of military weapons and parts thereof and 30409999 Manufacture of military fighting vehicles. <sup>3</sup>Enterprises refers to unique legal entities identified by the ONS in the PRODCOM data.

## **Supply Chain Employment**

The ONS business Register and Employment Survey (BRES) dataset publishes estimates for employment by region and industry.<sup>1</sup>

The **159** enterprises identified in the PRODCOM data on the previous page as producing goods in the four military manufacturing codes have been matched with employment data in the ONS BRES dataset.

The data shows that these companies have employment across the nations and regions of the UK, and in other industries. **Unlike the JEDHub data analysed in the 'People in Defence' chapter, the jobs identified here are not limited to defence-specific roles.** 

**64% of the jobs** identified are found in just three Regions: North West, South West and the South East. These remain the same as 2021.

#### The main regions are strongly represented in the following three main SIC code areas:





Building of ships and floating structures

Manufacture of electronic measuring, testing etc, equipment, not for industrial process control.



**80% of all defence jobs** fall into the three main SIC Codes, alongside:



Manufacture of weapons and ammunition.



Repair and maintenance of aircraft and spacecraft

Sources and Notes: Full details of the methodologies and SIC codes used can be found in the methodology <sup>1</sup>Business Register and Employment Survey -Office for National Statistics.<sup>2</sup>Employment represents jobs identified in the ONS Business Register and Employment Survey (BRES) with the 159 companies found as producing goods in the four PRODCOM military codes. These jobs are not limited to defence-specific roles. The latest BRES data can be found here: Employees in the UK.

## Conclusion

### **Key Takeaways**



#### **People in Defence**

- 1.7% FTE growth. Increase in proportion of female FTEs.
- Decline in median pay, however both male and female medians above manufacturing medians reported by the ONS. The decline in median pay is likely a symptom of a younger workforce, this theory is supported by increased apprentice employment, and a decline in the median age.

#### **Investment and Skills**

- - Increase in both apprentice employment (3%) and recruitment across the two years (17.8%).
  - Additionally, defence R&D has been on an upwards trend, with significant funding in the Air and Maritime domains. The UK government is by far the largest source of funding; however, companies' use of their own funds has risen.

#### **Defence Value**

- · Al ar
  - Alongside employment, defence output has increased across the two years. However, increased supply chain spending has reduced total GVA and GVA per FTE between years.
  - By revenue Combat Air continues to be the most valuable capability, followed by the Surface and Sub-Surface Maritime capabilities.
  - Domestic sales, notably to the MOD, continue to be the largest source of defence revenue.



#### **Defence Trade**

- There continues to be an upwards long-run trend in the value of both defence exports and imports, despite overall trading activity being down on the previous year. The defence sector has been operating at a trade deficit, which narrowed from 2021-22.
- The Middle East and Europe continue to be the largest recipient of UK exports, whilst the USA is the largest importer of defence goods and services into the UK.



#### Defence Supply Chain

- Across the two years, there has been an increase in the value of purchases used in the production of defence goods and services. As a result, there has been more spending throughout the UK economy with a greater number of suppliers.
- Similarly, the MOD has increased its spending across years, and has begun to issue a greater share of its contracts competitively.

### **Looking Forward**

As JEDHub continues to grow, and now with the experience of three annual economic reports, it remains guided by the following four key principals:



**Joint Activity** Between the UKDSC, government, industry, and academia. Recognising that data and expertise reside across a number of different entities.



**Independent and Impartial** to ensure that government, industry and other users have confidence in its quality and objectivity.



**Better and More Consistent Data** that provides greater granularity and fidelity showing trends over time.



**Collect Once, Use Many** to support synergies across government and industry and to reduce the burden on the companies providing the data.

For more about this year's report, and for information about the other work we do at JEDHub, visit our website <u>here</u>.

Through this year's survey the JEDHub has discovered new insights into the defence industry's contribution to the UK economy. Guided by lessons learnt from our last two Annual Economic Reports, we believe that the 2024 JEDHub Annual Economic Report represents a significant step in our goal to paint a picture of the economic impacts of the UK defence industry. This year's report contains analysis from a more detailed and consistent survey, helping to achieve our goal of improving data quality. Even so, we are always striving to improve the quality and efficiency of our survey.

The 2024 JEDHub Annual Economic Report was produced collaboratively with the support of the JEDHub Delivery Working Group, consisting of representatives from the following organisations: UK Defence Solutions Centre, Ministry of Defence, Department for Business and Trade, His Majesty's Treasury, Office for National Statistics, ADS and Make UK

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https://www.aace.co.uk/

AIRBUS

https://www.airbus.com/en/our-worldwidepresence/airbus-in-europe/airbus-in-the-united-kingdom

**ATKINS** 

https://careers.atkinsrealis.com/uk-earlycareers/aerospace-defence-security-technology

ATLAS ELEKTRONIK UK A company of the ATLAS ELEKTRONIK Group

https://www.uk.atlas-elektronik.com/

babcock

https://www.babcockinternational.com/

BAE SYSTEMS

https://www.baesystems.com/en/home







https://www.boeing.co.uk/boeing-defence-uk

GENERAL DYNAMICS United Kingdom Limited

https://generaldynamics.uk.com/

HORSTMAN A RENK GROUP COMPANY

https://horstmangroup.com/



https://www.l3harris.com/en-gb/unitedkingdom?regional\_redirect=en-gb



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MBDA

https://www.mbda-systems.com/

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PEARSON

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ENGINEERING

2arker

4

MEGGITT



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THALES

https://www.thalesgroup.com/en/countries/europe/ thales-united-kingdom



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Emeritus Professor Ron Smith, Birkbeck University of London.



Emeritus Professor of Economics Keith Hartley, University of York



Professor Trevor Taylor, Royal United Services Institute

## **Glossary and Sources**

Term	Meaning	Sources:		
ASHE	ONS Annual Survey of Hours and Earnings	• ADS Facts and Figures, 2023		
BRES	ONS Business Register and Employment Survey	• <u>Business Register and Employment Survey (BRES): Table 1: Broad</u> Industry Group (Standard Industrial Classification) – Office for National		
DGP	Defence Growth Partnership	<ul> <li><u>Statistics (ons.gov.uk)</u></li> <li><u>Business Register and Employment Survey (BRES): Table 2: Industry (two,</u></li> </ul>		
FTE	Full Time Equivalent	<u>three and five-digit Standard Industrial Classification) – Business Register</u> and Employment Survey - Office for National Statistics (ons.gov.uk)		
GVA	Gross Value Added	• <u>Business Register and Employment Survey (BRES): Table 4: Region by</u> <u>broad industry group (Standard Industrial Classification)</u>		
Indirect Jobs	Jobs supported within companies' supply chains resulting from companies' spending in that supply chain	• <u>Earnings and hours worked, UK region by industry by two-digit SIC: ASHE</u> <u>Table 5 - Office for National Statistics</u>		
Intermediate Goods	Semi-finished goods used to produce another final good	<u>GDP output approach – low level aggregates see methodology</u>		
ITL1	International Territorial Level 1	<ul> <li>Janes GPS</li> <li>JEDHub 2023 Survey</li> </ul>		
C3	Command, Control, and Communication	• <u>MOD regional expenditure with UK industry and commerce and supported</u> <u>employment 2021/22 pg. 23</u>		
MOD	UK Ministry of Defence	• <u>MOD trade, industry and contracts: 2023 – GOV.UK</u>		
ONS	UK Office for National Statistics	<ul> <li><u>Output per job, UK - Office for National Statistics (ons.gov.uk)</u></li> <li><u>UK defence export statistics 2022 – GOV.UK</u></li> </ul>		
PRODCOM	ONS UK Manufacturers' Sales by Product	• <u>UK manufacturers' sales by product (PRODCOM) - Office for National</u> <u>Statistics (ons.gov.uk)</u>		
R&D	Research and Development			
SIC	Standard Industrial Classification	<ul> <li><u>All images sourced from the UK Ministry of Defence Downloadable</u> <u>Collection</u> Open Government Licence (nationalarchives.gov.uk)</li> </ul>		
SME	Small and Medium Enterprises	<u>Collection</u> Upen Government Licence (nationalarchives.gov.uk)		
STEM	Science, Technology, Engineering and Mathematics			