JEDHub

Joint Economic Data Hub

Annual Economic Report

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

May 2023

JEDHub Annual Economic Report | Foreword

“As recognised in the Defence and Security Industrial Strategy (DSIS), the UK defence sector is a strategic capability providing essential capabilities to our Armed Forces and those of our allies and partners. Importantly, however, the UK’s defence sector also contributes to the economic wellbeing of communities right across the UK.

We are delighted that this second annual report from the Joint Economic Data Hub (JEDHub) builds on the success of last year’s inaugural report, providing information on the economic impact of the defence sector across the UK, including new insights in a number of areas.

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 defence sector’s contribution to the UK economy 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 on the sector. Over the last year, this has included expanding the questions set in the JEDHub’s survey of defence companies, and drawing on other sources of economic data such as microdata from the Office for National Statistics (ONS). These richer data sets have enabled the JEDHub to gain important new insights on skills, defence capabilities and the supply chain.

This report captures economic data in 2020 and 2021, a period during which the COVID-19 pandemic significantly impacted key metrics such as recruitment and turnover. The report highlights a number of insights, including the important contribution international business makes supporting UK defence turnover (around 40% of defence turnover in surveyed companies came from international sources in 2021); high average wages in the sector, including a 8.2% growth on 2020; an estimate of Gross Value Added (GVA) per Full Time Equivalent (FTE) employee of £112k in 2021; and that approximately 130,000 indirect jobs were supported by the 11 DGP companies in 2021.

We are grateful to all those who have supported this work, in particular all of the DGP members and other companies which responded to the survey.

We are also extremely grateful to 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. Their independent feedback has been taken into account in this report and in our plans for future work.

Through the JEDHub’s Industry Survey and making greater use of other rich data sources, we will continue to work with stakeholders to evolve this Annual Economic Report, developing an ever deeper understanding of the defence sector’s contribution to the UK economy.”

Samira Braund

Chief Executive Officer,
UK Defence Solutions Centre

Nick Toogood

Director, MOD Industrial
Strategy and Exports

JEDHub Annual Economic Report | Executive Summary

Key findings from the JEDHub Annual Economic Report:

3.5% Growth in surveyed defence FTEs on 2020

People in Defence | National and Regional Employment *(pg.3)*
The defence sector continues to show growth in employment across the nations and regions, despite wider manufacturing contractions

45% Surveyed defence FTEs in STEM roles, 2021

Investment in People | High Skill Sector *(pg.6)*
The majority of the defence workforce is found in technical skills roles, including STEM roles and production roles

25% Surveyed hires were Graduate trainees & Apprentices, 2021

Investment in People | Future Skills *(pg.7)*
Defence companies are investing in the future with a quarter of new recruits joining on training programmes

£112k GVA per surveyed defence worker, 2021

Defence Value | Productive Sector *(pg.10)*
New JEDHub Survey data shows how much value defence companies add to the UK economy, and the productivity of their workforce

JEDHub Annual Economic Report | Introduction

The latest JEDHub Annual Economic Report builds on the success of last year's report and an all-new industry survey, providing a detailed picture of the UK defence sector in 2021.

Much of the data presented is based on the JEDHub Industry Survey and is supplemented and contextualised with other sources throughout the report. Whilst the survey covers just 26 companies, the JEDHub believes the data presented is valuable and indicative of the wider defence sector's characteristics.

The report is presented in five themed chapters:

- **People in Defence**
- **Investment in People**
- **Defence Value**
- **Defence Trade**
- **Defence Supply Chain**

This year the JEDHub is unable to report R&D spend data for the UK defence sector this year due to ongoing redevelopments of ONS R&D data.[1]

JEDHub Industry Survey 2022

The JEDHub Industry Survey collects data directly from defence companies about their defence activity, to draw new insights on the economic impact of the UK defence sector which would otherwise be challenging to measure or require estimation.

Part of this challenge is due to the difficulty of defining defence activity which does not have its own standard industrial classification (SIC) and so is not generally identified by ONS data.

The JEDHub Industry Survey defines the defence sector as:

> 'those activities that support the production and delivery of goods or services (including subcontracted work) for a defence customer (UK or international)'

For the JEDHub Annual Economic Report, data was collected on 2020 and 2021 to allow for year-on-year analysis and growth estimates.

The JEDHub Survey has not attempted to measure the impact of COVID-19 or related policies on defence in 2020/21.

Data was collected from 26 companies; these are not the same companies from the previous survey. Further, not all survey questions had a complete response rate.

All references to, and analysis drawn from, survey data in this report are based exclusively on data collected in 2022; no growth calculations have been made using previous survey data.

Further detail on the JEDHub Industry Survey can be found in Annex A of the accompanying methodology and quality report.

The JEDHub would like to thank all respondents to the survey.

Notes and Sources: [1]Comparison of ONS business enterprise research and development statistics with HMRC research and development tax credit statistics

People in Defence | National and Regional Employment

88,900

FTEs identified by the JEDHub Survey, 2021

3.5% Growth

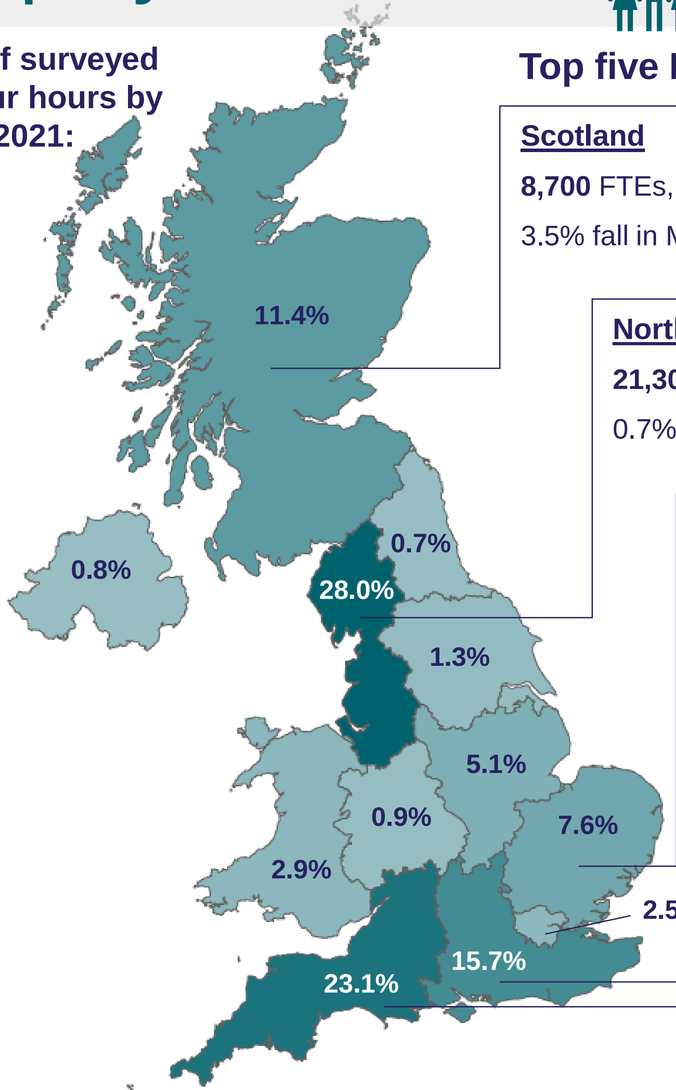
on 2020 employment, compared to a 0.4% fall in overall UK Manufacturing FTEs

133,700

Estimated total indirect UK jobs supported in the defence supply chain of 11 DGP companies, a **4% growth on 2020**[1], in addition to the 80,100 direct DGP FTEs in 2021

The distribution of defence jobs **are 2.4 and 2.2 times more concentrated in the South West and North West**, respectively, than the distribution of wider manufacturing

Distribution of surveyed defence labour hours by ITL1 Region, 2021:



Top five ITL1 Regions by Surveyed FTEs[2]:

Scotland

8,700 FTEs, 5.4% fall on 2020

3.5% fall in Manufacturing FTEs, 2021

North West of England

21,300 FTEs, 9.2% growth on 2020

0.7% fall in Manufacturing FTEs, 2021

East of England

5,800 FTEs, 1.8% growth on 2020

2.7% fall in Manufacturing FTEs, 2021

South East of England

12,000 FTEs, 5.5% fall on 2020

0.7% fall in Manufacturing FTEs, 2021

South West of England

17,600 FTEs, 6.0% growth on 2020

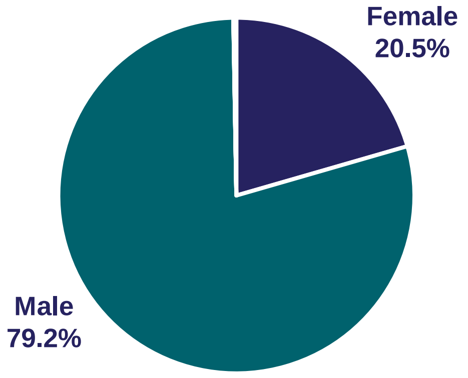
6.7% fall in Manufacturing FTEs, 2021

The remaining six ITL1 regions accounted for 10,900 FTEs in 2021

Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]This excludes so-called "induced" jobs supported by the spending of employees of a sector within the economy. Full methodology and assumptions made can be found in Annex D. [2]Manufacturing FTEs calculated by UKDSC analysts using Earnings and hours worked, UK region by industry by two-digit SIC: ASHE Table 5 - Office for National Statistics; full details can be found in the accompanying data tables.

People in Defence | Demographics

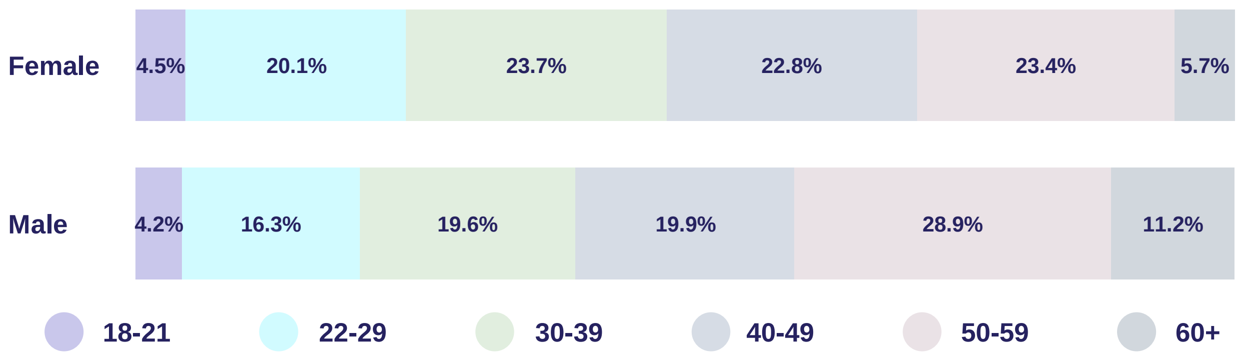
Surveyed defence FTEs by gender, 2021[1]:



20.5% of surveyed defence FTEs are female in 2021.

The average female employment in the UK manufacturing sector is **24%**[2]

Distribution of surveyed male and female FTEs by age bracket, 2021[3]

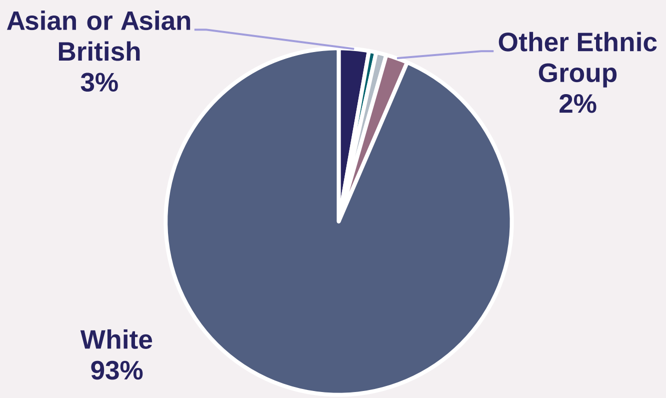


Ethnicity of the UK Defence Sector

Data on ethnicity was provided by nine companies and represents approximately 41.5% of surveyed defence FTEs

Eight companies surveyed have indicated an intention to increase data collection in this area

Surveyed defence FTEs by ethnicity, 2021[4]:



93% of surveyed defence FTEs identified as White. According to a Make UK report manufacturing has an average of 82% white employment[5]

The data shows minor growth in proportional employment of ethnic minorities between 2020 and 2021

Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]0.28% of FTEs identified as non-binary, other or preferred not to say. [2]Based on data from ONS Workforce jobs, full details of which can be found in the accompanying data tables. Note that the Make UK estimate an average of 29% female employment in manufacturing, see Note 5. [3]Some survey respondents indicated that under 18s on apprenticeships might be included in the 18-21 bracket. [4]1.63% of FTEs identified as Black, African, Caribbean or Black British, or Mixed or Multiple Ethnic Groups; full details can be found in the accompanying data tables. [5]Manufacturing Our Recovery through Inclusion | Make UK

People in Defence | High Pay Sector

£53,000

Estimated mean average salary per surveyed defence FTE in 2021, a **8.2% growth** on 2020[1]

44.3% greater than the UK Manufacturing mean average full time salary in 2021[2]

Medians are the preferred measure for salary data as they better represent the pay of an 'average' worker, without being distorted by a highly-paid minority

The median surveyed defence salary falls in the £22,001 - £45,000 bracket; using linear interpolation the JEDHub estimates the **median defence FTE salary to be £43,400[3]**

The median full-time UK manufacturing salary is £31,451, whilst that of SIC 30 (Other Transport Equipment[4]) is £40,665[2]

36.8%

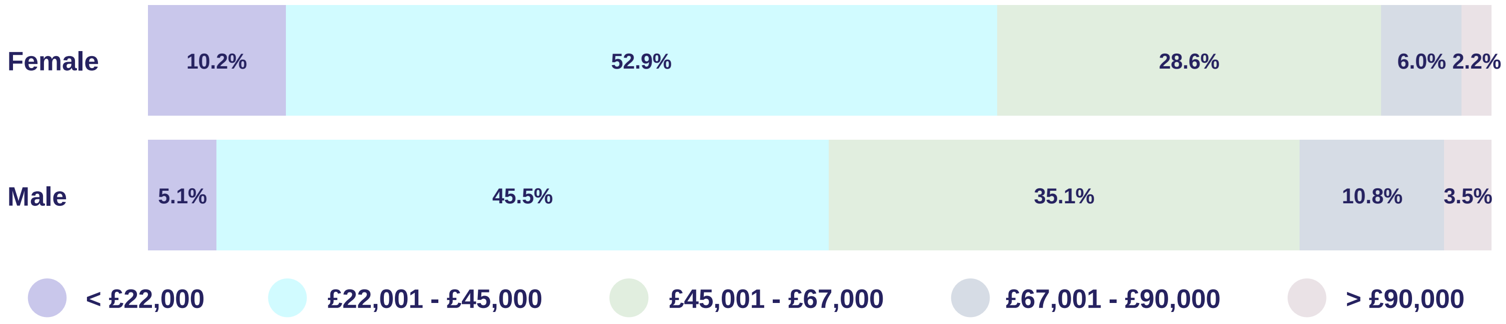
Surveyed female FTEs in pay brackets above £45,000 in 2021, an **8.4% increase** from 2020 of highly paid females

A younger female workforce might explain more females in the lower pay brackets

The female median full-time UK manufacturing salary is £26,991[2]

A wage premium in the sector not only reflects greater employee compensation but can serve as a proxy for a higher skilled workforce.[5] The sector is driving a demand for high productivity, highly skilled and high wage jobs across the UK

Distribution of Surveyed Male and Female FTEs by Salary Bracket, 2021



Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]Salary includes all pay before deductions; full list of inclusions and exclusions can be found in Annex A. [2]Earnings and hours worked, UK region by industry by two-digit SIC: ASHE Table 5 - Office for National Statistics. [3]Assumes a fixed distribution across the salary bracket. [4]Other Transport Equipment is a broad category, which includes the manufacture of Air & Spacecraft, and Ships & Boats. [5]Exploring the value of defence jobs in the UK.

Investment in People |
High Skill Sector

JEDHub
Joint Economic Data Hub

Defence employment by product lifecycle activity, 2021[1]:

A significant level of activity across each of the three lifecycle activities contributes to a diverse skillset, whilst the growth in R&D activity contributes to future skills, technologies and defence capabilities

25.4% of surveyed defence activity is in R&D
10.7% growth *in activity on 2020*

34.0% of surveyed defence activity is in production
2.9% growth *in activity on 2020*

40.5% of surveyed defence activity is in Customer Support, Services and Training
1.8% growth *in activity on 2020*

Employment by Job Function[2]

44.6%
surveyed FTEs in STEM-related employment, 2021

16.9%
surveyed employment in production roles in 2021

STEM and production related roles often require specialised education and training programmes specific to defence technologies

Gender Distributions

69.5%
of surveyed male FTEs are in **STEM and Production** related roles

38.5%
of surveyed female FTEs are in **STEM and Production** related role

Vacancies

Nearly **half of vacancies identified were in STEM or production** related employment

Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]Excludes 5.6% of activity attributed to ‘Other’. [2]STEM roles includes those classed as engineers, scientists, researchers, technicians and technologists, whilst production roles entail manufacturing production line work, as well as management of goods when in storage and transport.

Investment in People | Future Skills

Trainees: Apprentices and Graduates, 2021

The JEDHub Survey captured[1]:

2,100
New recruits started defence-related apprenticeship programmes, **59.6% growth on 2020**

3,800
Employees working in defence-related apprenticeship programmes, **0.5% fall on 2020**

950
New recruits started defence-related graduate programmes, **44.5% growth on 2020**

2,300
Employees working in defence-related graduate programmes, **2.5% growth on 2020**

7.9% of surveyed defence employment is made up of trainees on apprenticeship and graduate programmes

A quarter of new recruits in 2021 were apprentices and graduates

31.8% of graduates, and 27.1% of apprentices recruited in 2021 were female, up from 26.3% and 22.1% respectively in 2020

Growing investment in trainee programmes in the defence sector ensures future skills availability

Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]Over 12,000 new recruits in total in 2021 were captured by the JEDHub Industry Survey. Note that recruitment in 2020 was likely heavily affected by the COVID-19 pandemic and related policies.

Defence Value | Sales and Turnover

JEDHub
Joint Economic Data Hub

Key surveyed turnover findings, 2021:

Respondents to the survey broke down their total turnover sources according to customer type (e.g. defence or civil, and government or industry), customer location, and also by the capability being delivered. The data below highlights some of the key findings

62.1% *(£13.3bn)*
of defence turnover from domestic customers

UK MOD *(£11.7bn)*
The single largest source of turnover for the UK Defence Sector

Sub-Surface Maritime
26% of domestic defence turnover is from one capability

£21.4bn
Surveyed defence turnover, 2021

4.8% Growth
on 2020

74.7% *(£6.1bn)*
International governments account for the majority of turnover from overseas customers

79.0% *(£1.4bn)*
The majority of North American sales turnover is from private companies rather than governments, contrasting other regions

55.2% *(£4.4bn)*
The Middle East was the largest regional source of international sales turnover

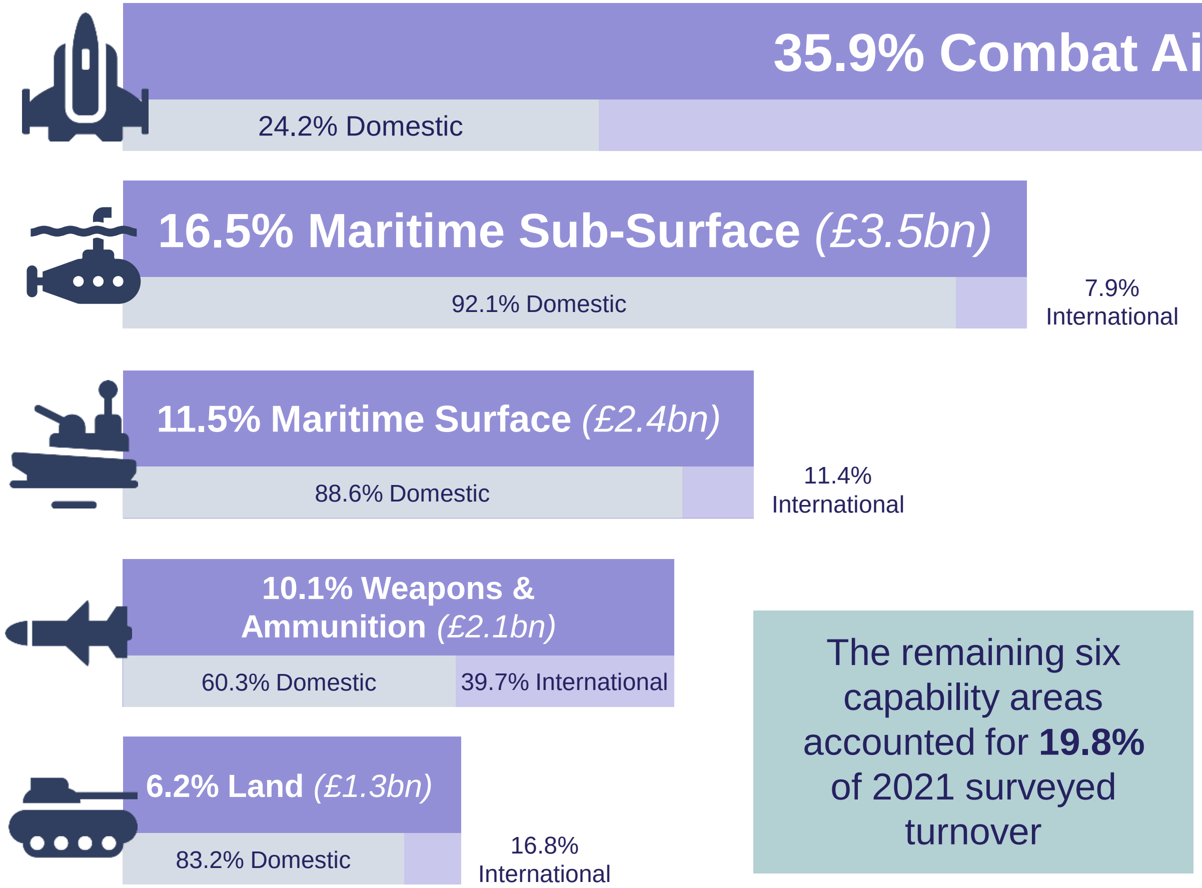
31.4% Growth
Turnover from Rest of Europe showed significant growth from 2020 to 2021

Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey for 2021 calendar year, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables.

Defence Value | Industrial Capabilities

JEDHub
Joint Economic Data Hub

Largest five surveyed capability areas as percentage of total defence turnover, 2021:
The turnover for each capability is further split according to customer location



The remaining six capability areas accounted for **19.8%** of 2021 surveyed turnover

Combat Air was consistently the largest capability area in surveyed years, also accounting for **34.7% of output** in 2020

Military C3 capabilities saw the largest **growth of 33.9%** on 2020 levels, reaching £196.2mn[1,2]

Rotary Wing capabilities saw the largest shift from international to domestic turnover sources (19.6%), whilst **Combat Air** saw a 15.0% shift towards international

Notes and Sources: All data presented above reflects findings from the JEDHub Annual Survey for 2021 calendar year, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]'Other' capability turnover saw a 44.9% growth in 2021. [2]Military C3 is defined as Military Command, Control and Communications, including Crypt Key and excluding Space and Cyber capabilities

Defence Value | A High Productivity Sector

JEDHub
Joint Economic Data Hub

Productivity of surveyed defence activity:
The JEDHub Industry Survey has provided enhanced insights regarding **defence-specific productivity** measures

Resilience

Defence activity showed resilience during the COVID-19 pandemic, with defence turnover growing by 2.1% as a percentage of total surveyed turnover in 2021

Productivity

Many surveyed companies produce defence and civil outputs. Whilst defence FTEs make up 46.7% of the total surveyed companies' FTEs in 2021, turnover from defence customers accounts for 69.3% of total surveyed turnover[2]

£9.8bn | Surveyed GVA, 2021

8.1% growth on 2020

ADS Facts and Figures reports £10.1bn value added by the UK Defence sector in 2021[1]

Surveyed GVA per FTE, 2021 | £112k

5.8% growth on 2020

The ONS reports a UK manufacturing average annual productivity of £82,176 GVA per job[3]

Notes and Sources: All data presented above reflects findings from the JEDHub Industry Survey for 2021 calendar year, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]Facts and Figures 2022 – ADS. [2]It is assumed that the remaining FTEs and Turnover relate to civil activity by the surveyed companies. [3]Output per job, UK - Office for National Statistics. Whilst not directly comparable to GVA per FTE, GVA per job is the closest estimated provided by the ONS.

Defence Trade | An International Sector

Whilst trade-in-goods statistics in other sectors are typically reported on the value of deliveries made in a given year, UK Defence and Security Exports (UK DSE) report on the *value of orders placed*, using a 10-year rolling average to account for the sharp peaks in value when new orders are placed. The key findings from this data are presented below.

On the next page, the JEDHub has included analysis drawn from a dataset provided by Janes, which provides a closer estimate of the *value of deliveries made* in a given year. This has been done with a view to making further cross sector comparisons in future report iterations

UK Defence Export Orders Placed, 2021[1]

UK Defence & Security Exports 2021

- **2nd** largest market share of global defence export orders, 2012-21
- **7%** UK market share of global export orders, 2021. Increase from **6%** in 2020
- The **Middle East** was the UK's largest single regional market from 2012-21, accounting for **51%** of defence export orders
- **Aerospace** accounted for **72%** of UK defence export orders from 2012-21. This was higher than in the global market, where aerospace made up 56% of all orders

£6.6bn defence export orders, 2021

Notes and Sources: [1]UK Defence and Security Export Statistics, 2021

Defence Trade |
Competing in the Global Market

JEDHub
Joint Economic Data Hub

Imports to the UK

$5.0bn

Average annual UK defence imports, 2017-21

Weapons (**43.7%**) & **Aircraft** (**31.7%**) accounted for the majority of UK defence imports, 2017-21

The **US** dominated UK defence imports, accounting for **68%** of the total

Export Statistics Methodology Explainer:

UK DSE export figures assess the value of defence orders placed, whilst Janes GPS assesses the value of deliveries made in the given year. Further, UK DSE and Janes report on different time periods. These methodological and reporting variances result in the difference in observed findings.

2021 trade snapshot:

$5.9bn defence imports

$5.3bn defence exports

Exports from the UK

$4.8bn

Average annual UK defence exports, 2017-21

Aircraft materiel accounted for **73.8%** of UK defence exports, 2017-21

UK defence exports were more evenly distributed than imports, with **Kuwait** (**11.6%**), the **US** (**10.7%**) and **Australia** (**6.9%**) representing the top 3 markets

5th

The UK had a **4.5%** share of the global defence export market from 2017-21, ranking **5th** – behind the US, France, Sweden and Germany

The **Middle East** was the largest single regional market from 2017-21, accounting for **32.0%** of UK defence exports. **Europe** was second largest market, accounting for **28.3%** of exports

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 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 Annex A.

Defence Supply Chain | MOD Expenditure

JEDHub
Joint Economic Data Hub

MOD Direct Supply Chain in 2021/22:

MOD Core Department paid £28.6bn to UK and foreign owned organisations in 2021/22

Top 19

largest suppliers receive around 50% of total MOD procurement spend[1]

10,600

UK and foreign owned organisations paid directly by the MOD[1]

3.4% Firms
94% Spend

363 organisations are paid over £5m and receive 94% of direct MOD spend[1]

Direct and indirect SME spend in 2020/21:

£0.9bn Direct SME Spend → **£3.5bn Indirect SME Spend**

SMEs receive 23% of MOD core department procurement spend, through direct and indirect spend in 2020/21 up from 21.3% in 2019/20[2]

In 2021/22[1,3]:

31.9%

Almost one third of new contracts are placed with SMEs[1]

78.5%

Around three quarters of SME contracts are let competitively, by value[1]

Notes and Sources: [1]MOD trade, industry and contracts 2022 - GOV.UK. [2]Central government spend with small and medium-sized enterprises, 2020 to 2021 - GOV.UK. [3]Data excludes those of unknown SME status and unknown competition type.

Defence Supply Chain | Defence Suppliers Spend

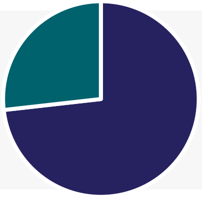
The JEDHub Industry Survey allows for a more detailed analysis of spending through the defence supply chain

£15.5bn

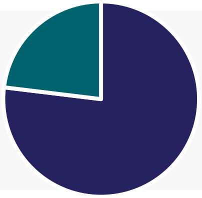
Total value of supply chain purchases in 2021, **3.2% growth** on 2020

Total value of supply chain spend by 21 surveyed companies in 2021, of which:

73.2% of purchases were used in the production of defence goods and services
***2.1% total growth** on 2020*



76.9% of purchases were with UK registered suppliers
*Over **25% higher** than a MakeUK estimate of the manufacturing average[1]*



Breadth

1,045 direct suppliers

Median average for surveyed defence companies

Companies with defence turnover of over £1bn have on average **2.5 times more direct suppliers** than those with less than £1bn and with a greater share of overseas suppliers[2]

Depth

Of every £1 spent by surveyed companies with UK companies, around **80p was spent on defence goods and services**[2]

This suggests a deep UK supply chain of defence goods and services, including significant use of contracting

Sources and Notes: All data presented above reflects findings from the JEDHub Industry Survey for 2021 calendar year, though may not include responses from all 26 companies; full response counts can be found in the accompanying data tables. [1]Operating without Borders - Building Global Resilient Supply Chains | Make UK. [2]Using median average as more representative of the typical supplier due to outliers.

Defence Supply Chain |
UK Defence Manufacturers

The ONS UK Manufacturers' Sales by Product (PRODCOM) data measures sales of products by UK manufacturers classified by SIC codes.[1]

Much of the manufacturing activity in the defence supply chain is captured by four military codes in the ONS PRODCOM data: weapons, ships and vessels, aircraft and fighting vehicles. This data is analysed below.[1,2]

£13.1bn
Total sales turnover of the four PRODCOM military codes, 2021[1]

Sales turnover in military aircraft have **grown 41.7% in two years** since 2019

Sales turnover has been relatively stable since 2019 in the other military codes

146
Unique enterprises identified[3]

Over half of enterprises identified in PRODCOM microdata manufacture military aircraft

70%
market share of five largest enterprises, 2021

86% of enterprises operate in only one of the military codes

Sources and Notes: Full details of the methodologies used can be found in Annex C. [1]The latest PRODCOM data can be found here: UK manufacturers' sales by product. [2]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. [3]Enterprises refers to unique legal entities identified by the ONS in the PRODCOM data.

Defence Supply Chain | Supply Chain Employment

The ONS Business Register and Employment Survey (BRES) dataset publishes estimates for employment by region and industry.[1]

The 146 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. The jobs identified are not limited to defence-specific roles.

69% of the employment is found in the four military manufacturing industries

Other industries in which employment is found includes:

- Manufacture of electronic instruments
- Repair and maintenance
- Engineering design
- Computer programming
- Consultancy

The top five ITL1 Regions in 2021 for BRES matched employment align with the top five identified with JEDHub surveyed FTEs

63.9% of the jobs identified are found in just three Regions: North West, South West and South East

Employment within:

Other Transport Equipment is **most strongly represented in the North West**

Repair and installation of machinery and equipment is **most strongly represented in the South East**

Manufacture of computer, electronic and optical products is **most strongly represented in Scotland**

Distribution of BRES identified employment, 2021[2,3]:

Sources and Notes: Full details of the methodologies and SIC codes used can be found in Annex C. [1]Business Register and Employment Survey - Office for National Statistics. [2]Employment represents jobs identified in the ONS Business Register and Employment Survey (BRES) with the 146 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. [3]Data has been rounded to the nearest thousand before percentages calculated.

Conclusions and Acknowledgements

Building on the strong foundation of the JEDHub's first Annual Economic Report, this latest report identifies new and important ways the UK defence sector contributes to the UK economy.

Through the annual survey, the JEDHub has discovered new insights into demographics and skills; defence capabilities; the defence supply-chain, gross value added and indirect jobs. As it did last year, the report brings together economic data on the defence sector from other sources to better understand the overall defence sector operating in the UK.

As the JEDHub takes this work forward, it will continue to be guided by these four key principles:

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 Consistent Data that provides greater granularity and fidelity showing trends over time; and

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

Working closely with stakeholders across government and industry the JEDHub will continue to grow its understanding of the defence sector's contribution to the UK economy. Our priorities for 2023/24 include:

- Considering future areas of analysis activity such as skills and research and development investment;
- Delivering analysis that is increasingly characteristic of the UK defence sector;
- Maximising opportunities to leverage other data sources, such as ONS microdata.

The 2023 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, Make UK

The JEDHub would like to thank the following companies for their completion of the 2022 survey:

The Defence Growth Partnership: *Airbus, Atkins, Babcock International Group, BAE Systems, General Dynamics, Leonardo, MBDA, QinetiQ, Raytheon, Rolls-Royce and Thales*

15 further responding companies: *AACE Ltd, Atlas Elektronik UK, Apache iX, Boeing UK, Capita, Centerprise Intl Holdings, Emberion Limited, EPS Logistics Technology, Kinsetsu, L3Harris Technologies UK, Lockheed Martin UK, Marshall of Cambridge (Holdings), Planned Link, Supacat UK and Transcal Engineering*

Additionally, the JEDHub would like to thank the JEDHub Industry Working Group for their contribution to the development of this report.

Find more on the JEDHub website, here

Glossary & Sources

JEDHub
Joint Economic Data Hub

Term	Meaning
ASHE	ONS Annual Survey of Hours and Earnings
BRES	ONS Business Register and Employment Survey
DGP	Defence Growth Partnership
FTE	Full Time Equivalent
GVA	Gross Value Added
Indirect Jobs	Employment supported by companies through their supply chain spending in the UK
ITL1	International Territorial Level 1
MOD	UK Ministry of Defence
ONS	Office for National Statistics
PRODCOM	ONS UK Manufacturers' Sales by Product
SIC	Standard Industrial Classification
SME	Small and Medium Enterprises
STEM	Science, Technology, Engineering and Mathematics
UK DSE	UK Defence and Security Exports organisation, sitting within the Department for Business and Trade

Sources:

- *ADS Facts and Figures, 2022*
- *Broad Industry Group (Standard Industrial Classification) – Business Register and Employment Survey (BRES): Table 1 - Office for National Statistics*
- *Central government spend with small and medium-sized enterprises, 2020 to 2021 - GOV.UK*
- *Comparison of ONS business enterprise research and development statistics with HMRC research and development tax credit statistics*
- *Earnings and hours worked, UK region by industry by two-digit SIC: ASHE Table 5*
- *Exploring the value of defence jobs in the UK*
- *GDP output approach – low-level aggregates - Office for National Statistics*
- *Industry (two, three and five-digit Standard Industrial Classification) – Business Register and Employment Survey (BRES): Table 2 - Office for National Statistics*
- *Janes GPS*
- *JOBS02: Workforce jobs by industry*
- *Manufacturing Our Recovery through Inclusion | Make UK*
- *MOD regional expenditure with UK industry and supported employment: 2020/21 - GOV.UK*
- *MOD trade, industry and contracts 2022 - GOV.UK*
- *Operating without Borders - Building Global Resilient Supply Chains | Make UK*
- *Output per job, UK - Office for National Statistics (ons.gov.uk)*
- *Region by broad industry group (Standard Industrial Classification) – Business Register and Employment Survey (BRES): Table 4*
- *UKDSE Defence and Security Export Figures, 2021*
- *UK manufacturers' sales by product - Office for National Statistics*
- *All logos have been sourced from CC sources or Flaticon*