

## **Defence Sector factsheet**

Plymouth has been a centre for defence for centuries. Despite the many challenges posed, the city's defence sector has excelled. Home to the largest naval base in Western Europe, the city is due to welcome one of the most expensive items on the UK balance sheet – Dreadnought. In preparation, investments of over £1 billion will secure submarine and nuclear work for the next 70 years. At present HMNB and Dockyard Devonport contributes over £700m to the Plymouth economy and supports the employment of nearly 14,000 across the city. Looking forward, the city stands ready to support the future work at Devonport.

#### **Sector Overview**

- 20,110 FTE jobs in marine and defence (2021)
- £1,214m GVA in marine and defence (2021)
- £60,080 GVA per FTE (2021)

#### The Best Place

The city of Plymouth and its surrounding area is home to a rich ecosystem of world-renowned defence research capabilities and private sector businesses set within an unrivalled geographic location providing access to the UK's first 5G testbed for marine innovation in Smart Sound Plymouth. The location of the city is truly unique, with quick access to deep, uncongested waters which can deliver trial areas ranging from sheltered locations to hostile 'real world' environments. The city boasts key development opportunities located at South Yard and Turnchapel Wharf:

- South Yard, a 35-hectare site on the southern edge of Devonport Dockyard with direct access to deep water. The site is now one of the three Plymouth and South Devon Freeport sites.
- Turnchapel Wharf, an ex-MOD, 14-acre waterfront business park that provides waterfront offices, workshops, warehouses, and deep-water access. Turnchapel is home to Thales' Maritime Autonomy Centre.

# **In Good Company**

Plymouth is already home to a vibrant defence ecosystem, hosting a wide variety of companies such as Thales, MSubs, BMT, Chess Dynamics, Artemis Optical, Collins Aerospace, Babcock and Barden.

Outside of these strategic defence suppliers is a well-established private sector in both the marine and manufacturing industries, accounting for 21% of the UK's marine manufacturing industry. This employs 10% of the city's workforce and contributes £572m to Plymouth's economy, 10 times the national average. Plymouth is truly unique in its size and expertise in defence industries.

Both within these companies and outside, the city is a hub for defence innovation, supported by a collaborative environment and made possible through organisations such as the FAST (Future Autonomy at Sea) Cluster and crosssector projects such as Smart Sound Plymouth.

The University of Plymouth helps to deliver defence innovation through key assets and relationships including:

### **Maritime Cyber Security**

The University delivers world leading research in Maritime cyber security through its Maritime Cyber Threats research group. This work is supported through the Cyber SHIP Lab which is a unique, hardware-based maritime cyber security research and development platform which is building cyber threat resilience in this uniquely complex, valuable and vulnerable sector.





#### Partnership with the Royal Navy

The Royal Navy and the University of Plymouth signed a partnership agreement in 2021 to facilitate research and advance understanding around the future potential of marine autonomy. The partnership will see world-leading academics, in fields including autonomous marine vessels and maritime cyber security, working closely with navy personnel on a range of innovative projects

# South West Regional Defence and Security Cluster (SWRDSC)

The cluster seeks to aggregate and raise the profile of regional defence and security capability to stimulate greater sector knowledge, business, economic growth and productivity across the South West region. It will attract businesses of all scales with an interest in defence and security to deliver new sector and cross-sector capability. It aims to apply a 'Team UK' approach to enable more joined up working between industry, academia and government, providing an efficient and accessible route to industry curation and the region's defence and security value chain.

The cluster engages with over 200 members that complement existing regional innovation hubs and clusters, collaborating with Government, trade bodies, Higher Education and Industry to drive and develop the defence & security sector within the region.

#### **Skills**

The longstanding and extensive defence sector of Plymouth has cultivated a secure pool of talent and skills. However, aware of the challenges facing such an innovative sector, the city keeps abreast of the emerging requirements for skills.

As the arena of defence increasingly moves towards cyber warfare in the information age, the University of Plymouth provides the skills for an emerging cluster of cyber security in the city, with undergraduate and postgraduate degrees in Cyber Security and a Cyber-SHIP Lab which recently received £3m in funding from Research England. The main component of the project is to bring together a host of connected maritime systems currently found on an actual ship's bridge. Once completed it will complement the existing ship simulator, bringing together core equipment readily used in today's fleet that can then be configured in vessel-specific layouts.

Beyond this the city remains committed to maintaining its pool of suitably qualified and experience personnel with the newly created SW Institute of Technology. As part of the project, Plymouth City College will grow their existing marine and engineering offering into the UK's first marine enterprise zone, allowing students access to specialist test facilities such as Smart Sound Plymouth

**Case Study:** 5G SMART SOUND Plymouth Sound is home to the world's first 5G ocean-based marine testbed. Known as Smart Sound Connect, the 5G private mobile network built by Vodafone using Nokia equipment, will enable ultrafast download speeds and low-latency 5G connectivity to support the development of new defence technology.

Case Study: MMCM A key defence prime, Thales stated their ambition of establishing Plymouth as the premier location for the development and testing of MAS when they opened their Maritime Autonomy Centre in 2018. The waterfront facility provides access to trial areas for the development of cutting-edge maritime autonomous systems and is integral to the recently signed £180m Maritime Mine Countermeasures programme (MMCM) contract. Creating more than 200 jobs across the SW, the project will build the world's first fleet of 8 fully integrated unmanned mine countermeasures vessels.

Case Study: CYBER SECURITY Partners across Plymouth have joined forces to bid to become a pilot area for Digital skills and Cyber security, working with the national Digital Policy Alliance (DPA) to ensure we generate a pipeline to meet the future needs of our cyber security industry. This builds upon the expertise of GCHQ accredited BluescreenIT, Cybercon and multiple undergraduate and masters level degrees in cyber security with military specialisms, making Plymouth a key centre for both traditional Armed Forces activities and future developments.



# **Take Action**

To find out more about what Plymouth offers the marine sector, or to discuss how our business support service can help meet your business needs, please contact:

#### **Enterprise and Inward Investment Team**

invest@plymouth.gov.uk investplymouth.co.uk

