









## Invest in Dorset's Advanced Engineering & Manufacturing Sector







Dorset is home to a thriving and varied advanced engineering sector, which specialises in Aerospace, Defence, Composite and Marine technologies. Altogether, they employ around 17,300 people and contribute over £803 million to Dorset's economy.

Dorset is a highly attractive region within which to locate Advanced Engineering & Manufacturing business for many reasons including:

- the presence of major prime contractors
- a highly skilled workforce
- a vibrant and dynamic supply chain supported by key trade associations including Farnborough Aerospace Consortium (FAC) and the West of England Aerospace Forum (WEAF), representing the industry at a regional and national level the government's Aerospace Growth Partnership.
- 50:50 split between military and civil work
- excellent universities and colleges with specialisms in aerospace and marine related research and education
- a superb quality of life acting as a magnet for skilled people







#### Advanced Engineering & Manufacturing Sector in Dorset Employs around 17,300 and contributes £803m to Dorset's economy.

Source: aGVA data by commissioned sectors, 2014, ONS

Local Facts 2017	Dorset LEP area	South West	Great Britain			
Population - all <sup>1</sup>	765,700	5,471,200	63,258,400			
Population - 16 - 64 yrs <sup>1</sup>	455,200	3,344,700	40,066,400	m,n		
Weekly earnings <sup>2</sup>	£504	£505	£540			
Economic activity rate <sup>3</sup>	79.0%	80.6%	77.8%			
Employment rate <sup>3</sup>	76.3%	77.3%	73.6%			
Employees <sup>3</sup>	65.3%	64.7%	63.0%			
Self employed <sup>3</sup>	10.5% 3.4%	12.2% 4.1%	10.2% 5.4%			
Unemployment rate <sup>3</sup> Education	3.4%	4.170	5.4%			
NVQ4+ 4	35.2%	37.3%	37.1%			
NVQ3+ 4	57.2%	58.5%	55.8%	A PART OF THE PART		
Employees in employment	31.2%	36.3%	33.6%			
Advanced Engineering -						
manufacturing <sup>5</sup>	11,900	87,600	707,800			
Advanced Engineering - support						
services <sup>5</sup>	5,400	54,300	562,700			
Advanced Engineering - manufacturing and support services	s <sup>5</sup> 17,300	141,900	1,270,400	Mid year population estimates 2015, ONS		
Advanced Engineering - manufacturing 6						
Computer, electronic, optical,				Median gross weekly earnings, full time, workplace based, from Annual		
electrical	1.2%	1.0%	0.7%	Survey of Hours and Earnings (ASHE) 2016, ONS		
Medical/dental instruments and supplies; machinery/equipment ned	0.9%	0.9%	0.7%			
Motor vehicles and other transport	, 0.070	0.070	0.170	aged 16-64, % of those aged 16-64, from Annual Population Survey,		
equipment	1.3%	1.7%	1.0%	Jan-Dec 2015 (ONS)		
Aircraft/spacecraft repair/				4 % of those aged 16-64, from Annual		
maintenance; electronic/optical repair	0.3%	0.1%	0.1%	Population Survey, Jan-Dec 2015 (ONS)		
Total in Advanced Engineering -				<sup>5</sup> Business Register and Employment		
manufacturing:	3.7%	3.7%	2.5%	Survey (BRES) 2015 (ONS)		
Advanced Engineering - support ser	1.7%	2.3%	2.0%	<sup>6</sup> Business Register and Employment		
Advanced Engineering - manufacturing and support services <sup>6</sup>				Survey (BRES) 2015 (ONS), % of all industries including estimate for		
	5.4%	6.0%	4.5%	agriculture based on DEFRA 2015		



## **Aerospace**

The UK has the world's second largest aerospace industry. Dorset counts aerospace as one of its leading key industries and the Dorset based companies excelling in aerospace include global and European leaders such as:

- Cobham www.cobham.com
- Meggitt www.meggitt.com
- Magellan Aerospace www.magellan.aero
- Curtiss-Wright www.curtisswrightds.com/avionics
- Honeywell https://aerospace.honeywell.com
- SPHEREA Test & Services http://www.spherea.com/
- AIM Altitude www.aimaltitude.com
- Micro-Nav www.micronav.co.uk
- CTC Aviation Training UK www.ctcaviation.com
- KDC Group https://www.kdcresource.com

The aerospace supply chain in Dorset is supported by the presence of

- ✓ Ultra Electronics https://www.ultra-electronics.com
- GSI Westwind Air Bearings www.westwind-airbearings.com
- GA Telesis www.gatelesis.com/contact/global-locations
- Copperchase www.copperchase.co.uk
- Valmiera Glass https://www.valmiera-glass.com

together with other engineering businesses in Tiers 1-3 to Airbus, Boeing, Bombardier, GKN and Leonardo.

Many of Dorset's aerospace companies help the world's most significant civil and defence projects with research and development, design and manufacturing.







## Europe's Aerospace Powerhouse

#### Think aerospace – Think UK South West

Dorset is also part of the South West Aerospace cluster of the UK, the largest in Europe. All the Local Enterprise Partnerships (LEPs) in the South West of England have engaged in promoting aerospace as the leading cluster in Europe. Within the UK the South West region has the largest aerospace cluster and one of the most diverse advanced manufacturing clusters in the country. The region's extensive network of highly-skilled and innovative suppliers mean the UK South West is the obvious choice for industry giants such as Airbus, Leonardo, Boeing and Rolls Royce to name but a few.



iAero is the South West of England's Aerospace sector's initiative to develop a regional platform for innovation and growth.

#### iAero in five points:

- 1. 14 of the largest global aerospace corporations and 800 of their supply chain companies operate within the South West.
- 2. iAero is a collaboration between the region's leading aerospace players to deliver a regional platform for innovation and growth.
- 3. A regional delivery mechanism for the UK Aerospace Growth Partnership strategy for technology, skills development, supply-chain competitiveness and manufacturing capability.
- 4. Over 27,000 highly skilled engineers and operatives adding value within the South West.
- 5. Supported by the UK Government's High Value Manufacturing Catapult through the National Composites Centre.

#### Key Objectives of iAero

- 1. Enhance the South West business's competitive advantage.
- 2. Promote growth through collaboration across the supply chain and between regional and national partners.
- 3. Increase international recognition as a region of significant industrial importance in Europe with the support of South West Local Enterprise Partnerships (LEPs).
- Create stronger links between industry, local and central government, the Catapult and higher education.
- 5. Focus on the development of advanced technologies, appropriate skills and supply-chain productivity.
- 6. Create the iAero environment to support business incubation and innovation development utilising local authority investments in new infrastructure.
- 7. Promote the concept of High Value Design capability that supports skills and technology development, and provide facilities for collaborative working.
- 8. Develop international cluster and collaboration opportunities.

## Aviation – Bournemouth Airport

#### http://www.bournemouthairport.com/

Dorset has an international airport, Bournemouth Airport, with a supporting aviation industry based at Aviation Business Park. The Airport has recently undergone a £45million redevelopment to improve terminal facilities. It is a gateway to Southern England and annually serves around 700,000 passengers and 36 destinations.

Aviation Business Park is to extend by offering 60 hectares of development land enhancing its reputation an as existing aerospace and aviation cluster.

- Runway 2271m long
- ILS CAT III;
- CAT 7 Fire / Rescue
- 11 x aircraft parking stands and more remote parking stands at Terminal Building
- Strong MRO capability







## Marine and Composite Technologies

Dorset is also the home to some of the largest players in the field of composite technologies, used in both marine and renewable energy industries.

#### **Sunseeker International**

https://www.sunseekerpoole.com

and

#### **The Royal National Lifeboat Institution**

http://college.rnli.org/Pages/HOME.aspx

both invest in R&D and manufacturing of composite technologies within Dorset. Sunseeker has manufacturing units within Poole and Osprey Quay, Portland and the RNLI has invested in a brand new R&D and manufacturing facility at its HQ and College base in Poole.

Norco GRP, www.norco.co.uk a leader in its field in combining composite technology with tidal power generation.

#### Other leading companies present in Dorset are:

- Wartsila www.wartsila.com/hamworth
- Manor Marine www.manormarine.co.uk
- Subsea Asset Location Technologies (Salt) www.cesalt.co.uk
- Caterpillar http://www.cat.com/en US/by-industry/marine.html
- Coda Octopus Martech www.martechsystems.co.uk/
- Global Marine Systems http://www.globalmarinesystems.com/ news/global-marine-powers-up-the-facilities-at-its-portland-depot. html with its operational base within Portland Port is the largest independent provider of submarine cable installation, maintenance and related engineering services worldwide.







### South Coast Marine Cluster

The South Coast Marine Cluster offers access to world-class research institutions and innovation-led companies.

Recognised as the UK's leading marine industry hub, with a rich maritime heritage, hundreds of kilometres of coastline, 32 world-renowned universities and research institutions and a large and growing network of sector-leading, innovative marine companies.

#### **Centres of excellence include**

- Applied Autonomy and Robotics
- Design, Engineering and Manufacturing
- Marine Energy and Renewables
- Sensors, Satellites, Big Data and the Environment

#### The area features:

Barnstaple, Bournemouth, Cornwall, Devon, Dorset, Exeter, Falmouth, Hampshire, The Isles of Scilly and Isle of Wight, Penzance, Poole, Portland, Portsmouth, Plymouth, Somerset, Southampton, Taunton, Torquay, Torbay, Weymouth and Yeovil.

https://southcoastmarine.org.uk/







### **Defence**

### Thanks to its maritime naval history, Dorset is at the forefront of R&D Defence with world-class companies such as

- Atlas Elektronik UK https://www.uk.atlas-elektronik.com
- QinetiQ https://www.qinetiq.com/contact/pages/officelocations.aspx
- Aish Technologies www.aishtechnologies.com
- Amsafe Bridport https://amsafebridport.com
- AGI Aeronautics http://www.agiltd.co.uk/
- AB Precision www.abprecision.co.uk
- Babcock International Group https://www.babcockinternational.com/
- ✓ IAP G3 Systems http://www.g3-systems.co.uk/
- Ultra Electronics NCS Systems http://www.ultra-ncs.com/
- Coda Octopus www.martechsystems.co.uk
- ✓ ViaSat https://www.viasat.com/
- Chemring Technology Solutions http://www.chemringts.com/
- Drumgrange http://www.drumgrange.com/
- Tods Defence http://unitech-aerospace.com/
- BMT Defence Services http://www.bmtdsl.co.uk/

#### MINISTRY OF DEFENCE CENTRES OF EXCELLENCE

- The Royal Marines Base Poole, Dorset and is the centre for the Royal Marines and Royal Navy amphibious and riverine activities.
- The Royal Corps of Signals based at Blandford, Dorset is the centre of excellence and training for information computer technology for the British Army.
- The Armour Centre at Bovington, Dorset is the centre of excellence for training in the core skills
  of armoured warfare.
- The Royal Engineers Bridging Camp in Wyke Regis, situated on the Dorset coastline is the only bridging training centre retained by the British Army.
- Royal Fleet Auxilliary servicing and supply at Portland Port.
- Special Forces (SBS) training within Portland Harbour with training platform "Sir Tristram"



## Bincleaves, Portland Port

Portland Harbour is at the end of a relatively short fetch across Lyme Bay and physically protected from strong winds and currents by the island of Portland and the causeway which connects it to the mainland. In addition there is a double low tide in Portland.

The key benefits are the ability to use sensitive equipment on stable platforms with real time data collection and analysis.

The water space is available with good conditions for the majority of the year and if more demanding conditions are required then the option still remains to conduct research South of Portland Bill.

This environment has enabled Atlas Elektronik UK https://www.uk.atlas-elektronik.com to develop world leading underwater systems technology development in a timely, affordable and highly effective manner. In addition, because there is a consistency of environmental conditions, the model can be validated to a high degree of accuracy and de-risk sea trials by credible modelling and simulation effort further reducing time and cost.









www.investindorset.co.uk

## **DORSET PORTS**

**Dorset has 2 ports – Port of Poole and Portland Port and is within 1 hour's drive of the Port of Southampton Container Terminal:** 

#### PORT OF POOLE

#### www.phc.co.uk

- Poole Harbour is one of the world's largest natural harbours, in excess of 10,000 acres
- It is one of the largest Trust Ports in the UK handling 40,000 freight units, 120,000 cars and 400,000 passengers annually
- There are more than 5,000 commercial movements, annually, within Poole Harbour
- £10m new port expansion currently under development
- New 200m long deep water South Quay
- Port of Poole is home of the iconic Twin Sails Bridge
- Regular cruise ships calling and operation of cross channel ferries and fast craft service to Jersey, Guernsey, Cherbourg, St Malo and Santander with daily/weekly crossings
- 2 modern Ro/Ro berths are fully operational to accommodate the latest ferries operating in the Western Channel
- The Port of Poole has one of the best safety records in the UK
- Poole is home to over 12 yacht clubs and 4 marinas within the harbour
- An ideal venue to support offshore renewable installations on the South Coast
- Port of Poole has 8ha of development land available for further development of facilities







### **DORSET PORTS**

#### **PORTLAND PORT**

#### www.portland-port.co.uk

- Over 2000m of linear berthing available Berth Depths of 11.6m (C.D.)
- 2450Ha of sheltered deep clear (up to 10m visibility) within PHAL jurisdiction
- Over 35Ha waterside and near water development site with extensive waterside land available for industrial development
- Ship repair & servicing close to major seaways The English Channel
- Vessel lay up
- Underwater survey
- Royal Fleet Auxillary servicing
- Royal Navy surface ship and submarine servicing
- Special Boat Service (SBS) training
- All aspects of offshore renewables including storage, assembly, construction and servicing
- Portland Port offers a bunkering service to passing vessels
- Leading cruise destination in the South West with over 22 cruise calls and 26,000 passengers booked for 2015 and planned cruise berth extension
- UNESCO designated World Heritage Site the Jurassic Coast
- In a sheltered bay giving good consistent benign conditions for all vessels



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#### DORSET INNOVATION PARK

## Enterprise Zone – Dorset Innovation Park

In April 2017 the Dorset Enterprise Zone will open, situated near Dorchester with close proximity to the Dorset coastline approximately halfway between Poole and Weymouth. The key sector to be associated with the EZ is Advanced Engineering & Manufacturing with an emphasis on defence developing around the existing anchor tenants which are Atlas Elektronik UK https://www.uk.atlas-elektronik.com and

QinetiQ https://www.qinetiq.com/contact/pages/officelocations.aspx

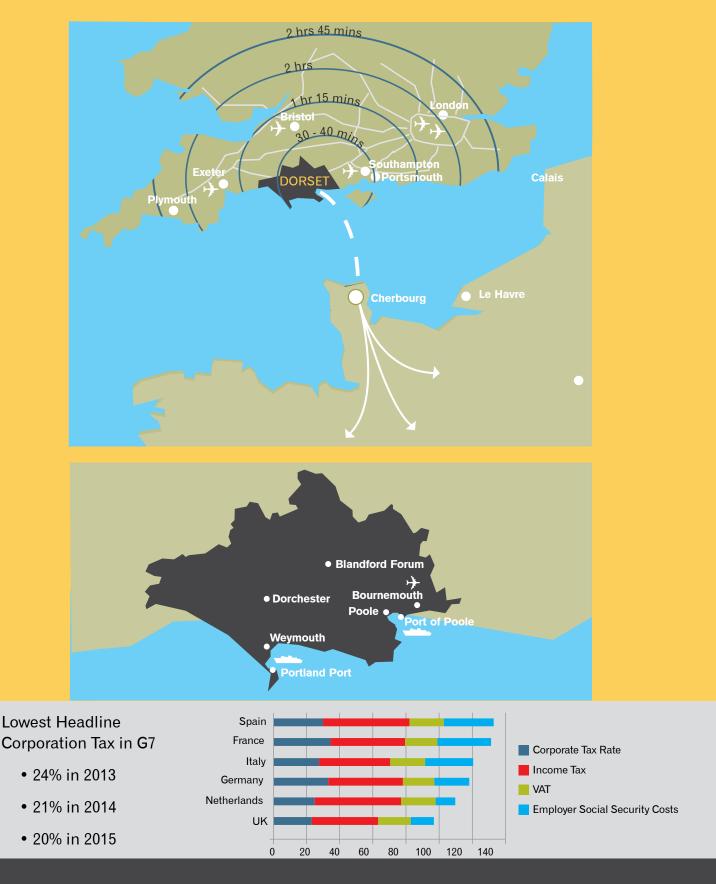


http://www.dorsetinnovationpark.co.uk





## Dorset's Location on the South Coast of the UK



## ADVANCED ENGINEERING SKILLS & DEVELOPMENT – THE TALENT

Dorset offers a skilled and experienced workforce

#### **Bournemouth University**

AT BOURNEMOUTH UNIVERSITY, RESEARCH RANGES FROM INTELLIGENT PROSTHETIC LIMBS TO CERAMIC BEARINGS TO CORROSION MONITORING

The University's Department of Design & Engineering, within the Faculty of Science and Technology, has several successful, professionally accredited undergraduate and postgraduate courses in design and engineering.

The department's Innovation Centre, includes modern laboratories and workshops featuring industry-standard facilities and the latest experimental, additive manufacturing and manufacturing equipment.

The Design & Engineering Research Centre comprises a team of world-class academics and researchers who are contributing to the development of new knowledge, tools and technologies that positively impact on the environment and society around us. The academics have a proven track record of internationally excellent applied research in a number of areas such as biomedical engineering (technology that will improve quality of life including prosthetic limbs, prosthetic implants biomechanical movement analysis and gait analysis), nano coatings, corrosion, clean energy technologies (design for durability) and tribology (study of friction, wear, lubrication) in collaboration with Chas A Blatchford and Sons Ltd, Royal Bournemouth Hospital, Poole Hospital, Schaeffler, Ministry of Defence, the Tank Museum at Bovington, and SKF for example.

Academics are also involved in a number of interdisciplinary projects that have resulted in the development of new products that have had an impact on a local, national and international scale. For example, the award winning Floodstop, an innovation flood defence barrier (www.fluvial-innovations. co.uk/about-us/) and Bottlebuoy, a low-cost floatation device in collaboration with the RNLI (https://bottlebuoy.com/).

www.bournemouth.ac.uk/about/our-faculties/faculty-science-technology/our-departments/department-design-engineering

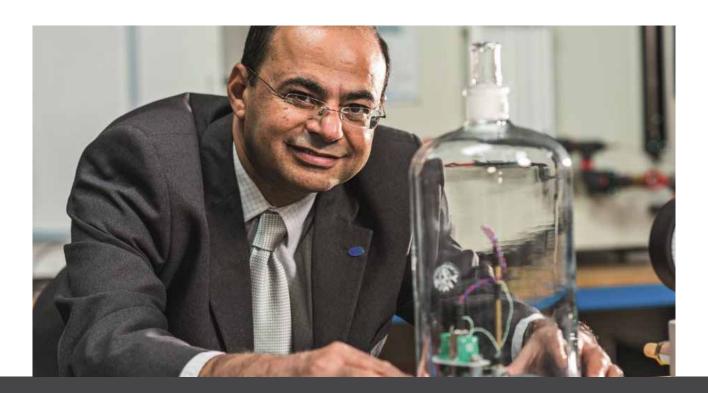
The Department of Design and Engineering is set within state-of-the-art facilities and courses are taught by prize winning academics. Through the fusion of its education, research and professional practice activities, the Department of Design & Engineering is recognised for the excellence of its design and engineering teaching and research.





### Easy access to other world class universities, centres of excellence and Russell Group universities:

- · University of Reading
- University of Bristol
- University of West of England (UWE)
- · Bristol Robotics Laboratory, University of West of England
- University of Southampton Maritime Centre of Excellence
- Southampton Solent University
- · University of Exeter
- Plymouth University
- The South West's National Catapult, the National Composite Centre, near Bristol Universities and Centres of R&D:
- Department of Design & Engineering, Bournemouth University
- · Royal National Lifeboat Institute design and manufacturing unit
- University of Portsmouth The Centre for the Economics and Management of Aquatic Resources (CEMARE)
- University of Plymouth Marine Institute
- Southampton Solent University Warsash Maritime Academy, one of the world's leading providers of education, training, research and consultancy to the international shipping and offshore industries
- Southampton City College Marine Skills Centre
- The National Oceanography Centre, Southampton
- The National Centre of Animation at Bournemouth University
- Bournemouth University leading in cyber security



## Skills and development at further education colleges

#### **Bournemouth & Poole College**

https://www.thecollege.co.uk

The largest provider of Further Education (FE) and Apprenticeships in the area, home to around 11,000 students from across the region, the UK and the world.

- STEM centre
- Apprenticeships
- Specialist training units sponsored by Cobham, Superior Seals and Sunseeker

#### **Brockenhurst College**

https://www.brock.ac.uk/

A high-achieving college set in a friendly 36-acre campus within the beautiful New Forest National Park. We offer a wide range of courses, superb facilities and an exceptional track record for results. Nationally recognised for excellence and innovation in further education, we attract around 3000 Sixth Form students from across the region each year, together with a mix of international students from around the world.

- STEM centre
- Apprenticeships

## Weymouth College www.weymouth.ac.uk/

Weymouth College, with over 4,000 students, is based in the South of England. It teaches a wide range of further education courses, ranging from Apprenticeships to vocational courses.

Apprenticeships

## South Wiltshire University Technical College http://www.wiltshire-utc.co.uk/

South Wiltshire UTC will use real world challenges from world class Engineering & Science employers to prepare students for their future careers.

- STEM Centre
- Apprenticeships

#### Yeovil College www.yeovil.ac.uk

Yeovil College remains passionate about its role as a key provider of education and training in South Somerset and North and West Dorset. It remains committed to its role as a tertiary college for the whole community and currently supports around 5,000 full and part-time students.

- STEM centre
- Apprenticeships





## Why Dorset is right for you

- In easy reach of major air and sea ports
- Over 90% coverage of Superfast Broadband, and investment secured for the roll out of Ultrafast broadband
- A Great Place to do business situated on the central south coast of England
- ✓ UNESCO designated World Heritage Site the Jurassic Coast, England's first and only Natural World Heritage Site
- Protected landscapes: Areas of Outstanding Natural Beauty with
   South Dorset Ridgeway Projects in environmental management with sustainable economy
- The Dorset Enterprise Zone near Dorchester to be opened April 2017 and focusing on advanced engineering and manufacturing, with access to Ultrafast broadband



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## Commercial property in Dorset

- Dorset remains a very competitive location for both office, light industrial and industrial/ warehousing occupiers.
- Rentals levels are very attractive when compared with similar urban areas in South Eastern England.
- Please follow this link to view some of the commercial property on offer within Dorset

http://dorsetlep.co.uk/invest-in-dorset/commercial-property-database/



## **Special Events**

The Invest in Dorset Team collaborates with other South and South West Local Enterprise Partnerships to exhibit at

- Farnborough International Air Show next show 2018
- Paris Air Show next show June 2017
- Oceanology International next show London 2018



# Key organisations and associations working within Dorset:

- Dorset Engineering and Manufacturing Cluster http://www.dorsetemc.com/
- The Department for International Trade http://www.gov.uk/dit
- Farnborough Aerospace Consortium www.fac.org.uk
- West of England Aerospace Forum www.weaf.co.uk
- British Marine Federation http://britishmarine.co.uk/





Dorset at a glance

- 250 foreign owned businesses are established in Dorset including world leaders:
- JP Morgan
- 🕟 Sunseeker International
- Atlas Elektronik UK
- Siemens
- Sharp
- Honeywell
- Merck
- Hitachi
- Manitou 🕏
- BNY Mellon
- Dupont
- 🕟 Caterpillar
- o 1 International Airport and 2 Ports in Dorset providing strong links to mainland Europe and Channel Islands, and the Port of Poole with a long history of handling agricultural bulk products. The Port of Southampton Container Terminal within 1 hour's drive time
- Excellent road connections to London, the Midlands and the North
- Dorset is home to Bournemouth Airport and both Exeter and Southampton Airports are easily accessible within 1 hour's drive time. Bristol, London Heathrow and Gatwick Airports are within 2 hours drive time.

#### Other key sectors supported within Dorset:





### Dorset is Great for...



Housing, Education, Health Services, Shopping, Leisure and Sports Facilities







World renowned natural environment historic sites and buildings and UNESCO World Heritage Site "Jurassic Coast"





'Outdoors Lifestyle' walking, cycling, diving, windsurfing and sailing and many other sports available for participation







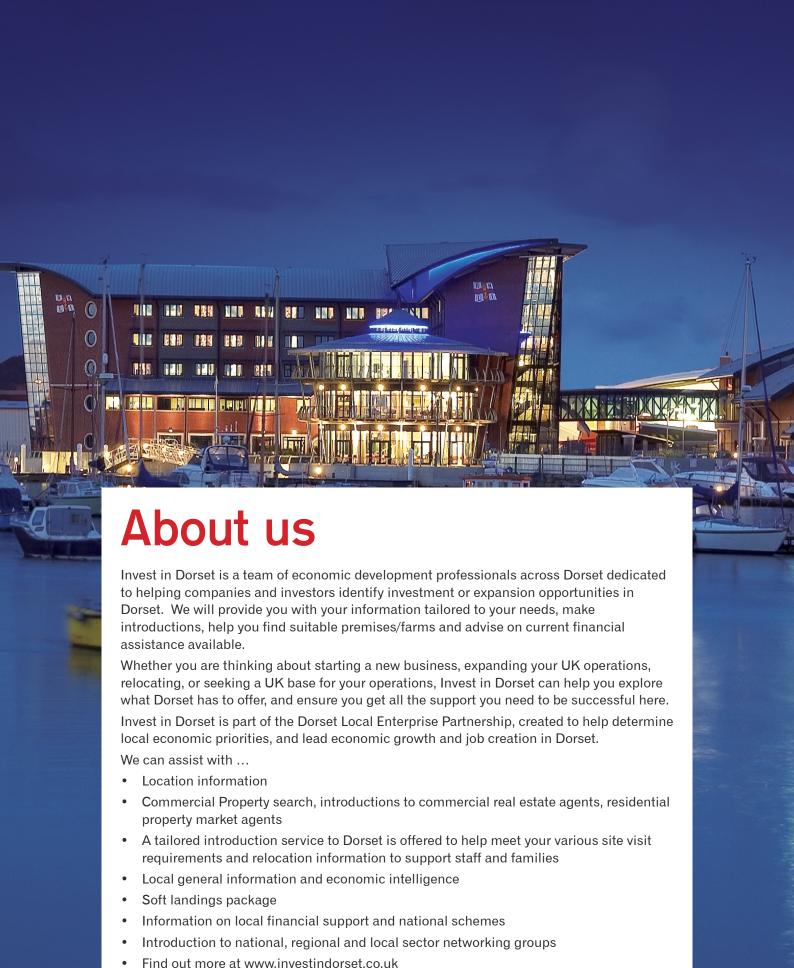
Local foods and hospitality from fashionable restaurants to rural pubs and local farmers markets











Contact us at www.investindorset.co.uk





