

## Sector Summary Report – Engineering Sector

### Sector Definition

This includes the footprints of the 4 engineering and manufacturing related sector skills councils and one related sector body (Engineering Construction Industry Training Board – ECITB)

The occupational areas covered in this summary are

- **SEMTA**- Science, engineering and manufacturing technologies
- **COGENT** Chemicals, oil, gas, petroleum, polymers and nuclear
- **Pro skills** Mining, quarrying, manufacture of paper products, glass, ceramics, cement and furniture
- **Automotive Skills** Sales, maintenance and repair of motor vehicle parts, Renting of motor vehicles.
- **ECITB**. Building of industrial assets – power stations, oil refineries, chemical and pharmaceutical plants, bridges and steel structures

### Overview

INDICATOR	ProSkills	Cogent	SEMTA	Automotive Skills
	Mining, quarrying, manufacture of paper products, glass, ceramics, cement, furniture	Chemicals, oil, gas, petroleum, polymers	Science, engineering and manufacturing technologies	Retail motor industry
<b>EMPLOYERS</b>				
Number of establishments	600	700	1,900	2,000
Share of all establishments	1.1%	1.2%	3.4%	3.5%
<b>EMPLOYMENT</b>				
Number of employee jobs	13,400	25,400	64,400	19,300
Share of all employee jobs	1.3%	2.5%	6.4%	1.9%
<b>QUALIFICATION LEVELS (INDICATIVE)</b>				
Employees whose highest qualifications are at:				
Level 4 and above	5.0%	26.9%	18.7%	5.3%
Level 3	18.1%	19.5%	22.0%	30.6%
Level 2	30.8%	23.8%	27.6%	34.0%
Below Level 2	43.6%	25.4%	29.0%	23.4%
No qualifications	2.4%	4.4%	2.6%	6.7%
Proportion of employees without qualifications at Level 2	46.0%	29.8%	31.6%	30.1%
<b>PROJECTED EMPLOYMENT CHANGE</b>				
Projected employment change 2007-2017	-19.4%	-16.4%	-13.3%	-10.7%

(Sector Skills Needs in the NE: Summary Matrix (modified 13 October 2008))

ECITB figures are not available for the North East, however see below.

There are similar skill requirement across all of these sectors, but each of the sectors has different characteristics in terms of what they contribute to the economy both regionally and nationally. The regional GVA contribution by the companies in the Cogent sector footprint stands at around 25%, whereas the margins in the Automotive skills footprint are much lower. The workforce across the sector is significantly male dominated and ageing. The average

age of the workforce in the SEMTA footprint is 48 and older in parts of the Cogent footprint. Across the sector employment is mainly on a full time basis, however significant parts of the workforce particularly in the ECITB footprint work on a cyclical, project or contract basis, which can make upskilling difficult.

The wider 'energy' sector is seen as a key sector in the North East, some companies in the footprints of Cogent, Semta, ECITB and Proskills contribute to this sector.

**The ECITB** state that around 50,000 people work in their sector in the UK and a further 30,000 work offshore. No figures are currently available for the size of the workforce in the North East, however, as some of the major engineering construction companies are headquartered in this region it is reasonable to assume that a significant part of the engineering construction workforce is based or was trained in the North East.

### **Future Skills Key Demand issues for 2009/10**

From the sector skills agreement across all the sectors

1. Management and leadership skills for the all the sectors are seen as key.
2. Business improvement, always described as critical, however, in the current economic climate, this could become even more so.
3. In large manufacturing companies, across all of the sectors, improving the technical ability of the workforce – particularly upskilling from levels 2 to 3 and beyond.

### **Sector Qualification Strategies (SQS) and Vocational Qualification Reform (VQR)**

All Sector Skills Councils have recently completed their SQS and Action Plans. Through this process a variety of new and updated qualifications will emerge that are more closely aligned to the needs of employers. It is anticipated that there will be a need for providers to develop capacity and upskill their workforce to deliver new qualifications. The following link to the Sector Qualification Strategies

<http://www.ecitb.org.uk/ecitbresources/204523/>

[http://www.cogent-ssc.com/education\\_and\\_qualifications/SQ\\_Reform\\_main\\_page.php](http://www.cogent-ssc.com/education_and_qualifications/SQ_Reform_main_page.php)

[http://www.proskills.co.uk/Proskills\\_SQS.asp](http://www.proskills.co.uk/Proskills_SQS.asp)

[www.motor.org.uk/standards-and-qualifications/standards-and-qualifications-information.html](http://www.motor.org.uk/standards-and-qualifications/standards-and-qualifications-information.html)

[http://www.semta.org.uk/about\\_us/media\\_centre/skills\\_policy.aspx](http://www.semta.org.uk/about_us/media_centre/skills_policy.aspx)

### **Sector Compacts**

Across the engineering sector compacts are viewed by the sector skills councils as a route to engage employers to the Train to Gain offer.

The SEMTA compact was launched in October 2008. Proskills and Cogent compacts will be launched early 2009.

### **Economic Developments**

The offshore and wider 'energy' sectors are important to the region and many of the skills sets are shared with the process industry and engineering construction.

The offshore wind generation sector will be key over the coming years as will the nuclear sector. The demand for cheaper, secure and 'clean' energy will increase based on political drivers as well as societal demand for environmentally acceptable energy sources. Companies active in this sector, are stating their skills needs as mainly being engineering, level 3 to graduate.

Over the period 2008 – 2014 there is expected to be a net requirement within the engineering industry in the North East for about 2,300 people at NVQ level 2, 2,700 people at NVQ level 3, 2,700 at NVQ level 4 and about 650 at NVQ level 5 or above. Note (*However these estimates were compiled before the economic downturn*).

### **National Skills Academies**

In this sector there are 3 active National Skills Academies in the region – manufacturing, hub in West Midlands, Process Industries, hub in the North East and Nuclear with the hub in the North West. All these academies are currently in discussions with providers about delivery in the North East.

### **Train to Gain**

Delivery for this sector is dominated by Performing Manufacturing Operations (PMO) and Business Improvement Techniques at level 2. PMO is not on the additional qualification list for SEMTA however B-IT is.

BIT is regarded as a key qualification for this sector. SEMTA are revising the assessment strategy for this qualification. By academic year 09/10 all assessors will be required to meet the RITA standard.

### **Work Based Learning**

Apprenticeships are valued by the sector particularly frameworks in the engineering, manufacture, maintenance, process and automotive sectors. New frameworks that are coming through tend to be for niche employers, such as project control in the ECITB footprint. Business Improvement Techniques is not widely valued by employers for their apprentices, this is used mainly to up skill their adult workforce. NVQs in Vehicle Maintenance and Repair, Performing Engineering Operations and Engineering Maintenance are by far the most popular qualifications.

### **Focus Recommendations for 09/10**

- Respond to the economic developments in the region in what could be a very difficult time for employers in this sector.
- As business improvement is key across the sector providers will need to be up to date in terms of assessment requirements and sectoral differences in delivery.
- The Cogent Gold Standard will become more prominent through their sector compact.

- Delivery in Train to Gain including the new flexibilities.
- Support the sector during the current economic downturn.