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## *Foreword*

The oil and gas industry has witnessed considerable swings in market forces over recent times affecting both mood and confidence. In this environment it is increasingly important that we understand the underlying performance of the sector during these periods. Since 2000 this report has provided a reliable annual indicator of international sales performance by Scotland's oil and gas supply and service specialists.

Industry forecasters predict continued and significant growth in demand for hydrocarbons over the coming years, and in this respect it is extremely heartening to see Scottish businesses record another year of increased activity in international markets. This report highlights the success of the Scottish oil and gas supply chain which has secured 40 percent of sales from international activity.

When considering the uncertainties facing the UK Continental Shelf, it is clear that international opportunities will remain key for future growth and should be vigorously pursued. We also believe it is important for offshore oil and gas businesses to position themselves for the substantial alternative opportunities being presented as a result of the Government targets for major deepwater wind developments, and through time wave and tidal energy developments.

We hope that the provision of energy market intelligence will encourage Scottish companies to maximise these opportunities for growth.



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# SURVEY OF INTERNATIONAL ACTIVITY IN THE OIL AND GAS SECTOR 2007/2008

## *Summary of Study Results*

Total oil and gas supply chain sales from the Scottish market increased by 9.9% to reach £14.2 billion.

International activity accounted for 40% of the Scottish supply chain sales total.

Direct oil and gas exports from Scottish based operations, valued at £2,344.8 million, increased by 29.8% in 2007.

49% of direct oil and gas export sales was derived from the Service industries.

International oil and gas sales derived via Subsidiary Companies was valued at £3,349.8 million in 2007.

In 2007 total oil and gas international sales was valued at £5.69 billion, 19.5% higher than in 2006.

Provision of General Services to the oil and gas industry accounted for 75% of total international sales, followed by the provision of Products/Equipment/Materials at 14%.

Rapid growth in the African region resulted in the country being firmly established as the top geographic region for direct oil and gas sales. It also accounted for 15% of total international sales, second behind the North American market with its 31% share.

The top 5 international markets for direct exports were Angola, Norway, Russia, Azerbaijan and the United States. The top 5 total international markets combining direct and subsidiary exports were the United States, Canada, Norway, Russia and Azerbaijan.

Sales activity from the oil and gas supply chain was recorded in 103 different country markets, a record high number.

In the North American region the majority of sales were driven through subsidiary operations as opposed to direct exports. Canada was a case in point, showing a 236% rise in total international sales into the market since the last survey.

13% of total international sales was delivered via SMEs (companies with less than 250 employees), compared with 15% the year before.

In the domestic market Scottish-based operations recorded £8.5 billion of sales in 2007, a 4.3% increase since 2006. Of this £8.5 billion, 70% was delivered via the Service sector.

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**International  
Activity in the  
Service/Supply  
Base**

**International Sales**

The survey defined international sales as a combination of direct exports and sales delivered via overseas owned subsidiaries. The first part of this section examines the level of direct export activity undertaken by the service/supply base, the second element looks at the activity within overseas owned subsidiaries and lastly the combined results examine the overall total.

It was clear that many businesses which supplied the oil and gas industry would not necessarily have this as the sole end market for their products or services. Thus the survey research asked companies to give an indication of exports into other markets. This data is examined in the “Sector Diversification” section later in the report.

In addition the companies who responded to the survey were categorised into four main business or product areas to help define from what segment of the service/supply industry the greatest activity levels were generated. These category areas are defined below: See Appendix A on Page 22 for more information.

Business Category 1	Product/Equipment/Materials
Business Category 2	Bulk Materials
Business Category 3	Services
Business Category 4	Engineering/Procurement/Construction/Installation

**(i) Export Values**

This section looks at directly generated export revenues where the product or service is supplied/managed from Scotland. The results of the research are presented overleaf in Table 1.

The 2007 period to which this survey research relates has again seen a sustained rise in the price of crude oil. The market forces which were prevailing in 2006 intensified during the 2007 period, namely global economic growth driven strongly by the Chinese and Indian economies. All of this was combined with ever increasing challenges on the supply side as oil became more difficult and expensive to discover and produce.

The price of Brent Crude closed the 2006 period at \$64/bbl with an average price between \$64 and \$65/bbl. While 2006 had seen fluctuation in the oil price with a peak of \$77/bbl and a low of \$55/bbl, the 2007 period witnessed overall a steady increase during the year. Opening at \$55/bbl, it climbed and was at its peak of \$94/bbl as the year closed and averaged a price of \$72/bbl across 2007. Although not covered by this survey, the price continued its strong rise during 2008, reaching almost \$140/bbl before slumping sharply to around \$60/bbl towards the end of the year. This sharp decrease occurred as the impact of turmoil in the financial markets and a looming recession across the world led to fears about significant demand reductions. As regards gas prices these tend to be linked closely to the oil price, albeit with a time lag. They had a spike in 2006 but fell back again later that year and in 2007, albeit not to the lower levels witnessed in the early part of the century.

What has been clear over the past two to three years is that the firming up of the oil price since the shock of sub \$10/bbl oil in the late 1990s, was leading to a sustained increase in investment, not only in the relatively high cost UKCS, but across all of the world’s major oil and gas provinces. This survey has recorded over many years the success of the Scottish-based supply chain in capitalising on these opportunities. The nature of oil and gas industry investment is such that projects are often large scale and capital and labour intensive in nature which can inevitably lead to fluctuations in either industry sector or market sector results year on year. While this has to some extent been the case, the general trend over the last ten years has been that of ongoing and sustained growth in international markets and it is encouraging to note that the statistics contained in this latest report for the 2007 period maintain this positive picture.

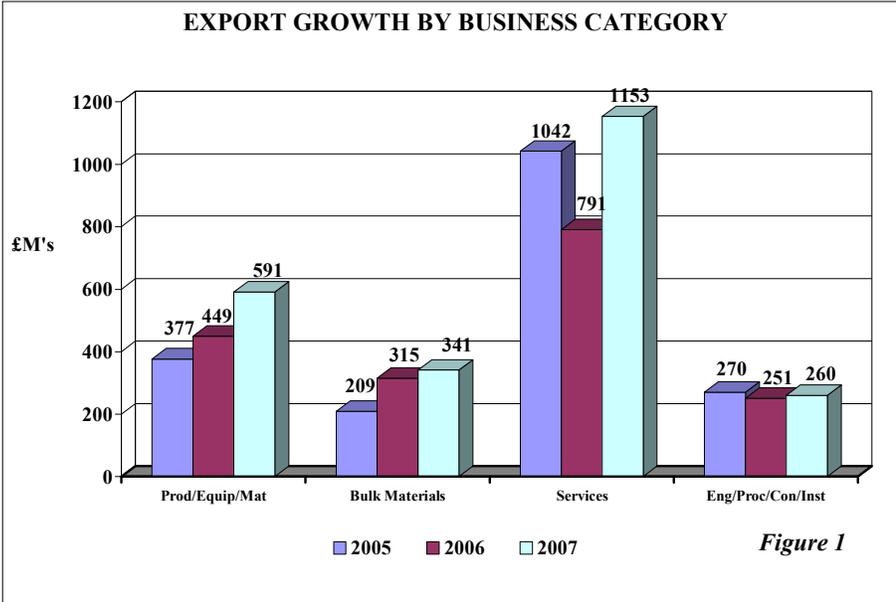
**International  
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Base**

Turning to the results of the 2007 survey into international performance from the oil and gas supply chain, the overall figures for direct exports show a welcome return to a position of strong growth following a small decline in value in 2006 compared to 2005. Table 1 records the growth across all four industry categories, although the recovery in direct exports from the Service sector is clearly the predominant influence on the upturn. In total value terms, the Scottish oil and gas supply chain direct exports are valued at £2,344.8m compared to £1,806.1m in 2006, a substantial increase of 29.8%.

**Table 1. Scottish Service/Supply Direct Exports 2005 - 2007  
(£m current prices)**

	2005	2006	2007
<b><u>BUSINESS CATEGORY</u></b>			
(1) Prod/Equip/Materials	377.5	449.1	590.7
(2) Bulk Materials	208.7	315.4	340.9
(3) Services	1,041.7	790.6	1,153.2
(4) Eng./Proc/Constr/Install	269.7	251.0	260.0
<b>TOTAL</b>	<b>£1,897.6</b>	<b>£1,806.1</b>	<b>£2,344.8</b>

The information presented in Figure 1 illustrates the sectoral breakdown of direct exports into the oil and gas sector.

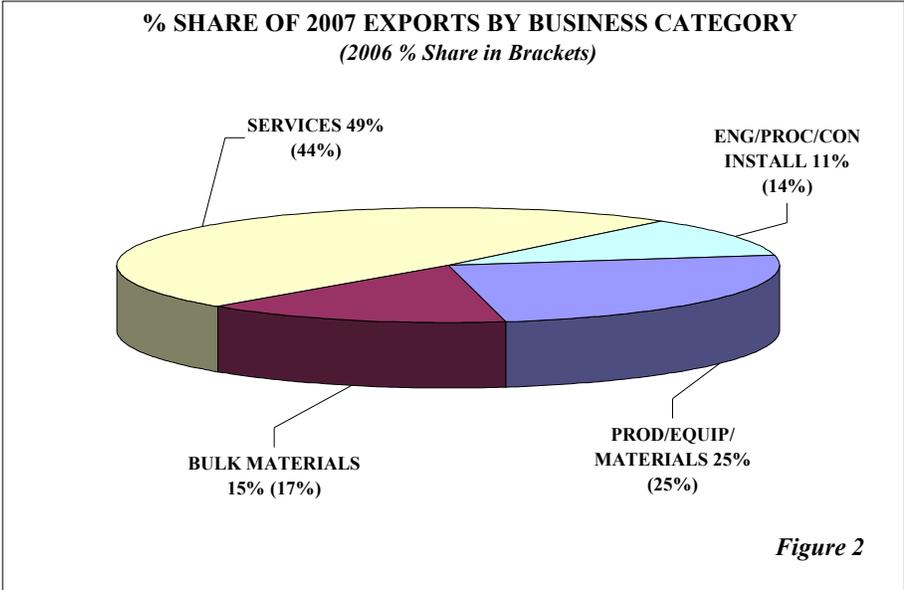


The picture is consistent in sectoral terms with an increase from all of the four industry categories. The Services category however has largely driven the rise in overall exports, with sales up from £791m in 2006 to £1,153m in 2007, representing a huge increase of 45.7% over the period. The Product/Equipment/Materials category has grown by 31.6% to reach £591m in direct exports; Bulk Materials are up by 8.3% to £341m and the Engineering/Procurement sector shows a more modest 3.6% increase to reach a direct export value of £260m in 2007.

**International  
Activity in the  
Service/Supply  
Base**

Figure 2 illustrates the proportion of direct export sales accounted for by the four industry categories. The value of sales from the Service sector continued to account for the greatest proportion of direct exports from the oil and gas supply chain. Its strong growth over the 2007 period further strengthened its influence representing just under half of total direct exports or 49% to be exact. Although in 2005, Services accounted for a 55% share.

Bulk Materials and Engineering/Procurement show a small decline in total share whilst the remaining sector, Products/Equipment/Materials, maintains its share of the total at 25%.



**Figure 2**

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**International  
Activity in the  
Service/Supply  
Base**

**(ii) Overseas Subsidiary Values**

This section looks at activity levels and international sales generated via overseas owned subsidiaries which although they may operate in a largely autonomous fashion ultimately report back to a Scottish based headquarters. The results of the research are presented in Table 2.

**Table 2. Overseas Subsidiary Sales 2005 - 2007 (£m current prices)**

	2005	2006	2007
<b><u>BUSINESS CATEGORY</u></b>			
(1) Prod/Equip/Materials	168.5	193.5	227.7
(2) Bulk Materials	11.8	11.3	7.5
(3) Services	1,675.7	2,753.6	3,106.5
(4) Eng./Proc/Constr/Install	0.0	0.0	8.1
<b>TOTAL</b>	<b>£1,856.0</b>	<b>£2,958.4</b>	<b>£3,349.8</b>

The 2006 survey results witnessed a substantial 59% rise in the level of sales derived via overseas subsidiary operations and for the first time put the sales level significantly ahead of that derived from direct export activity. This latest set of results also record strong growth in subsidiary sales albeit not quite as substantial as that reported for 2006. In total oil and gas terms overseas subsidiary revenues have risen from £2,958.4m to £3,349.8m in 2007 which equates to a 13.2% increase. Hence oil and gas revenues generated via subsidiaries are just over £1 billion higher in 2007 than the level of sales derived via direct exports - £3,349.8m compared with £2,344.8m.

Similar to direct exports, the largest share of activity was accounted for by the Service sector. However, in relation to subsidiary sales the impact of the Service sector was even greater and the £3,106.5m of sales which the sector represents accounted for 92.7% of total oil and gas sales from overseas subsidiaries, a proportion little changed from the 93.1% level of 2006. Of the other industry categories substantial activity was only noted in the Product/Equipment/Materials sector, where £227.7m of sales was measured for 2007. The other two industry categories recorded modest revenues of £7.5m for Bulk Materials and £8.1m for Engineering/Procurement.

Looking at the dominant Services sector the analysis reveals that a very wide range of businesses have set up in other countries, providing expertise in such fields as catering, drilling, access solutions, logistics/transport and of course in engineering and design. Within the Product/Equipment/Materials industries there are subsidiaries established supplying industrial lighting equipment, drill pipe, cranes and underwater survey equipment.

While many opportunities remain for direct export of goods and services to overseas oil and gas provinces there are certain markets where companies operate that a physical presence is required and this is usually achieved either via the establishment of a stand alone business or via the acquisition route. Often having such a presence may be a pre-requisite for being allowed to do business in a particular geographic market and the emphasis on local content and labour is a trend that is likely to continue. Where such an overseas local operation is established these are often supported by senior management from the company's Scottish headquarters.

**International Activity in the Service/Supply Base**

**(iii) Total International Activity**

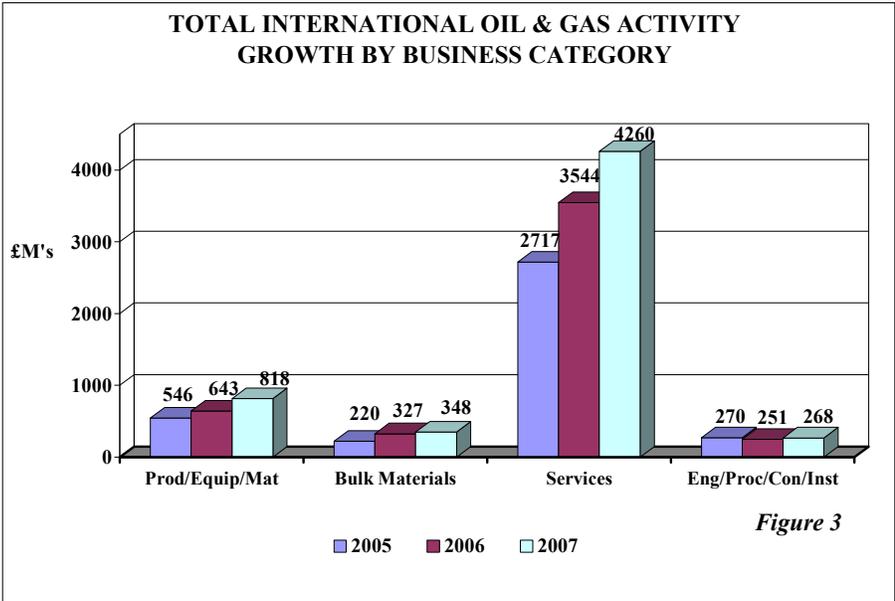
Summarising the previous two sections, this element of the report combines both categories of international activity and presents the total level of internationally derived sales from the Scottish oil and gas industry. The results of the research are presented in Table 3.

**Table 3. Total International Sales 2005- 2007 (£m current prices)**

	2005	2006	2007
<b>BUSINESS CATEGORY</b>			
(1) Prod/Equip/Materials	546.0	642.6	818.4
(2) Bulk Materials	220.5	326.7	348.4
(3) Services	2,717.4	3,544.2	4,259.7
(4) Eng./Proc/Constr/Install	269.7	251.0	268.1
<b>TOTAL</b>	<b>£3,753.6</b>	<b>£4,764.5</b>	<b>£5,694.6</b>

Total international sales to oil and gas customers in 2007 was £5,694.6m, which equates to a 19.5% rise compared with the 2006 figure of £4,764.5m. Albeit marginally lower than the level of the 2006 increase, which was measured at 26.9% the figures are nonetheless significant and seem to show a sustained return to the substantial double digit percentage growth levels shown in 2002 and 2003. Growth in 2005 and 2004 had been 2.7% and 7.7% respectively, whereas in 2003 and 2002 it was 25% and 44%.

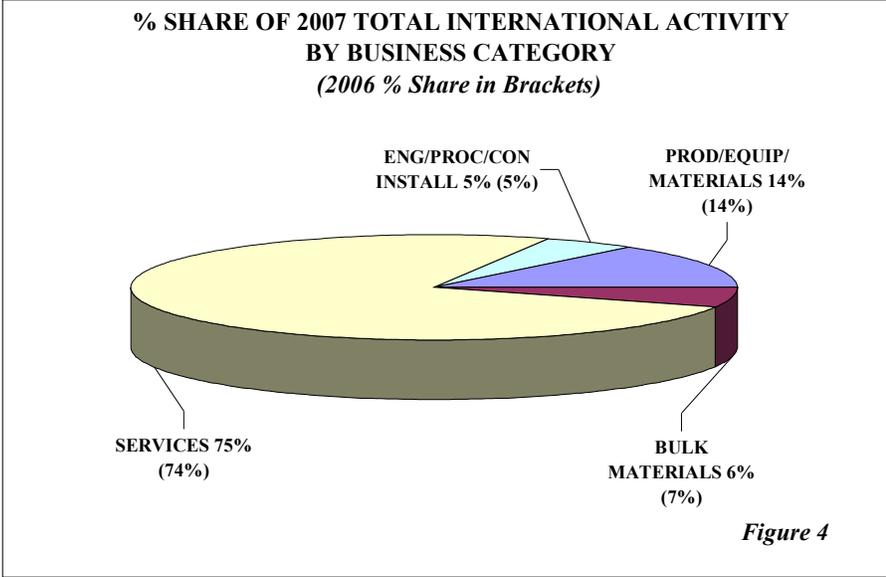
Figure 3 clearly shows the continued dominance of international sales of Services but also shows a strong increase in sales from the Product/Equipment/Materials industry category and some modest growth from the Bulk Materials and Engineering/Procurement business categories over this period.



**International  
Activity in the  
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Figure 4 clearly illustrates the major contribution from the Services category, with its percentage sales rising from 74% in 2006 to 75% in 2007. The Engineering/Procurement category and Product/Equipment/Materials share of total revenues both remain unaltered at 5% and 14% respectively, with Bulk Materials reduced slightly to a 6% share as opposed to 7% in 2006.

While there has been fluctuation in these percentage shares over the years the general make up has been broadly similar with Services typically accounting for between two thirds and three quarters of all international sales for Scotland’s oil and gas supply chain.



The results from this 2007 survey represent a very positive performance from Scotland’s oil and gas supply chain in all aspects of their business. In 2006 the results showed very strong growth in performance from overseas subsidiary operations, but a small decline in revenues derived via direct export activity. This latest set of statistics records strong growth both in direct export sales and subsidiary sales with percentage rises of 29.8% and 13.2% respectively.

In some respects given the continued high oil price (average \$65/bbl Brent Crude for 2006 versus \$72/bbl for 2007) this should not be surprising. One of the ongoing concerns expressed in last year’s report was whether the continued shortage of key skills would be a constraint and impact the industry’s ability to fully capitalise on projects and investment opportunities facilitated by the buoyant oil price. Clearly in 2007, despite such potential constraints, the industry has successfully been able to grow revenues and take advantage of the many opportunities that exist. Anecdotal evidence suggests that activity levels in 2008 have remained very high and despite the late 2008 dip in the oil price it seems probable that the Scottish supply chain will have another successful year. The skills challenge though will not go away and the considerable efforts that have been brought to bear on this issue over the last couple of years by the industry need to be maintained to nurture the talent for the future.

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## **Market Analysis of International Activity in the Service/Supply Base**

In addition to measuring the level of international sales, a further rationale for undertaking the research was to accurately gauge what overseas markets were principal targets for international activity. This has enabled trends to be monitored which assist in the targeting of export assistance and other measures aimed at encouraging the further growth of overseas sales.

In responding to the survey, companies were asked to give details of their sales in overseas markets and to indicate whether the sales revenue was generated by direct export activity or via an overseas subsidiary. The data presented is for 2007 only and covers sales to oil and gas end user customers.

### **Geographic Analysis**

Initially the responses are broken down at a broad geographic level to give an indication of the principal market regions in which activity is concentrated. Table 4 examines the level of total international sales activity on a geographic region basis and breaks this down into direct sales and overseas subsidiary sales.

**Table 4. Destination of International Sales by Geographic Region in 2007  
(£m Current Prices)**

	Direct Export	Overseas Subsidiary	Total International
North America	146	1,601	1,747
Africa	592	254	846
FSU and Eastern Europe	351	365	716
European Union (EU)	243	130	373
Western Europe (excl. EU)	196	158	354
Middle East	191	119	310
Latin America	27	206	233
Australasia	23	174	197
Asia Pacific	72	94	166
Unallocated	504	248	752
<b>TOTAL</b>	<b>£2,344.8m</b>	<b>£3,349.8m</b>	<b>£5,694.6m</b>

NB See Appendix A on page 21 for more details of geographic region definitions.

Table 4 clearly illustrates how important the North American market is in terms of total international sales. The 2007 value of £1,747m, records a substantial increase of 30.9% compared to the 2006 level of £1,334m. The 2006 figure saw sales into the North American market reach the £1 billion level for the first time and 2007 has witnessed further very strong growth. The key driver for this has been the rise in revenues generated by North American subsidiaries. In addition, although dwarfed by subsidiary sales activity there was a small rise in direct exports to North American markets, increasing from £138m in 2006 to £146m in 2007.

All of this clearly reflects the success gained by the Scottish supply chain in key oil and gas provinces such as the Gulf of Mexico, Newfoundland and in the Canadian oil sands business. That it is driven by subsidiaries is not surprising as the North American market is a first port of call in terms of international expansion with common language and business practices making the region less difficult to penetrate and establish a successful business model. The scale of the presence of the Scottish supply chain in this region is also such that it makes it easier for new entrants to gain the knowledge, understanding, contacts and confidence they need to establish a North American presence and build a business in the region. In effect there is now a critical mass in the area and news of “bolt on” acquisitions by major Scottish companies is common-place.

**Market Analysis of International Activity in the Service/Supply Base**

The relative share of total international sales by the differing geographic regions is shown in Figure 5.

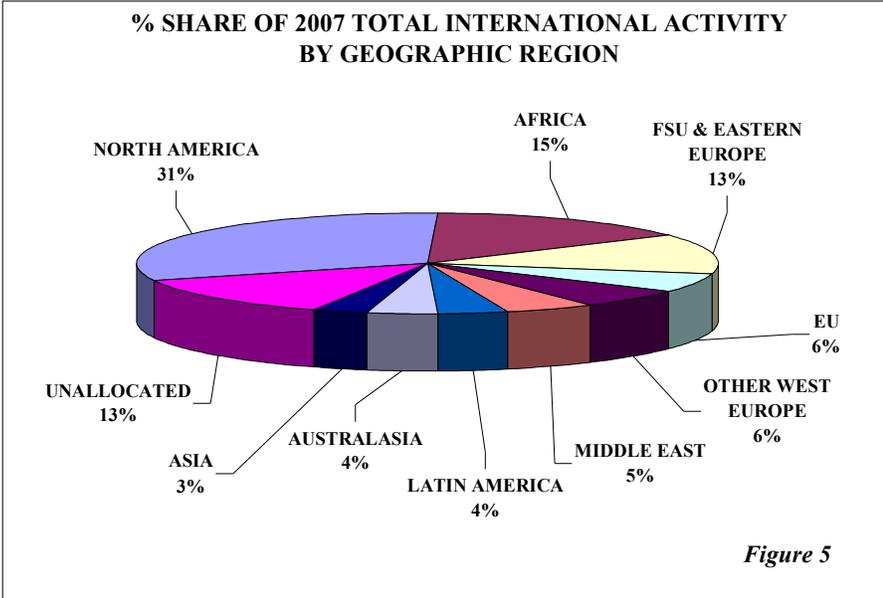


Figure 5

The positive performance by Scottish-based companies in North America in 2007 reflects a strong period of growth in these markets and accounts for an ever increasing share of total international sales. A 24% share in 2004 rose to 25% in 2005, to 28% in 2006 and for 2007 increased again to reflect a 31% share.

For the past few years Africa has been the second largest market for our exporters after North America. Its position in this regard was strengthened by the 2007 results which indicate that it accounts for a 15% share of total sales compared with 11% in 2006, although it should be noted that in 2005 it also accounted for a 15% share. However, sales into the African markets substantially increased in 2007 and currently stand at their highest ever levels. The results in Table 4 show that total oil and gas international sales into Africa were valued at £846m in 2007. This compares with £532m in 2006 and £567m in 2005. Unlike in North America where the increase was driven by activity from overseas subsidiary operation, the principal source of sales growth into Africa was direct exports. Subsidiary sales into Africa have actually decreased marginally from £274m in 2006 to £254m in 2007. In contrast, revenues from direct exports were valued at £592m compared with £258m in the 2006 period. The Scottish supply chain is less inclined to establish a major physical presence in a number of the key African markets due to the security issues associated with working in the oil and gas sector in the region. As a result many of the major projects are managed and controlled from a Scottish base rather than via an established subsidiary business.

The other key geographic region of growth in recent years has been in the Former Soviet Union (FSU) states and Eastern Europe, with strong activity levels recorded in Russia and the Caspian area in particular. The latest figures show a continuation of this trend and total international sales into FSU and Eastern Europe were valued at £716m in 2007 compared to £478m in 2006, £263m in 2005 and £215m in 2004 – representing a more than trebling of activity levels in this region over the past three years. In 2007 activity levels were fairly evenly split between direct exports and subsidiary sales, although most of the 2007 growth was derived via a sharp rise in direct exports into the region. The region now accounts for a 13% share of total international sales and has a well established series of linkages into the Scottish supply chain. Assuming the correct global market conditions, it is clearly one of the key oil regions which will drive further growth in Scottish exports.

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Base**

Elsewhere Table 4 shows that sales into the European Union and other Western European markets achieved reasonable growth levels in 2007. Sales to the EU were up by £90m and to other Western European markets by £77m. The Middle Eastern markets remain important and sales into this region rose above the £300m level for the first time, valued at £310m compared with £234m in 2006. Lastly the activity levels in the Australasia and Asia Pacific regions remained relatively flat during the period with modest increases of £5m and £9m recorded.

**Country Analysis**

Table 5 provides a more detailed analysis of the country markets in which the Scottish oil and gas service/supply base is trading. These figures again relate solely to sales from the industry to oil and gas end user customers.

**Table 5. Destination of International Sales by Country Market in 2007  
(£m Current Prices)**

	Direct Export	Overseas Subsidiary	Total International
(1) United States	136	1,238	1,374
(2) Canada	9	364	373
(3) Norway	193	158	351
(4) Russia	165	176	341
(5) Azerbaijan	163	163	326
(6) Angola	301	11	312
(7) Australia	22	174	196
(8) Nigeria	120	36	156
(9) Netherlands	100	52	152
(10) United Arab Emirates	124	14	138
(11) Germany	81	47	128
(12) Equatorial Guinea	30	82	112
(13) South Africa	64	2	66
(14) Oman	5	59	64
(15) Venezuela	3	55	58
(16) Saudi Arabia	13	40	53
(17) Trinidad & Tobago	6	47	53
(18) Libya	11	36	47
(19) Kazakhstan	19	26	45
(20) Argentina	2	41	43
(21) Colombia	0	42	42
(22) Chad	0	41	41
(23) Malaysia	24	15	39
(24) Egypt	29	9	38
(25) China	5	24	29
(26) Singapore	13	16	29
(27) Denmark	24	2	26
(28) Algeria	14	11	25
(29) France	19	3	22
(30) Qatar	16	5	21
OTHER NAMED MARKETS	129	112	241
UNSPECIFIED MARKETS	504	248	752
<b>TOTAL</b>	<b>£2,344.8m</b>	<b>£3,349.8m</b>	<b>£5,694.6m</b>

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## *Market Analysis of International Activity in the Service/Supply Base*

The geographic figures in Table 4 reported an almost 31% rise in sales into the North American markets. Table 5 again shows the United States to be the overall top market for Scotland's oil and gas supply chain, with activity being heavily dominated by sales from subsidiary companies. The United States was a more significant market in sales value terms than Canada but these latest statistics show stronger growth into Canada than the USA in the period since the last survey. Total international sales into the USA rose from £1,222m in 2006 to £1,374m in 2007, equating to a 12.4% increase. Sales into Canada grew more than three fold from a level of £111m in 2006 to £373m in 2007, a 236% rise. Significantly Canada became the second top export market for the Scottish oil and gas supply chain in 2007. One of the principal reasons for this increased level of activity in Canada was the successful involvement of key Scottish suppliers in a number of oil sands projects. Oil Sands are large deposits of bitumen or extremely heavy crude oil, located in north-eastern Alberta, Canada. The Athabasca deposit is the largest reservoir of crude bitumen in the world and the largest of three major oil sands deposits in Alberta, along with the nearby Peace River and Cold Lake deposits. Together, these oil sand deposits contain about 1.7 trillion barrels of bitumen in-place, comparable in magnitude to the world's total proven reserves of conventional petroleum. With modern non-conventional oil production technology, at least 10% of these deposits, or about 170 billion barrels, were considered to be economically recoverable at 2006 prices, making Canada's total oil reserves the second largest in the world after Saudi Arabia. Whilst difficult to extract and, like all major projects, oil price sensitive, there are clearly major ongoing opportunities for more of the Scottish supply chain to target opportunities in this particular region.

One of the other major growth regions was Africa and in particular the key West African markets of Angola, Nigeria and Equatorial Guinea. Taken together these three markets accounted for almost 70% of Scottish international sales into the African market. During 2007 there was growth in sales recorded into all of these markets, with sales into Angola showing the strongest increase from £135m in 2006 to £312m. The impact of security concerns on trade with Nigeria was speculated upon in last year's report, but these latest figures suggest that significant activity levels by Scottish companies was ongoing with sales almost doubled to Nigeria, rising from £79m to £156m in 2007. Sales into Equatorial Guinea also increased from £83m in 2006 to £112m in 2007. Although less significant, revenue growth was also recorded into South Africa, Libya and Algeria over the period.

Despite being displaced by Canada, Norway remains a major market for Scottish companies and one that is easily accessible and serviceable from the domestic market. Language barriers, albeit thanks to the Norwegians, are also not an issue and it has been an important source of revenue for many years. In addition, there is much cross border collaboration on major projects that straddle or are close to the North Sea boundary line between Scotland and Norway. It would appear that such collaboration enables Scottish companies to capture a greater range of opportunities in the Norwegian market than they have in the past. The value of total international sales recorded into Norway in 2007 was £351m, an increase of £75m since 2006 and a figure which represents a record for revenues generated from this market. Activity levels were split fairly evenly between direct exports and subsidiary company sales.

Examining the other European or European Union markets then the two most significant were the Netherlands and Germany. Sales into the Netherlands showed modest growth, up from £132m in 2006 to £152m in 2007; sales into Germany doubled during the period with revenues rising from £62m to £128m in 2007. Elsewhere, sales into Denmark remained static at £26m and exports to France of £22m were recorded.

The third major geographic region for Scottish exports was the FSU and Eastern Europe. In reality two markets dominated, namely Russia and Azerbaijan. Direct and subsidiary exports to Russia grew from £269m in 2006 to £341m in 2007 representing the fourth top total market for the Scottish supply chain. Closely followed in fifth place by Azerbaijan, Scottish exports to this market grew substantially, almost doubling from £175m in 2006 to £326m in 2007. Both markets reflected an even split between international business conducted direct from Scotland and through subsidiary operations. The other major market

**Market Analysis of International Activity in the Service/Supply Base**

in Eastern Europe was Kazakhstan, although to date it has been considerably less lucrative to Scotland's supply chain than Russia or Azerbaijan. Nonetheless it is showing signs of gaining in importance and exports to the market were valued at £45m in 2007, compared with £32m in 2006 and £3m in 2005.

Within the Middle East markets the main growth was seen in sales to the United Arab Emirates (UAE) and Saudi Arabia. Revenues from sales into the UAE reached £138m, up from £105m in 2006 and into Saudi Arabia they reached £53m compared with a 2006 level of £20m. Exports to Oman decreased marginally and in contrast there was an increase to Qatar.

Elsewhere changes in sales tended to be modest. There were small increases recorded to Trinidad & Tobago, Argentina, Australia and Colombia and small declines to Venezuela and Brazil.

Figures 6-8 graphically illustrate the key markets for Scottish based oil and gas supply/service companies.

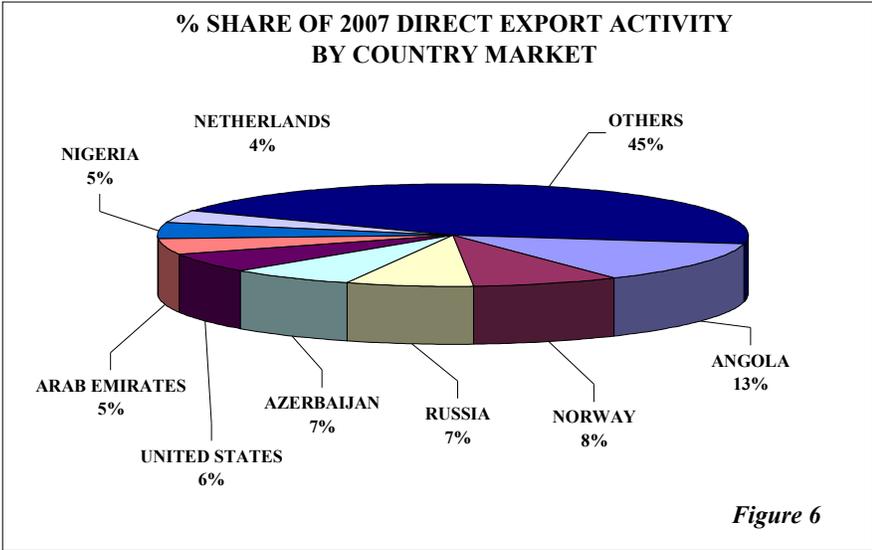
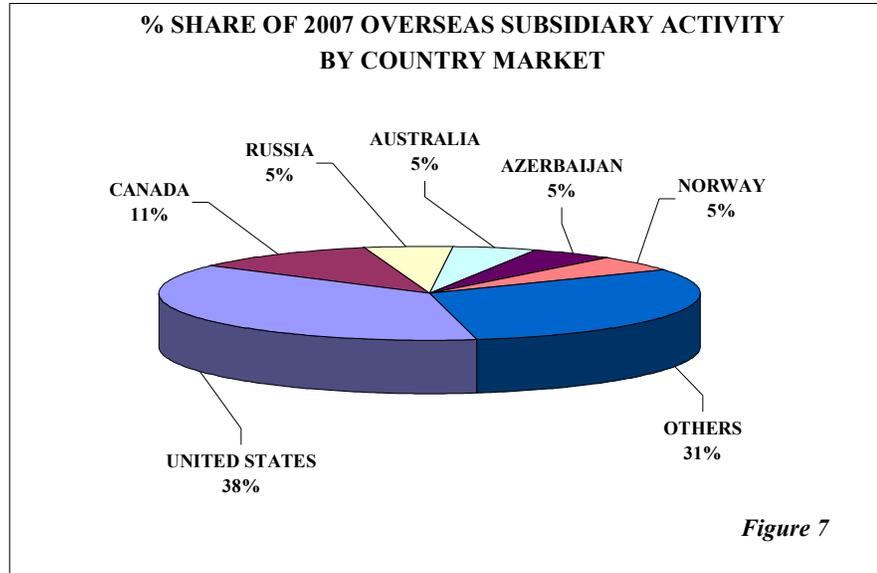


Figure 6

From Figure 6 it can be seen that with a 13% share of the total, Angola was the most significant market in terms of the value of direct exports, followed by Norway and Russia. Whereas in 2006 direct exports into Angola were only valued at £68m, the corresponding figure for 2007 was £301m, making it by some distance the top direct export market. In 2007 the direct export figures for Norway and Russia were £193m and £165m respectively. Russia and Azerbaijan both increased their share of direct exports from 5% and 2% in 2006 to 6% and 6% in 2007, reflecting the fact that the majority of the increase in total international sales to both of these markets over the past year has been due to a sharp rise in direct exports rather than overseas subsidiary growth.

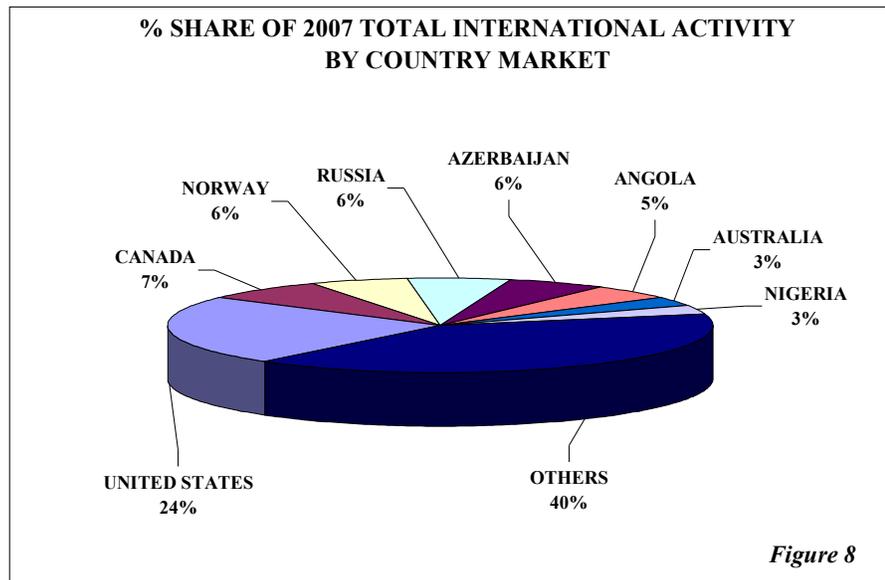
**Market Analysis of International Activity in the Service/Supply Base**

Figure 7 shows the dominance of the United States as a market for sales via overseas subsidiaries and its share in 2007 was 38%, up marginally from 37% in 2006. The change here was due to the increasing activity in Canada which accounts for 11% of subsidiary sales in 2007 compared to only 3% in 2006.



*Figure 7*

The market distribution for the combined total international sales is shown in Figure 8. The United States takes a 24% share compared with 26% in 2006. Canada accounts for 7% compared to 2% in 2006 and the share accounted for by Norway and Russia remains unchanged at 6%.



*Figure 8*

The 40% figure for “Others” indicates there was a diverse range of country markets to which international activity was recorded but on an individual country basis they did not make an impact in terms of having a high percentage share of the total. As is the case every year, the survey registers an extremely wide range of sales activity across the globe. This latest research recorded sales activity in 103 different markets across the world, the

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**Market Analysis of  
International  
Activity in the  
Service/Supply  
Base**

highest number of different destinations recorded in the history of the research. Sales activity via subsidiary operations was noted in 54 different country markets, just two below last year's record level of 56. This spread of activity reflects the global nature of the oil and gas industry but is also powerful recognition of the increasing international capability of the world class oil and gas supply chain which has been built in Scotland over the last 30-40 years.

**Small and Large  
Exporters**

The statistics in Table 6 were derived by calculating the proportion of sales accounted for by SMEs (i.e. those with up to 249 employees) and large companies (250 plus employees). This enables the relative contributions of small and large companies to be assessed.

**Table 6. Relative Contributions of SME and Large Companies - 2007**

	SME Company Share (%)	Large Company Share (%)
Direct Exports	25	75
Subsidiary	4	96
Total International Sales	13	87

The 2007 breakdown of the results for SMEs and Large Companies show a modest rise, compared to 2006 data, in the proportion of total international sales being accounted for by Large Companies.

Applying the above percentage figures to the original data in Tables 1-3 the performance in value terms for both the SME and Large Company categories was estimated. For SMEs, direct exports grew to £586.2m in 2007 compared with £560m in 2006, a 4.7% rise. Sales via subsidiaries from SMEs declined from £148m in 2006 to £134m in 2007. For Large Companies, direct exports increased 41.1% from £1,246.2m in 2006 to £1,758.6m in 2007. Subsidiary sales via Large Companies also rose, this time by 14.4% from £2,810.5m in 2006 to now stand at £3,215.8m in 2007. Hence in overall sales both the Large Company and SME category witnessed a growth in oil and gas performance.

**United Kingdom  
Activity in the  
Service/Supply  
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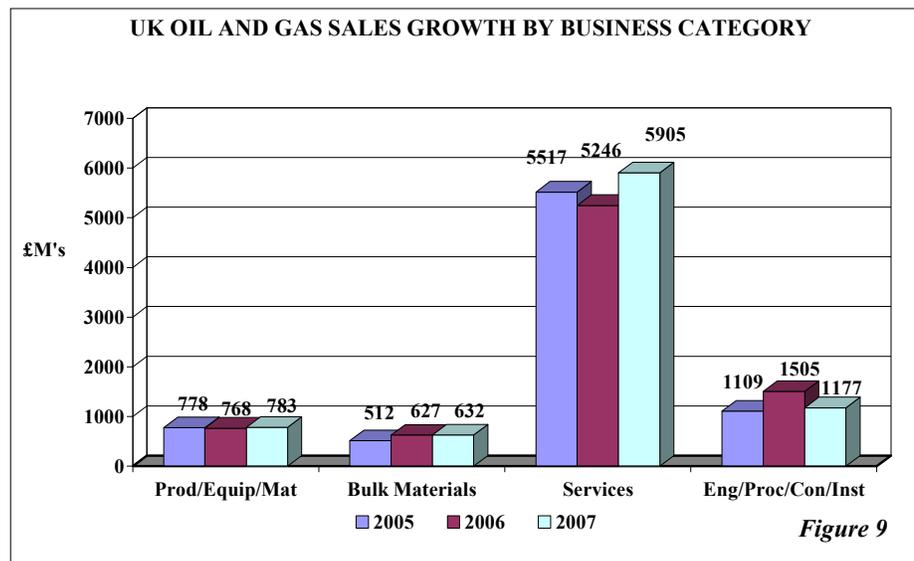
**Domestic Sales**

Although not a core part of the survey, which principally was designed to measure international sales activity, respondents were asked to indicate the value of their domestic sales i.e. sales within the United Kingdom marketplace. A breakdown of these results in Table 7 and Figure 9 illustrate the changes within the four main business categories as defined below:

Business Category 1	Product/Equipment/Materials
Business Category 2	Bulk Materials
Business Category 3	Services
Business Category 4	Engineering/Procurement/Construction/Installation

Once again businesses were asked to indicate their total domestic sales but then also to define the proportion of these which were sold to end user customers in the oil and gas industries. It is these latter estimates which are focused on.

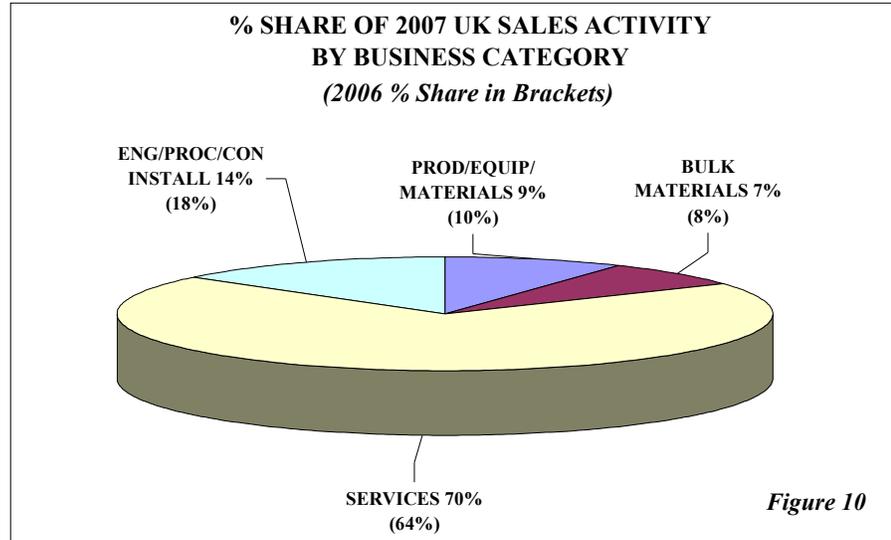
	2005	2006	2007
<b><u>BUSINESS CATEGORY</u></b>			
(1) Prod/Equip/Materials	777.7	767.6	783.2
(2) Bulk Materials	512.4	627.5	631.9
(3) Services	5,517.1	5,246.4	5,905.3
(4) Eng./Proc/Constr/Install	1,109.3	1,505.1	1,176.8
<b>TOTAL</b>	<b>£7,916.5</b>	<b>£8,146.6</b>	<b>£8,497.2</b>



These survey figures represent a period of further steady growth in sales into the UKCS market, although it continues the trend of slower growth than for international activity. Sales have risen from £8,146.6m in 2006 to £8,497.2m in 2007, an increase of 4.3% over the period. The international growth in the same period was 19.5%, although of course it must be remembered that the actual level of domestic sales remains higher than international, £8.5 billion compared with £5.7 billion.

**United Kingdom  
Activity in the  
Service/Supply  
Base**

Similar to international activity, the main industry category generating UKCS revenues was Services which has driven the increase in domestic activity. Sales have grown by 12.6% from £5,246.4m in 2006 to £5,905.3m in 2007. The Bulk Materials and Product/Equipment/Material categories have both risen marginally. The Engineering/Procurement sector witnessed a 21.8% decline, with UKCS generated revenues falling from £1,505.1m to £1,176.8m in 2007.



**Figure 10**

The share of UKCS sales accounted for by the four business categories is illustrated in Figure 10. Combined with overall UKCS sales growth, there was a sharp drop in the share taken by the Engineering/Procurement business category, down to 14% from 18%. The growth in revenues generated by the Service sector means it accounted for 70% of all domestic sales in 2007. Marginal share decreases were recorded for Bulk Materials and the Product/Equipment sector.

Despite being a mature basin there is little doubt that the UKCS remains an attractive region to do business. It is characterised by political stability and does not have the security issues prevalent in many other emerging oil and gas provinces. The survey results demonstrate this but so does the ongoing willingness of companies to invest in the region. 2007 saw the highest number (111) of offshore exploration and appraisal wells drilled since 1996 (112). The ongoing interest and potential of the UKCS was further reflected in the summer announcement by the Department for Business Enterprise and Regulatory Reform (BERR) that 193 applications had been made by a total of 131 companies for licenses in the 25th Offshore Licensing Round. This represents the highest number of applications ever made and signifies a 31% increase on the number of applications made in comparison with the 24th Licensing Round. In mid November 2008 the Department of Energy and Climate Change (DECC), which has taken on BERR's responsibilities for licensing, announced a very positive set of results for the 25<sup>th</sup> licensing round, such that 171 new licenses were offered to 100 companies covering 257 blocks of the North Sea. This included successful bids from eight companies new to the North Sea.

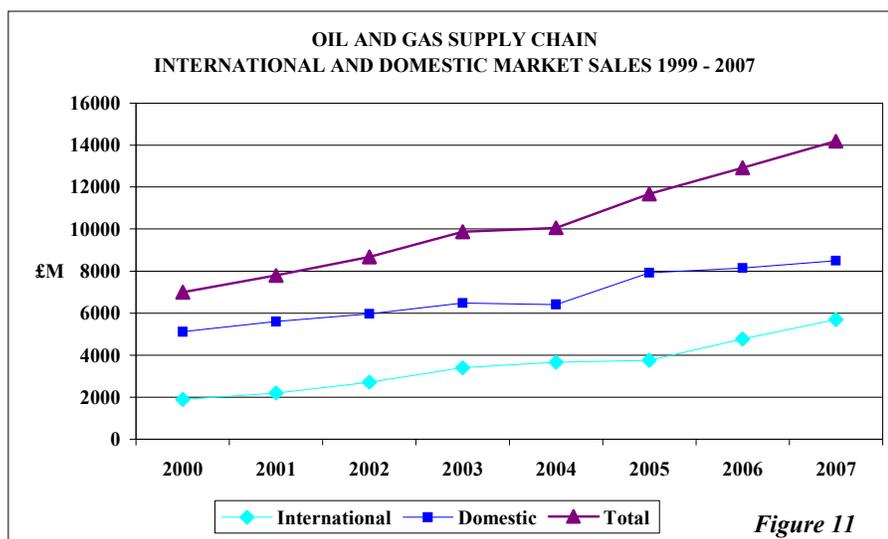
All of the above is extremely positive and gives hope that the UK will maximise the potential of its oil and gas resources. It is generally recognised that the UK still has a possible 25 billion barrels of oil equivalent left to produce. There are of course clouds on the horizon. The credit squeeze which has developed in the second half of 2008 is already beginning to impact on the ability of some of the smaller independent oil companies to raise the capital required to proceed with drilling and field development programmes. The prevailing view at the time of writing is that this much tighter lending environment is likely to be with us for some time to come.

## International and Domestic Market Sales Comparisons

Having carried out the survey for a number of years, it was considered valuable to take a closer look at the relative trends in international and domestic sales since 2000. Whilst the growth in international activity is welcome, is it actually substituting for a decline in the UKCS market or is it part of a wider growth picture?

Table 8 below details the overall Total International sales figures and Domestic sales data between 2000 and 2007, as well as the sum of these. Figure 11 illustrates the growth trend in these same categories again over the seven year period.

	2000	2001	2002	2003	2004	2005	2006	2007
International	1,888	2,199	2,716	3,394	3,654	3,754	4,764	5,695
Domestic	5,107	5,599	5,965	6,481	6,406	7,916	8,147	8,497
<b>Total</b>	<b>6,995</b>	<b>7,798</b>	<b>8,681</b>	<b>9,875</b>	<b>10,060</b>	<b>11,670</b>	<b>12,911</b>	<b>14,192</b>
International % Share	27.0%	28.2%	31.3%	34.4%	36.3%	32.2%	36.8%	40.1%



Once again the data illustrated in Figure 11 presents a very positive set of results. International sales growth has been on a very strong upward trend over 2006 and 2007 after a couple of relatively slow growth years between 2003 and 2005. Domestic sales have continued their pattern of steady modest growth, excepting the period between 2004 and 2005 when there was a sharp surge in revenues generated from the UKCS. The faster paced growth in international sales means that for 2007, a record percentage share of total sales, 40.1%, was once again accounted for by non UKCS activity.

The combination of domestic and international sales has risen by almost £1.3 billion to reach a value of £14.2 billion, an increase in total revenues of 9.9%. This represents more than a doubling in total sales revenues from the Scottish oil and gas supply chain over the seven year period illustrated in Table 8 and Figure 11. With high levels of activity continuing both domestically and internationally in 2008 it seems probable that the 2008 survey will continue this positive pattern of results. However, as the oil price has risen so have costs throughout the supply chain. In addition the pound has weakened considerably against the US dollar in 2008. The combined impact of this is likely to affect profit margins in the industry and with the late 2008/early 2009 oil price considerably reduced from recent peaks it is likely that sustaining recent investment levels will be challenging.

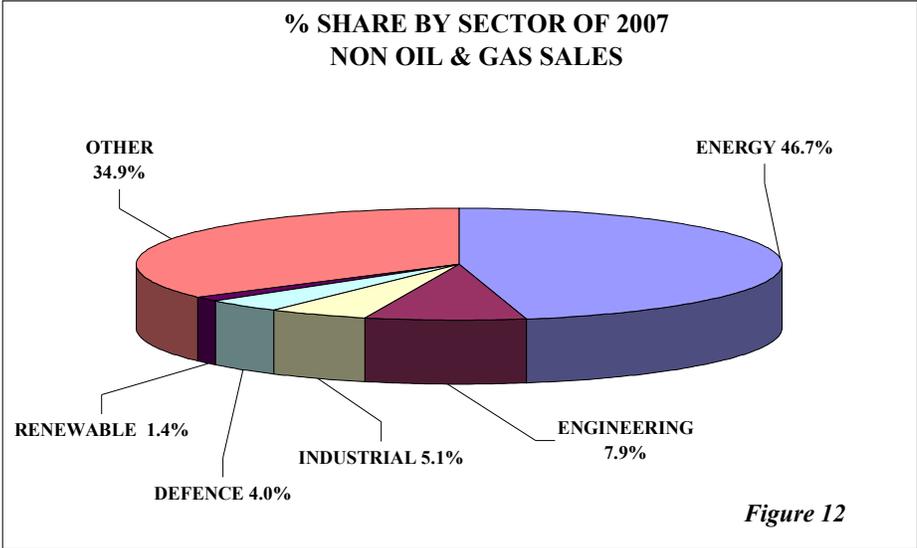
**Sector  
Diversification**

An additional question incorporated in 2002 aimed to focus on the extent to which companies traditionally selling into the oil and gas sector were beginning to diversify their business. The response to this was patchy and although the data generated enough information to give an indication of what other key sectors were being targeted, it was the intention to build on that in subsequent surveys. A more precise definition of the question, with the fundamental aim to record the level of sales into non oil and gas end market sectors has since helped generate an improved response. In addition this survey defined Renewable Energy as a specific option, whereas in previous years it was included under the Non Oil & Gas Energy business sector. Table 9 summarises the information received in 2007.

**Table 9. Scottish Service/Supply Trading with Non Oil & Gas Sectors 2007**

<b>BUSINESS SECTOR</b>	<b>VALUE (£m)</b>
Defence	£32.3m
Renewable Energy	£10.8m
Non Oil & Gas Energy (mainly Power Generation)	£372.1m
Non Oil & Gas Engineering	£63.3m
Industrial Equipment, Materials and Services	£40.9m
Other	£278.0m
<b>TOTAL</b>	<b>£797.4m</b>

Table 9 continues to indicate a substantial level of activity undertaken within non oil and gas sectors with a total of £797.4m recorded during the latest survey, compared with £678.7m in the 2006 survey. The major key sector for this activity by far was Non Oil & Gas Energy, which accounted for 46.7% of the total by value. This sector relates principally to power generation. Respondents specifically identifying the Renewable Energy market as a source of diversified income equated £10.8m by value. It might have been anticipated that this figure would have been higher given the ongoing focus for the oil and gas supply chain to diversify into renewables.



There was a very wide range of other sectors targeted and generating sales for the oil and gas supply chain outwith its core sector. The key ones mentioned were Construction, Public Sector, Chemicals/Petrochemicals, Water and Aerospace.

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## Conclusions

As in previous years the survey targeted companies in Scotland's Oil and Gas Service/Supply chain. The main aim of the study was to continue measuring the degree of international development based on the expertise gained in the UKCS. The survey research also took the opportunity to gauge the value of domestic sales generated by the same Service/Supply base and, in addition, examined the extent of diversification into non oil and gas end user markets. This was the ninth time the research has been carried out and it again augments the data set which has been developed since 1997.

The 2007 results reflect a second strong year of international growth after a period of relative slow down. Total oil and gas international sales were up by 19.5%, valued at £5,694.6m compared with £4,764.5m in 2006 and £3,753.6m in 2005. Unlike the 2006 results which indicated a large difference in growth rates between direct exports and overseas subsidiary sales, the 2007 results show fairly strong rises in both categories. Direct exports were up 29.8%, as were subsidiary sales by 13.2%. With regard to the domestic or UKCS market, growth was also witnessed but at a lower rate with revenues rising by 4.3% to reach £8,497.2m. The combined growth of international and domestic activity in 2007 took the total revenues generated by the Scottish oil and gas supply chain to a new record level of £14.19 billion, a 9.9% rise compared to the £12.91 billion 2006 figure. Geographically the most obvious feature in the 2007 research was the large increase in sales into Canada. In addition, the markets of West Africa continued to grow in significance to Scottish exporters, as have certain key FSU and Eastern European markets such as Russia and Azerbaijan. The global reach of the Scottish supply chain continues to extend ever wider with 103 separate individual country markets supplying a revenue stream in 2007.

So what are the implications of the above results and the outlook for future years? The 2007 results reflect the very strong levels of investment there has been across the globe in finding and extracting oil and gas over the last few years. A generally growing world economy, driven in particular by the rapid growth in India and China, has meant an ever rising demand for energy, all forms of energy. It is however clear writing at the end of 2008 that the world economy is now in a very different place and a period of slow down and in some cases recession is inevitable. This has already had a dramatic impact on reducing the oil price from the \$140/bbl level witnessed in the summer of 2008. Oil companies will inevitably be re-examining their investment plans. In the current very tight lending markets smaller independent oil operators may struggle to raise necessary capital to proceed with projects. Given that past investment decisions have long lead times it may be that the impact in activity levels in 2008 is not too great, but a period of sustained lower oil price and restrictive lending markets would likely lead to activity downturns in 2009 and beyond. Despite this the long term prospects remain positive and oil and gas will remain the world's key energy source for many years to come.

In a UK context it is important that the industry does not lose sight of the need to continue to invest in people and skills. Reactionary cost cutting in this area would be extremely detrimental to the long term reputation and health of the oil and gas industry. In addition, the need to maximize UKCS output is critical as this will generate more investment for exploration, production and help sustain assets in a mature, high cost province which has to compete for mobile international investment.

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## Appendix A

### **Geographic Region Definitions**

<u>Region</u>	<u>Main Markets</u>
North America	United States, Canada
Western Europe (Excl' EU)	Norway, Faeroes, Switzerland
Latin America	Brazil, Mexico, Columbia, Venezuela, Trinidad, Argentina
European Union	Denmark, Netherlands, France, Germany, Italy
FSU and Eastern Europe	Russia, Azerbaijan, Kazakhstan
Middle East	Iran, Qatar, Saudi Arabia, UAE, Oman, Syria
Africa	Egypt, Ivory Coast, Nigeria, Equatorial Guinea, Angola, Libya
Asia Pacific	Singapore, Vietnam, Brunei, China, Indonesia, Malaysia, Thailand
Australasia	Australia, New Zealand

### **Business Category Definitions**

#### *1. Products/Equipment/Materials*

Pumps, drilling equipment, computers, wellhead equipment, ROVs, Instrumentation/Process Control Equipment.

#### *2. Bulk Materials*

Chemicals, Valves, Building Materials, Plastic/Composites

#### *3. Services*

Surveying, Logistics, Certification, Repair/Maintenance, Drilling Services, Diving, Testing/Inspection, Seismic Services.

#### *4. Multidiscipline*

Engineering, Procurement, Construction, Installation, Commissioning. (Platforms, Subsea, Pipelines etc)

## ***Acknowledgements***

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February 2009