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The contribution of mobile phones
to regional economies of the UK

This report is published by mmO2 as part of its continuing commitment to enable a wider understanding of the contribution of mobile telephony to the UK economy.

This report has been produced by cebr, an independent economics and business research consultancy established in 1993 providing forecasts and advice to city institutions, government departments, local authorities and numerous blue chip companies throughout Europe. The contributors to this report are Douglas McWilliams and Louisa Ward.

While every effort has been made to ensure the accuracy of the material in this report, the authors, cebr and mmO2 will not be liable for any loss or damages incurred through the use of this report.

London, September 2004



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Executive summary

This study has been commissioned by mmO2 and prepared by cebr to build on two previous studies - 'The contribution of mobile phones to the UK economy' and 'The changing economic impact of mobile phones' - which looked at the current and future economic impact of the industry at a national level. This study aims to examine the economic impact at a regional level. We systematically analyse existing data and combine this with our own analysis to estimate the industry's contribution to regional employment and GDP.

The key findings of the report are:

Mobile telephony supports jobs across the whole of the UK

Mobile telephony is often seen as creating jobs mainly in Southern England. But in fact we estimate that in addition to the 42,000 jobs supported in the South East, the 27,200 supported in London and the 20,600 supported in the South West, mobile telephony supports a very significant 40,300 jobs in Northern England, 27,200 in the Midlands, 14,600 in Eastern England, 12,000 in Scotland, 6,900 in Wales and 3,100 in Northern Ireland.

The contribution to regional employment ranges from 0.46% to 1.15%

In every region, at least 0.46% of jobs are supported by mobile telephony. The contribution is highest in the South East of England at 1.15%, followed closely by the North East with a contribution of 1.0%.

The contribution to regional GDP varies from 1.01% to 3.23%

In every region the contribution of mobile phones to GDP is at least 1.01%. In the South East the contribution is as high as 3.23%, and the contribution is over 2% in the North East, West Midlands, London and the South West.

Access to mobile telephony is high throughout Great Britain

According to the Expenditure and Food Survey 2002-2003, access to mobile telephony varies relatively little throughout Great Britain, ranging from 63% of households with access to mobile phones in Wales to 75% with access in the South East of England. Access in Northern Ireland is apparently lower at just 50% of households.

Introduction

Objectives and approach

This study was commissioned by mmO2 and prepared by cebr to investigate the contribution of mobile telephony to the regional economies within the UK. The study builds on earlier reports prepared by cebr for mmO2 'The contribution of mobile phones to the UK economy' and 'The changing economic impact of mobile phones' which assessed the economic contribution of mobile phones over the past five years and the likely impact in the future.

The impact of mobile telephony varies across the UK

In this study we present a picture of how the economic impacts which have been identified in previous studies – in terms of GDP and employment - are distributed across the country. The effect on output and employment will vary as a result of differences in population, socio-economic characteristics and industry structure.

We have a narrow definition of mobile telephony...

As in previous studies, mobile telephony is described as:

"The manufacture, operation and distribution of mobile phones and any additional services that are directly facilitated by mobile telecommunications."

...and we exclude activity that would have taken place anyway

Where a service provided through a mobile phone is merely a substitute for the same service that might have been provided through some other route, this impact has been netted out in our calculations.

National results from previous studies

Mobile telephony is a major UK economic sector...

We have previously estimated that the mobile telephone industry contributed £22.0 billion to UK GDP in 2003 . This is just under 2.2% of the UK's total economic output.

...and supports nearly 200,000 jobs in the UK

We also estimate that the mobile telephone sector directly and indirectly supported 197,000 jobs in the UK in 2003 - 0.75% of the total number of jobs.

¹ These calculations were made prior to the release of the latest Ofcom report – The Communications Market 2004, published August 2004

Methodology for regional contribution calculation

We calculate the regional contribution, looking at jobs and productivity

To estimate how these totals split between the UK Government Office regions in England and Scotland, Wales and Northern Ireland we make a detailed analysis of the location of jobs by region and country; look at sectoral productivity and allocate the industry's contribution to regional Gross Value Added (GVA) by taking account of the regional distribution of jobs and of productivity.

The detail of these calculations are set out in the following pages.

Regional employment

Mobile telephony jobs can be allocated to six areas

Our previous studies estimated that a total of 197,000 jobs are supported directly and indirectly by the mobile telephone industry.

This total was produced by carefully investigating the number of jobs in six different categories of employment:

- Mobile phone operators
- Suppliers of goods and services to operators
- Distributors
- Suppliers of value added services
- Jobs involved in capital expenditure – in construction and from capital equipment suppliers
- Suppliers of goods and services to the above other than operators

We analyse jobs on a workplace basis

We consider the distribution of jobs on a workplace basis – that is where the jobs are actually carried out rather than where employees live.

We look in detail at each job type to allocate employment across the UK

To allocate these jobs between each of the UK's regions, we again look at each of the six job types in turn. In doing so, we are able to consider which measures are most appropriate for determining regional job dispersion. The assumptions behind the allocations are explained below.

In operator jobs

The spread of 'in operator' jobs will depend on where the five mobile phone operators base their staff.

We investigated the main locations for these operators in the UK and will allocate the jobs between locations based on three assumptions:

- all operators have a small number of staff spread throughout the country. We estimate that 5% of total 'in operator' employees are distributed throughout the UK according to the distribution of population
- 20% of total 'in operator' employees are located at the main headquarters of each of the mobile phone operators
- the remaining 75% of 'in operator' employees are spread across the operators' other main offices, as identified in table 1

TABLE 1 EMPLOYMENT NUMBERS AND LOCATIONS OF OFFICES FOR OPERATORS

Operators	UK employees ¹	HQ location	Location of other main office ²
Vodafone	10,138	Newbury (South East)	Banbury (West Midlands), Newark (East Midlands), Theale (South East), Trowbridge (South West), Warrington (North East), Birmingham (West Midlands)
mmO2	7,462	Slough (South East)	Leeds (Y&H), Runcorn (North West), Bury (North West)
T-Mobile	4,793	Hatfield (South East)	Warrington (North West), Bristol (South West), Barnsley (Y&H), London, Dearne Valley (Y&H), Doxford (North East), Greenock (Scotland), Merthyr Tydfil (Wales), Solihull (West Midlands)
Orange	11,382	Bristol (South West)	Darlington (North East), North Tyneside (North East), Peterlee (North East), Hertford (South East), London, Leeds (Y&H), Plymouth (South West), Bristol (South West)
3	1,995	Maidenhead (South East)	Maidenhead (South East), Glasgow (Scotland), London, Manchester (North West), Reading (South East), Birmingham (West Midlands)
Virgin	1,393	Trowbridge	Daventry, (East Midlands), London
Total	37,164		

Distribution jobs

We assume that the level of employment within the distribution of mobile phones is linked to each region's spending on mobile phones.

Linking employment in distribution to spending on mobile phones

To analyse the variation of expenditure on mobile phones across the regions, we start with the official Expenditure and Food Survey data on each region's average spending on all phone services. We adjust these figures to take account of the variations in access to mobile phones between the regions.

This enables us to estimate the share of UK expenditure on mobile phones that is accounted for by each region. The details are set out in Table 2. We allocate the jobs within the distribution sector based on the regional shares of UK expenditure on mobile phones.

¹ cebr estimates using phone operators accounts for 2002 and 2003 updated to estimated 2003 levels

² From operating companies' information

³ Formerly known as the Family Expenditure Survey – data available from National Statistics

TABLE 2 REGIONAL ACCESS TO MOBILE PHONES, CONSUMER SPENDING ON ALL PHONE SERVICES AND ON MOBILES AND REGIONAL SHARE OF UK EXPENDITURE ON MOBILE PHONES

	Total spend on all phone services (£ million)	Average household spend on mobile (£ pa)	Access to mobile phones (% all households)	Spend on mobile phones as share of UK total
North East	434.93	552.93	67%	3.7%
North West	1,199.85	534.61	64%	9.6%
Y&H	897.16	586.94	72%	8.1%
East Midlands	760.24	573.15	67%	6.4%
West Midlands	959.09	612.91	70%	8.4%
Eastern	1,136.41	660.81	67%	9.5%
London	1,911.78	843.88	65%	15.5%
South East	1,833.31	785.01	75%	17.2%
South West	943.49	541.05	64%	7.6%
England	10,076.25	651.67	68%	85.9%
Wales	513.50	500.89	63%	4.1%
Scotland	968.14	586.64	67%	8.1%
Northern Ireland	306.28	478.05	50%	1.9%
UK	11,864.16	633.84	67.3%	100.0%

Source: cebr calculations on FES/EFS data

Suppliers of goods and services to operators

To allocate our total UK figure for employment in supplying goods and services to operators we utilise ABI¹ data for regional employment in the whole telecommunications sector and in the 'manufacture of TV/radio transmitters etc' sector. We assume that 80% of jobs are distributed according to the distribution of telecommunications jobs and 20% according to the distribution of employment in the manufacturing of telecommunications equipment.

Suppliers of goods and services to distributors and service providers

We use the same assumptions to allocate employment in supplying goods and services to distributors and service providers as above.

Suppliers of value added services

We allocate employment within suppliers of value added services according to the distribution of existing telecommunications jobs indicated by ABI data.

¹ Annual Business Inquiry – this is the main detailed annual cross sectional official survey of business and workplace-based employment

TABLE 3 TOTAL NUMBER OF EMPLOYEES IN THE TELECOMMUNICATIONS SECTOR

	Total employees in telecommunications
North East	6,000 ¹
North West	24,448
Y & H	16,689
East Midlands	10,382
West Midlands	17,379
Eastern	24,742
London	52,953
South East	45,039
South West	19,459
England	227,591
Wales	6,189
Scotland	18,081
Northern Ireland	3,786

Source: Annual Business Inquiry 2002

From capital expenditure

To allocate employment from capital expenditure we again utilise ABI data for regional employment in the whole telecommunications sector and in the 'manufacture of TV/radio transmitters etc' sector. We assume that 10% of jobs are distributed according to the distribution of telecommunications jobs and 90% according to the distribution of employment in the manufacturing of telecommunications equipment.

The results of our analysis are displayed in Figure 8 – a detailed breakdown of employment by job category and by region follows in Table 9.

Mobile telephony supports many more jobs indirectly

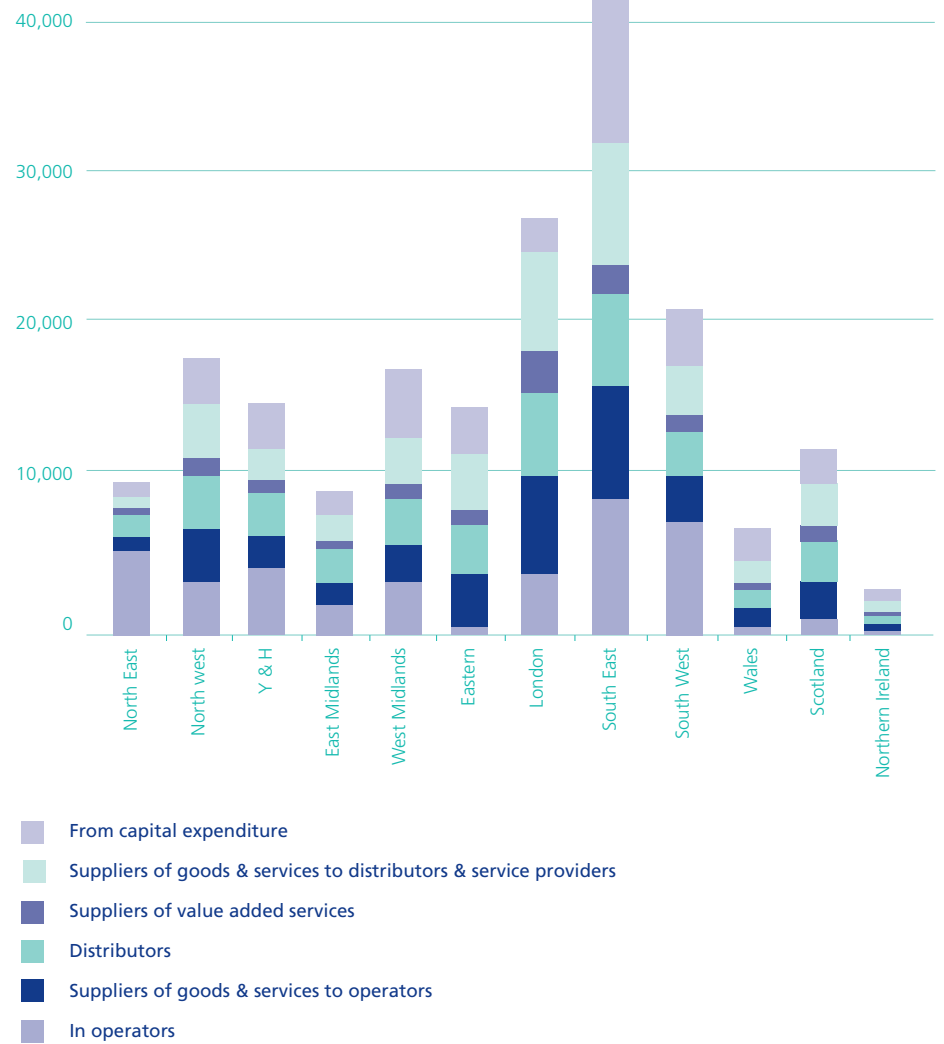
Having looked at the jobs created directly by the mobile telephone industry, we consider the knock-on impact on the rest of the UK economy. This would include those revenues and jobs created in, say, the advertising industry that are directly dependent on mobile phone activities.

In performing this analysis we have drawn on the input-output tables published by government. These tables quantify the interdependency between industries. Our findings do not imply that the identified jobs and revenues would disappear in the absence of the mobile telephone industry. In competitive markets, economic theory suggests that the most remunerative activity will crowd out the marginal activity when supply resources are limited. This implies that, in the absence of a mobile phone industry, revenues and employee jobs would be lower but many of those working in the associated industries would work on other industries and assignments instead.

Our findings are intended to give an indication of the current economic activity associated with the mobile industry in each region.

¹ The ABI figure for the North East was 16,500. We have adjusted this figure to bring the employment contribution from the mobile phone industry more in line with other regions, in light of the disproportionately high number of call centres which are located in the region.

FIGURE 1 JOBS SUPPORTED – DIRECTLY AND INDIRECTLY - BY MOBILE TELEPHONY, 2003



Source: cebr

TABLE 4 BREAKDOWN OF JOB TYPES BY REGION, INCLUDING MULTIPLIER EFFECT

Job Category	UK Employment		North East	North West	Y & H	East Midlands	West Midlands	Eastern	London	
	In operators	41,995	HQs other offices Other	10,499 29,397 2,100	0 5,394 89	0 3,433 240	0 4,223 177	0 1,917 149	0 3,551 188	0 117 192
Suppliers of goods & services to operators	36,128		877	3,355	1,981	1,465	2,969	3,392	6,348	
Distributors	35,239		1,285	3,385	2,847	2,245	2,959	3,356	5,478	
Suppliers of value added services	10,680		251	1,021	697	434	726	1,034	2,212	
Suppliers of goods & services to distributors & service providers	39,504		959	3,668	2,166	1,602	3,246	3,709	6,941	
From capital expenditure	33,415		907	2,778	611	1,347	4,405	2,800	2,195	
Total number of jobs	196,961		9,762	17,879	12,702	9,158	18,044	14,601	27,216	

Job Category	UK Employment		South East	south west	England	Wales	Scotland	N Ireland	UK	
	In operators	41,995	HQs other offices Other	10,499 29,397 2,100	5,512 3,375 285	2,887 4,635 176	8,399 30,425 1,757	0 353 103	0 681 179	0 37 60
Suppliers of goods & services to operators	36,128		7,261	2,924	31,759	1,212	2,534	623	36,128	
Distributors	35,239		6,061	2,662	30,279	1,426	2,859	675	35,239	
Suppliers of value added services	10,680		1,882	813	9,508	259	755	158	10,680	
Suppliers of goods & services to distributors & service providers	39,504		7,939	3,197	34,726	1,325	2,771	682	39,504	
From capital expenditure	33,415		9,617	3,267	28,064	2,213	2,276	862	33,415	
Total number of jobs	196,961		41,932	20,560	174,916	6,891	12,056	3,097	196,961	

Source: cebr. Figures may not sum to total for each region, as figures were constrained in calculations

Assessing mobile telephony's contribution to regional employment

Having systematically allocated the jobs across the regions, we are able to look at the extent to which the mobile phone industry contributes to the employment of each region.

Mobile telephony supports jobs across the whole of the UK

In every region, at least 0.46% of jobs are supported by mobile telephony. The contribution is highest in the South East of England at 1.15%, followed closely by the North East with a contribution of 1.0% and the South West at 0.98%. Yorkshire and Humberside and the East Midlands see the smallest contributions to their regional employment levels. The contributions for Wales, Scotland and Northern Ireland are all significantly below that for England.

The contributions are explained by the location of company headquarters and offices, the level of expenditure on mobile phones and the location of the manufacturing employment that contributes to the industry.

It is notable that the North East and West Midlands enjoy high contributions. In the North East this is due to the presence of operator offices and call centres, whilst in the West Midlands it is the result of a relatively high number of jobs in the manufacturing of telecommunications equipment, with several manufacturers locating here.

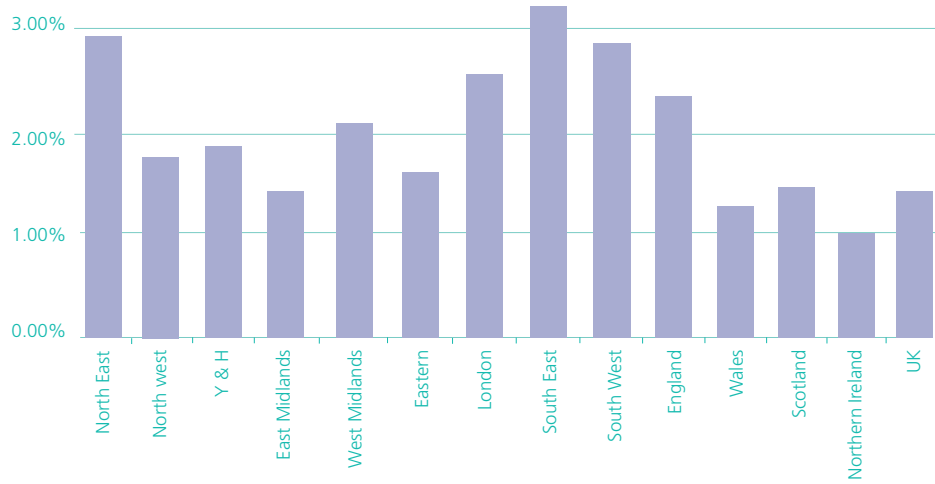
TABLE 5 SUMMARY OF MOBILE PHONE INDUSTRY EMPLOYMENT, 2003

	Mobile phone industry's contribution to regional jobs	Share of UK mobile phone industry's jobs	Total regional employment (thousands)	Mobile phone industry's share of regional employment
North East	9,762	4.96%	974	1.00%
North West	17,879	9.08%	2,887	0.62%
Y&H	12,702	6.45%	2,085	0.61%
East Midlands	9,158	4.65%	1,756	0.52%
West Midlands	18,044	9.16%	2,314	0.78%
Eastern	14,601	7.41%	2,271	0.64%
London	27,216	13.82%	4,015	0.68%
South East	41,932	21.29%	3,656	1.15%
South West	20,560	10.44%	2,099	0.98%
England	174,916	88.81%	22,057	0.79%
Wales	6,891	3.50%	1,091	0.63%
Scotland	12,056	6.12%	2,309	0.52%
Northern Ireland	3,097	1.57%	669	0.46%
UK ¹	196,961	100.00%	26,126	100.00%

Source: cebr and ONS Regional Trends

¹ The figure for employment for the UK is the ABI based figure which is different from the National Accounts based figure used in the national analysis, which includes self employment etc.

FIGURE 2 MOBILE TELEPHONY'S CONTRIBUTION TO REGIONAL EMPLOYMENT



Source: cebr

REGIONAL GDP

Combining employment and productivity analysis to look at output

In order to allocate UK GDP generated by the mobile phone industry across the regions, we combine our figures for employment with estimates of productivity for each job type. The basis of our calculations is the economic identity:

$$\text{output} = \text{employment} \times \text{productivity}$$

UK average output per head for each job type

To develop an estimate of the UK average output per head for each job type, we combine our estimates of total output and total employment in each of the six job types. This enables us to produce figures for the UK average output per employee in each of the six job types identified.

Average output per head for each job type in each region

To adjust for the fact that productivity varies across the regions of the UK we use average GVA per head figures from ONS's latest Regional Trends data. We assume that output per head in each of our six job categories varies across the regions in the same way that the average GVA per head figure varies from the UK average. This provides us with an estimate for the output per head for each of the six job types in each of the regions.

Mobile phone industry's contribution to regional GDP

We are then able to combine this output per head measure with our estimates for employment in each job type in each region, to produce a figure for the total output of the mobile phone industry by region.

Estimating mobile telephony's contribution to regional output

In order to assess the contribution to the output of each region, we need to convert regional GVA data (from ONS's Regional Trends), into 'regional GDP'. We do so by assuming that the relationship between GDP and GVA at the national level holds at the regional level.

A summary of these calculations is provided in Table 6.

The contribution to regional GDP varies from 1.01% to 3.23%

The results show that in every region the contribution of mobile phones to GDP is at least 1.01%. The contribution to GDP is greater in England than in Wales, Scotland or Northern Ireland. The contributions in these regions are lower due to the low proportion of jobs located here. However the important role played by the mobile telephone industry and the above average productivity within the industry means that contribution to GDP remains significant throughout the regions.

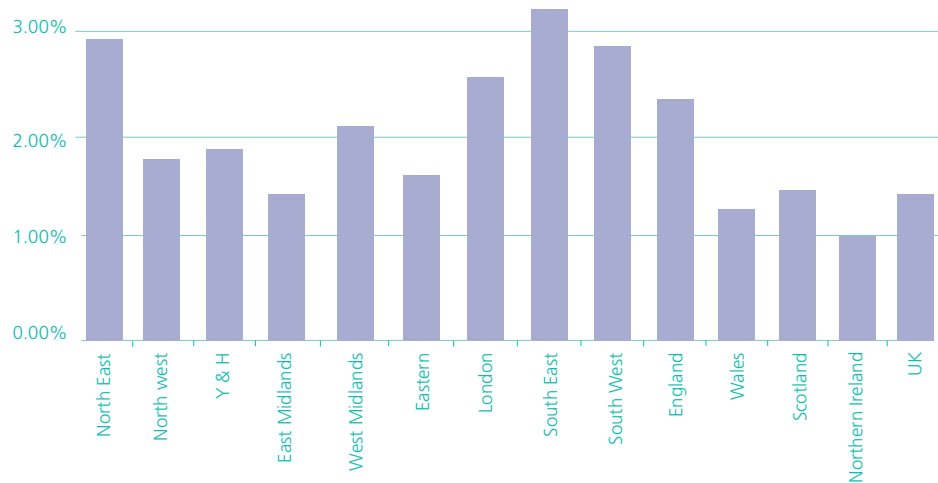
As expected the mobile phone industry accounts for a particularly high % of GDP in the South East (3.23%). This is due to a combination of several factors; the high mobile phone penetration; the location of several operator headquarters; and above average productivity levels in the region (the average contribution per employee to GDP is greater than in all regions other than London, further increasing the gap in the GDP generated). The high concentration of jobs in the North East means that this region benefits from the second highest contribution to regional GDP.

TABLE 6 GDP GENERATED BY THE MOBILE PHONE INDUSTRY IN UK REGIONS, 2003

	Regional GDP (£billion)	Mobile phones' contribution to GDP (£billion)	Mobile phones' contribution to GDP per capital (£)	Mobile phone GDP as share of regional GDP
North East	32.94	0.969	385.53	2.94%
North West	103.97	1.794	264.90	1.73%
Y&H	73.37	1.373	275.49	1.87%
East Midlands	66.00	0.940	222.89	1.42%
West Midlands	81.41	1.682	317.13	2.07%
Eastern	101.62	1.633	301.30	1.61%
London	164.05	4.149	564.14	2.53%
South East	165.05	5.333	663.53	3.23%
South West	77.28	2.201	443.73	2.85%
England	865.80	20.073	404.04	2.32%
Wales	39.20	0.495	169.75	1.26%
Scotland	81.52	1.179	233.18	1.45%
Northern Ireland	22.89	0.231	135.95	1.01%
UK	1009.30	21.978	371.07	2.18%

Source: cebr

FIGURE 3 MOBILE TELEPHONY'S CONTRIBUTION TO REGIONAL GDP



Source: cebr

Regional fact sheets

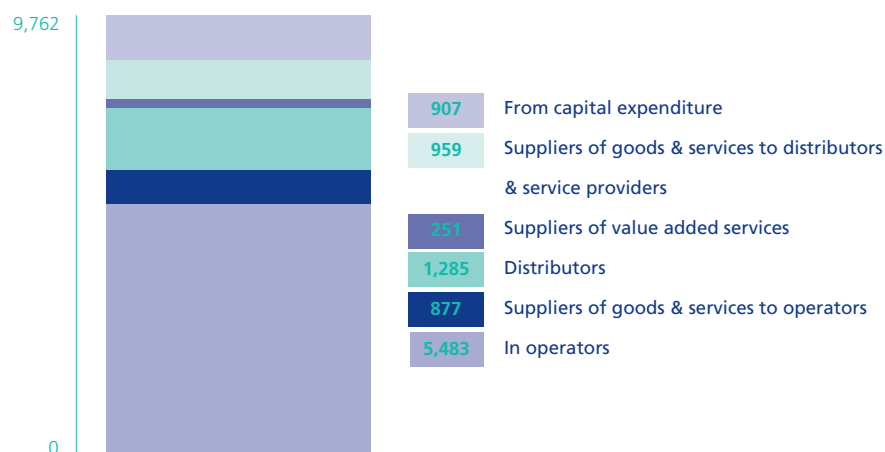
North East

Resident population (2002 figure)	2,513,000
Households (2003)	1,020,000
Employment (April-June 2004)	69.9% of working age population
Unemployment rate (April-June 2004)	5.5% of economically active
Regional GVA (2001 figure)	£27.7 billion
Regional GVA per head (2001 figure)	£11,009

The mobile telephone industry

Access to mobile phones	67% of all households
Contribution to employment	9,762 jobs – 1.00% of region's jobs
Contribution to GDP	£969 million – 2.94% of region's GDP
Spending on mobile phones per household	£552.93 per annum
Contribution to GDP per household	£949.96 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN THE NORTH EAST, NUMBER OF EMPLOYEES, 2003



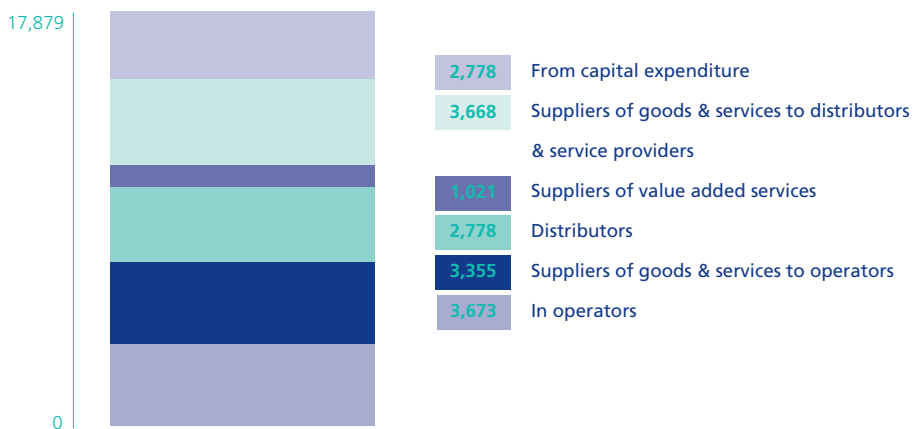
North West

Resident population (2002 figure)	6,771,000
Households (2003)	2,780,000
Employment (April-June 2004)	73.8% of working age population
Unemployment rate (April-June 2004)	4.4% of economically active
Regional GVA (2001 figure)	£87.6 billion
Regional GVA per head (2001 figure)	£12,942

The mobile telephone industry

Access to mobile phones	64% of all households
Contribution to employment	17,879 jobs – 0.62% of region's jobs
Contribution to GDP	£1.8 billion – 1.73% of region's GDP
Spending on mobile phones per household	£534.61 per annum
Contribution to GDP per household	£645.20 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN THE NORTH WEST, NUMBER OF EMPLOYEES, 2003



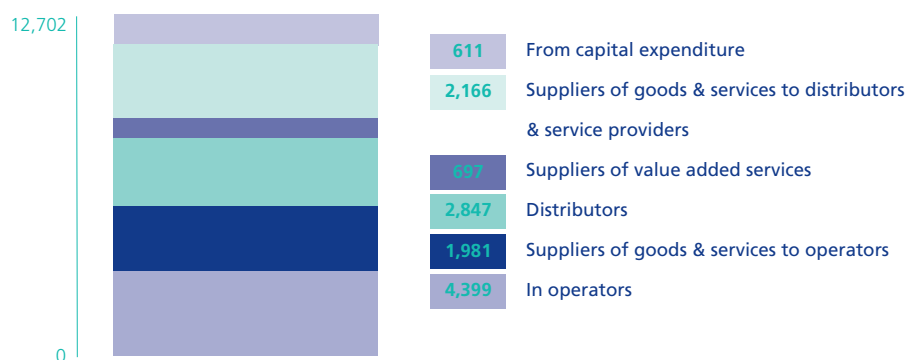
Yorkshire and the Humber

Resident population (2002 figure)	4,983,000
Households (2003)	2,130,000
Employment (April-June 2004)	74.1% of working age population
Unemployment rate (April-June 2004)	4.6% of economically active
Regional GVA (2001 figure)	£61,929,000,000
Regional GVA per head (2001 figure)	£12,459

The mobile telephone industry

Access to mobile phones	72% of all households
Contribution to employment	12,702 jobs – 0.61% of region's jobs
Contribution to GDP	£1.4 billion – 1.87% of region's GDP
Spending on mobile phones per household	£586.94 per annum
Contribution to GDP per household	£644.44 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN YORKSHIRE AND THE HUMBER, NUMBER OF EMPLOYEES, 2003



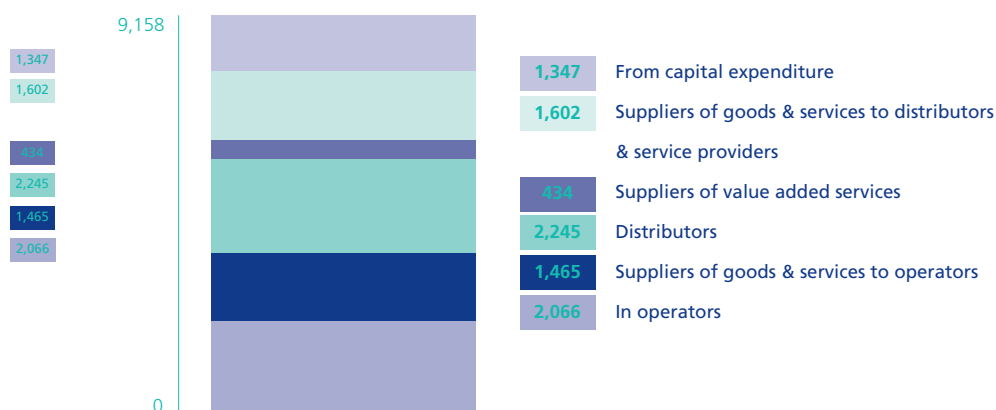
East Midlands

Resident population (2002 figure)	4,216,000
Households (2003)	1,720,000
Employment (April-June 2004)	76.1% of working age population
Unemployment rate (April-June 2004)	4.4% of economically active
Regional GVA (2001 figure)	£55,394,000,000
Regional GVA per head (2001 figure)	£13,243

The mobile telephone industry

Access to mobile phones	67% of all households
Contribution to employment	9,158 jobs – 0.52% of region's jobs
Contribution to GDP	£940 million – 1.42% of region's GDP
Spending on mobile phones per household	£573.15 per annum
Contribution to GDP per household	£546.28 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN THE EAST MIDLANDS, NUMBER OF EMPLOYEES, 2003



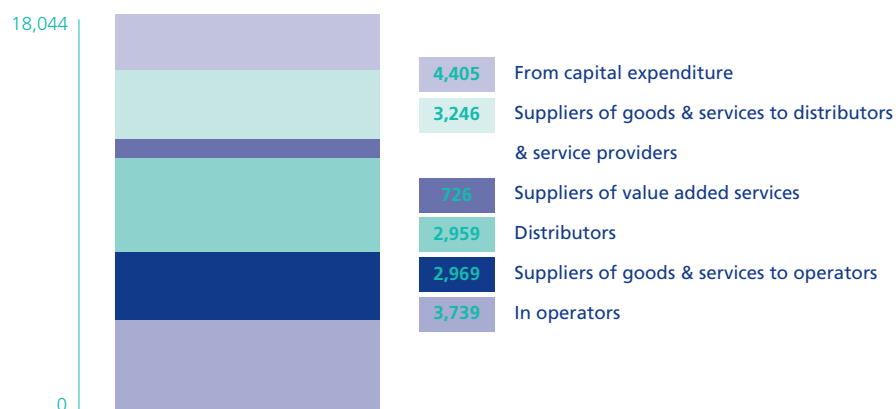
West Midlands

Resident population (2002 figure)	5,304,000
Households (2003)	2,120,000
Employment (April-June 2004)	73.9% of working age population
Unemployment rate (April-June 2004)	5.5% of economically active
Regional GVA (2001 figure)	£68,839,000,000
Regional GVA per head (2001 figure)	£13,031

The mobile telephone industry

Access to mobile phones	70% of all households
Contribution to employment	18,044 jobs – 0.78% of region's jobs
Contribution to GDP	£1.7 billion – 2.07% of region's GDP
Spending on mobile phones per household	£612.91 per annum
Contribution to GDP per household	£793.44 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN THE WEST MIDLANDS, NUMBER OF EMPLOYEES, 2003



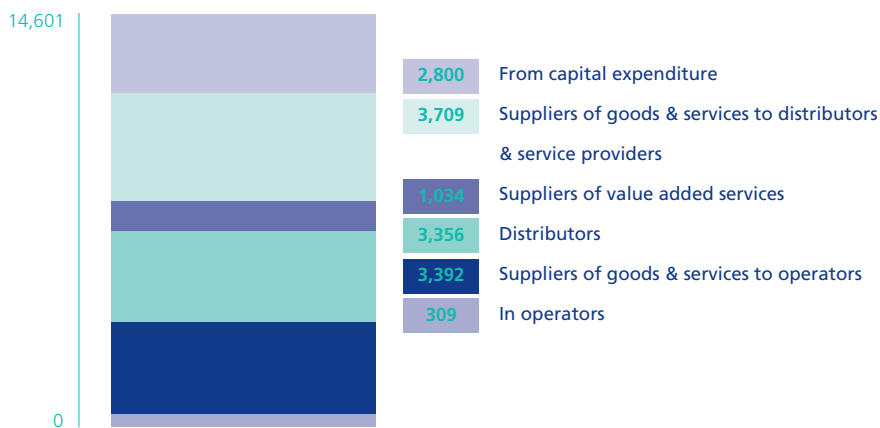
East of England

Resident population (2002 figure)	5,420,000
Households (2003)	2,230,000
Employment (April-June 2004)	79.0% of working age population
Unemployment rate (April-June 2004)	3.8% of economically active
Regional GVA (2001 figure)	£75,128,000,000
Regional GVA per head (2001 figure)	£13,909

The mobile telephone industry

Access to mobile phones	67% of all households
Contribution to employment	14,601 – 0.64% of region's jobs
Contribution to GDP	£1.6 billion – 1.61% of region's GDP
Spending on mobile phones per household	£660.81 per annum
Contribution to GDP per household	£732.36 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN EAST OF ENGLAND, NUMBER OF EMPLOYEES, 2003



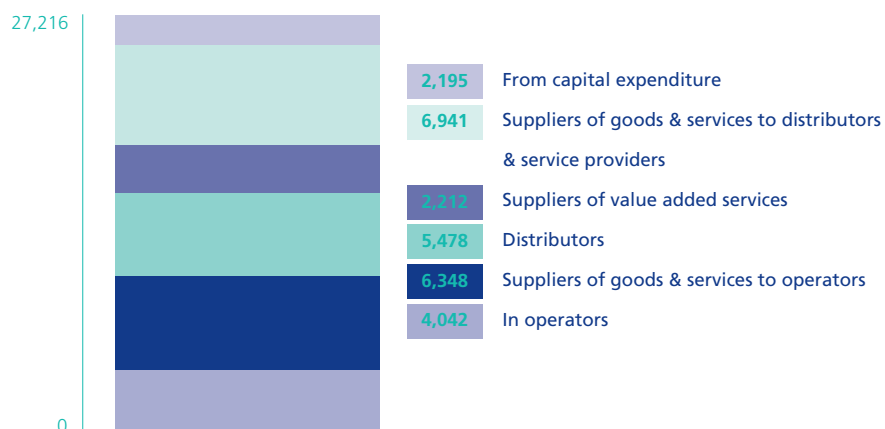
London

Resident population (2002 figure)	7,355,000
Households (2003)	2,850,000
Employment (April-June 2004)	70.3% of working age population
Unemployment rate (April-June 2004)	7.0% of economically active
Regional GVA (2001 figure)	£162,501,000,000
Regional GVA per head (2001 figure)	£22,236

The mobile telephone industry

Access to mobile phones	65% of all households
Contribution to employment	27,216 jobs – 0.0.68% of region's jobs
Contribution to GDP	£4.1 billion – 2.53% of region's GDP
Spending on mobile phones per household	£843.88 per annum
Contribution to GDP per household	£1,455.96 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN LONDON, NUMBER OF EMPLOYEES, 2003



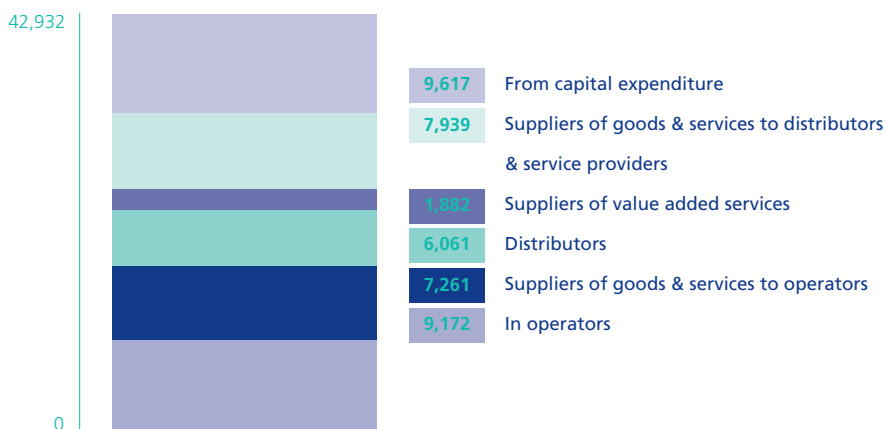
South East

Resident population (2002 figure)	8,037,000
Households (2003)	3,390,000
Employment (April-June 2004)	78.6% of working age population
Unemployment rate (April-June 2004)	3.7% of economically active
Regional GVA (2001 figure)	£127,377,000,000
Regional GVA per head (2001 figure)	£15,880

The mobile telephone industry

Access to mobile phones	75% of all households
Contribution to employment	41,932 jobs – 0.1.15% of region's jobs
Contribution to GDP	£5.3 billion – 3.23% of region's GDP
Spending on mobile phones per household	£785.01 per annum
Contribution to GDP per household	£1,573.12 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN THE SOUTH EAST, NUMBER OF EMPLOYEES, 2003



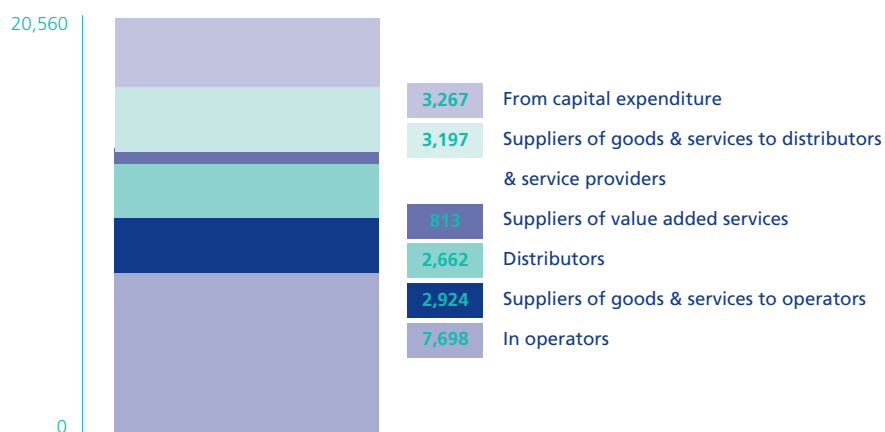
South West

Resident population (2002 figure)	4,960,000
Households (2003)	2,160,000
Employment (April-June 2004)	78.1% of working age population
Unemployment rate (April-June 2004)	3.7% of economically active
Regional GVA (2001 figure)	£63,554,000,000
Regional GVA per head (2001 figure)	£12,873

The mobile telephone industry

Access to mobile phones	64% of all households
Contribution to employment	20,560 jobs – 0.98% of region's jobs
Contribution to GDP	£2.2 billion – 2.85% of region's GDP
Spending on mobile phones per household	£541.05 per annum
Contribution to GDP per household	£1018.85 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN THE SOUTH WEST, NUMBER OF EMPLOYEES, 2003



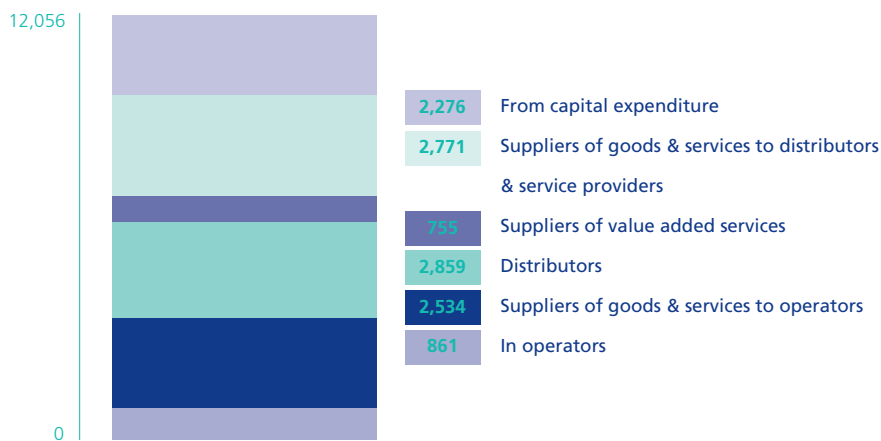
Scotland

Resident population (2002 figure)	5,055,000
Households (2003)	2,140,000
Employment (April-June 2004)	74.5% of working age population
Unemployment rate (April-June 2004)	6.2% of economically active
Regional GVA (2001 figure)	£69,179,000,000
Regional GVA per head (2001 figure)	£13,660

The mobile telephone industry

Access to mobile phones	67% of all households
Contribution to employment	12,056 jobs – 0.52% of region's jobs
Contribution to GDP	£1.8 billion – 1.45% of region's GDP
Spending on mobile phones per household	£586.64 per annum
Contribution to GDP per household	£550.79 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN SCOTLAND, NUMBER OF EMPLOYEES, 2003



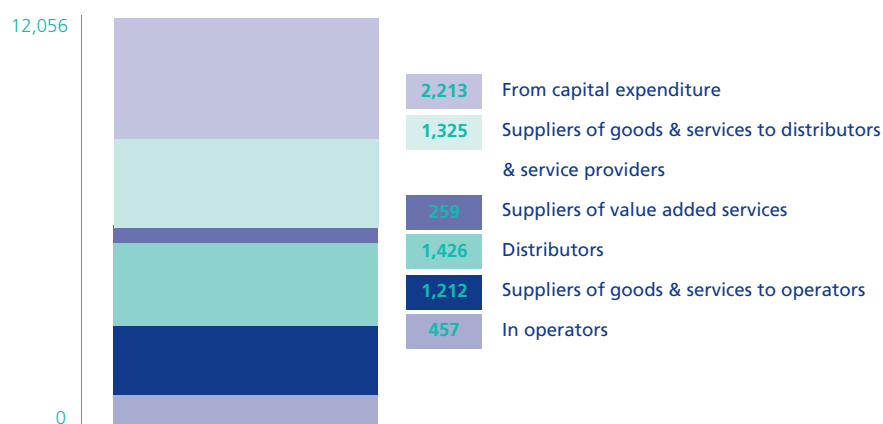
Wales

Resident population (2002 figure)	2,919,000
Households (2003)	1,250,000
Employment (April-June 2004)	72.2% of working age population
Unemployment rate (April-June 2004)	4.4% of economically active
Regional GVA (2001 figure)	£33,086,000,000
Regional GVA per head (2001 figure)	£11,379

The mobile telephone industry

Access to mobile phones	63% of all households
Contribution to employment	6,891 jobs – 0.63% of region's jobs
Contribution to GDP	£495 million – 1.26% of region's GDP
Spending on mobile phones per household	£500.89 per annum
Contribution to GDP per household	£396.37 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN WALES, NUMBER OF EMPLOYEES, 2003



Northern Ireland

Resident population (2002 figure)	1,697,000
Households (2003)	620,000
Employment (April-June 2004)	66.7% of working age population
Unemployment rate (April-June 2004)	5.3% of economically active
Regional GVA (2001 figure)	£19,108,000,000
Regional GVA per head (2001 figure)	£11,311
The mobile telephone industry	
Access to mobile phones	50% of all households
Contribution to employment	3,097 jobs – 0.46% of region's jobs
Contribution to GDP	£231 million – 1.01% of region's GDP
Spending on mobile phones per household	£478.05 per annum
Contribution to GDP per household	£372.02 per annum

JOBS SUPPORTED DIRECTLY AND INDIRECTLY BY THE MOBILE TELEPHONE INDUSTRY IN NORTHERN IRELAND, NUMBER OF EMPLOYEES, 2003

