



Cornwall County Council & Cornwall and Isles of Scilly Economic Forum

CORNWALL AND ISLES OF SCILLY SECTOR PROFILE:

# INFORMATION & COMMUNICATION TECHNOLOGY

December 2008

This research has been undertaken to update the previous sector profiles that had been requested by Cornwall Enterprise to stimulate a better understanding of their 10 priority sectors. This work will provide additional detail to underpin *Strategy and Action* in order to help to inform future decisions on the kind of support that is provided for local businesses and economic development projects.

## The Sector

- The sector includes the manufacture of computers, TV and radio, telecommunications and computer hardware and software.

## Headline facts

- There are 2700 jobs in the sector in Cornwall, with a total of 700 units.
- Most business units are small.
- The sector accounts for 1.6% of total GVA, £109 million in 2006.
- Employee earnings in the sector, at the UK level, tend to be above average.

## Overview

The ICT sector is playing an increasingly important role in the economy, particularly in relation to the knowledge economy though its impact is diffused across the wider economy.

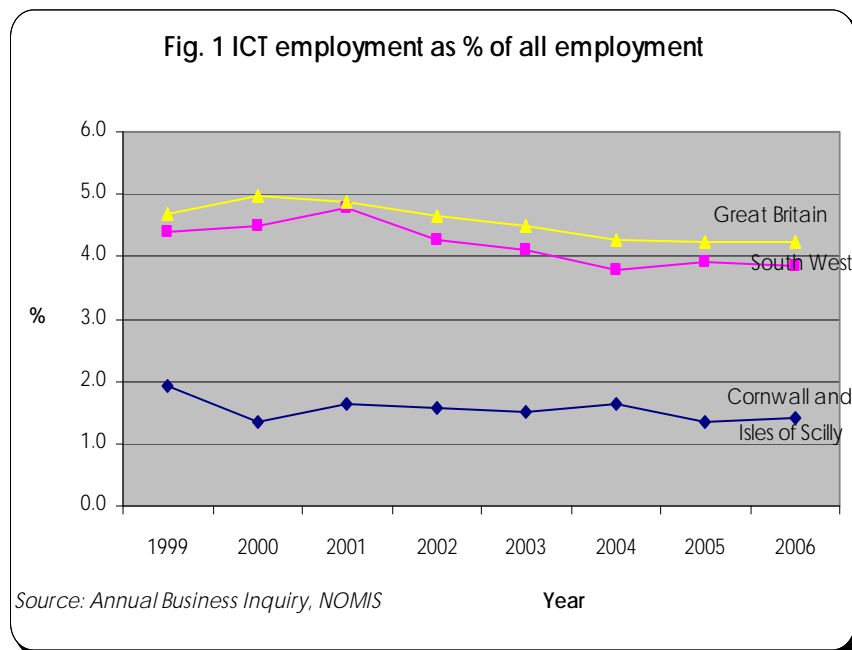
*To Switch On Cornwall and the Isles of Scilly as an ICT-enabled region, in which empowered individuals, businesses and communities are equipped with the necessary understanding, knowledge, skills and infrastructure to embrace the benefits of ICT, relevant to their own needs and aspirations. (ICT Task Force Strategy, 2000, Information Communications Technology).*

*The UK computer software market grew by 5.2% in 2006 to reach a value of £8.9 billion; 52% of the market relates to application software whilst 48% relates to systems software. The UK computer hardware market grew by 3.9% in 2005 to reach a value of £8.7 billion; 70.9% of the market relates to personal computers whilst the remaining 29.1% relates to other hardware. (Enterprise Edge ICT Industry Market Sector Overview).*

*Information and communications technologies are becoming ever more ubiquitous. At work, at home and on the move the capacity of individual devices continues to increase at astonishing speed. The electronic information and services offered to consumers, businesses and public agencies grow in parallel with the diffusion of more and more technology. (Greater London Authority 2004, Connecting the capital: information and communications technology in London).*

## Employment

- There are 2700 jobs in the ICT sector in Cornwall.
- Between 1999 and 2006 employment in the ICT sector in Cornwall decreased by 5%, compared to a decrease of 3% across the SW and 5% across GB.
- Full time jobs now account for 88% of the total employment in the sector in Cornwall, slightly lower than the SW and GB rates (both 90%).
- As Fig. 1 shows, there has been a decline in the importance of the sector when employment is measured as a proportion of total employment. This trend is similar to that across the SW and GB.



- Table 1 shows that in 2006 employment in the ICT sector in Cornwall as a percentage of total employment, was below both the SW and GB figures.

	Cornwall	SW	GB
1999	1.9	4.4	4.7
2006	1.4	3.8	4.2

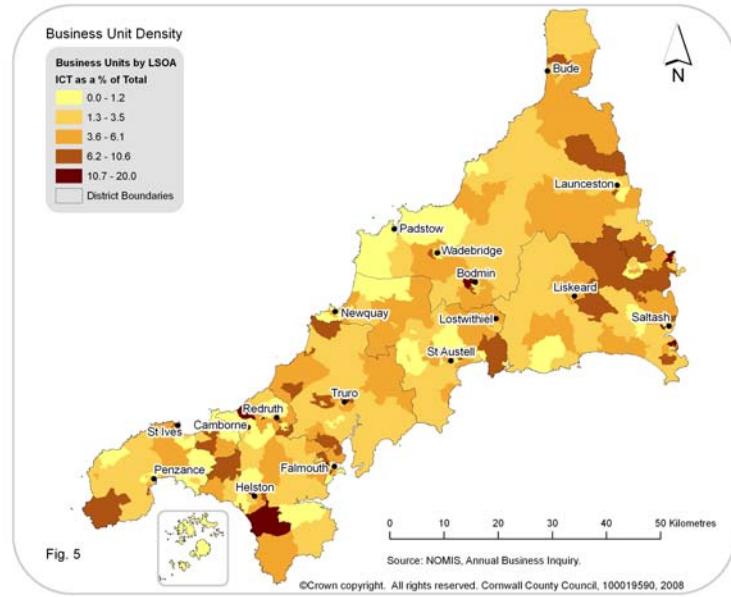
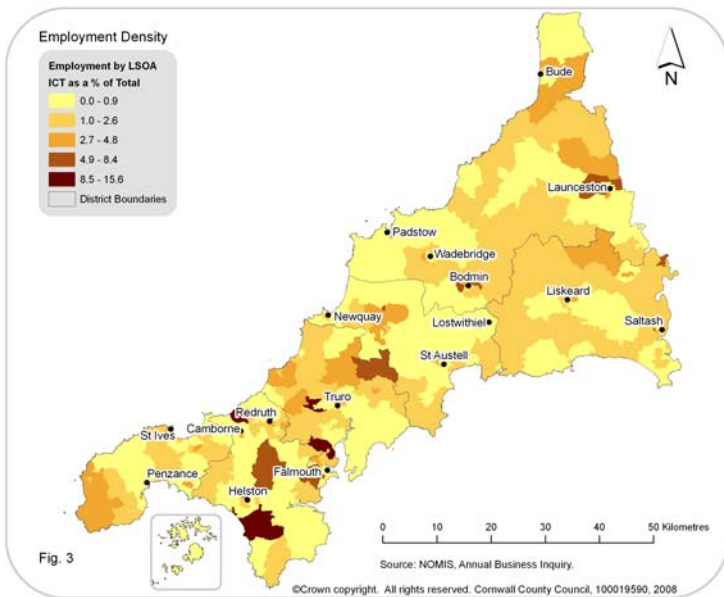
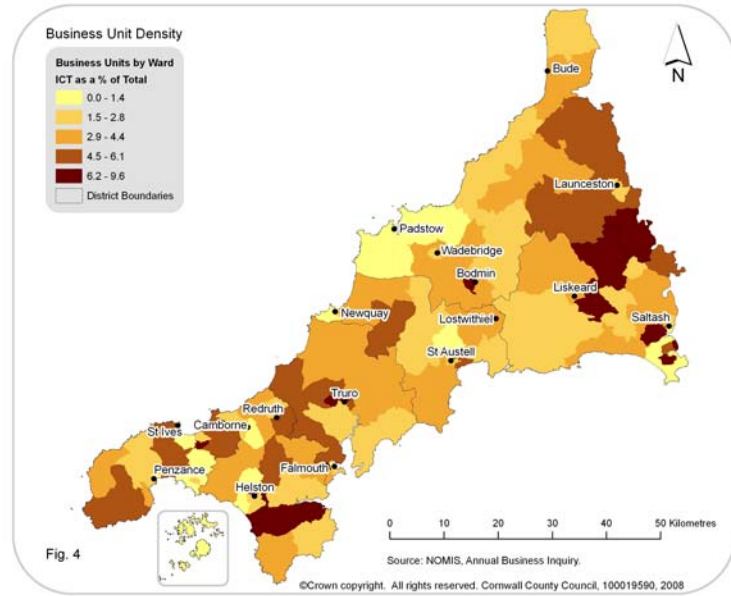
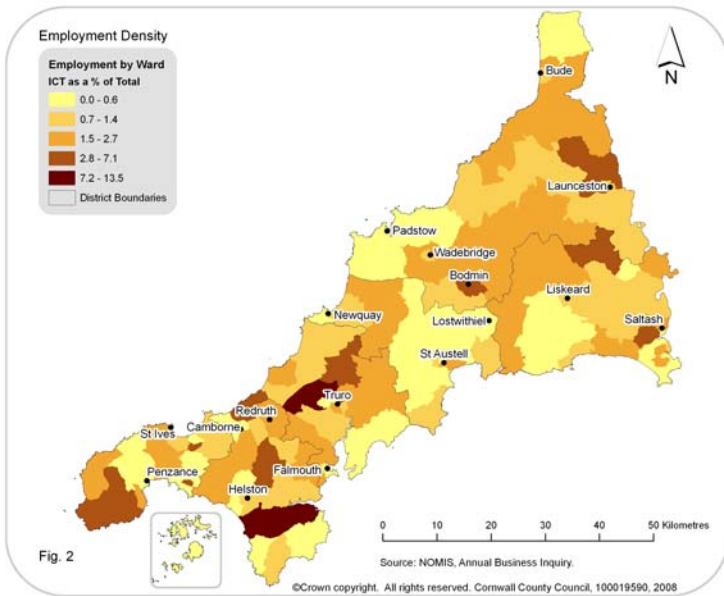
Table 1

## Business Units

- There are 700 business units in the ICT sector in Cornwall.
- Business units in this sector constitute 3.2% of all units. Comparative figures for the South West and Great Britain are 6% and 6.5%.
- Between 1999 and 2006 the number of business units in Cornwall increased by 17%.
- Conversely, during the same period, the SW and GB experienced a decline of 3% and 7% respectively.
- The distribution of units by sizeband in Cornwall is similar to that found across Britain, however, there are no units in Cornwall in the 200 plus sizeband.
- More employees in Cornwall are employed in smaller units than elsewhere. Units in the 1-10 sizeband account for 49 % of total employment in Cornwall, compared to 27% across the South West and 25% across GB. Conversely, whereas 33% of employees in GB are employed in units of 200 or more the figure for Cornwall was nil.
- Business units in the ICT sector are smaller than the average. Each data unit employs 3.9 employees compared to an average of 8.9 per unit across the Cornish economy. ICT units across GB employ on average 7.3 employees.

## Spatial distribution

- There are four wards where employment in the sector constitutes 5% or more of the total. The highest percentage is found in Meneage ward (14%).
- Two-fifths of all employees are found in four wards - Bodmin St Petroc, Truro Boscawen, Kenwyn and Chacewater, Meneage and Redruth North.
- A quarter of all employment in the sector is concentrated in four LSOAs - Threemilestone West, Truro Boscawen Ward City Centre, Bodmin St Petroc Ward North, and Garras, Culdrose and Gunwalloe.
- As a percentage of total employment, the highest concentrations are found in Garras, Culdrose and Gunwalloe (16%), Threemilestone (13%) and Mylor Bridge North (10%).
- Thirty percent of all business units in the ICT sector are clustered in 16 wards. Concentrations occur in Truro, Bodmin, Penryn, Mylor, Illogan South and Bude.
- There are 24 wards in Cornwall where ICT businesses make up 5% or more of total units.
- There are 18 LSOAs where the ICT units make up 10% or more of total units.
- In two LSOAs - Helston North Ward South West and Latchbrook South, ICT business units make up a fifth or more of all units.

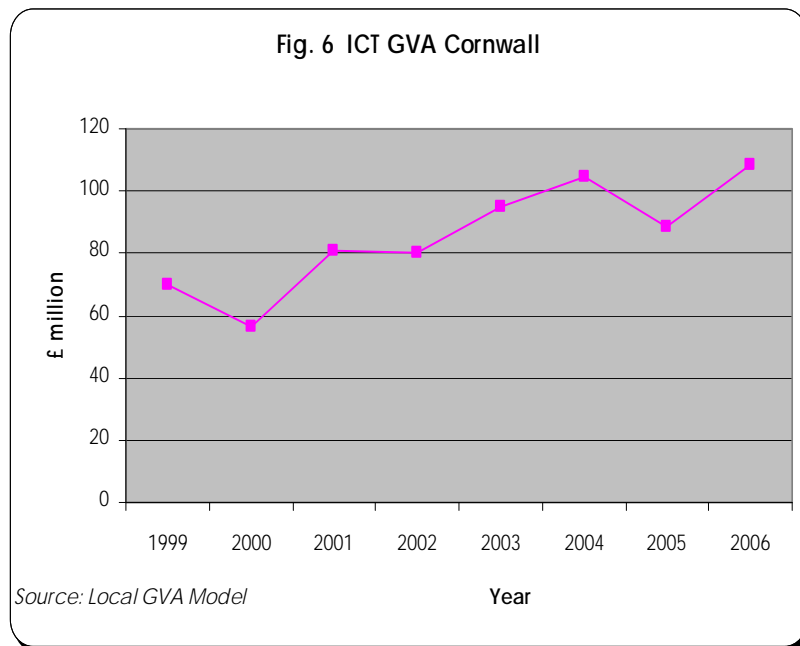


## Gross Value Added

- The ICT sector in Cornwall has shown an increase in absolute terms of GVA growing from £70 million in 1999 to £109 million in 2006. In relative terms however, falling slightly from 1.7% to 1.6% of total GVA.
- In 2006, the ICT sector accounted for 1.6 % of the economy in Cornwall. In 2004, the last year when comparative data was available for the UK, the figure for Cornwall was 1.8%, compared to 5.9% for the UK.
- Since 1999, the annual growth rate in GVA has been 9.4% compared to the 7.9% growth in GVA across all sectors in Cornwall.

## Productivity

- Productivity, as measured by GVA per worker, equalled £33,200. This figure is 21% above the average for all workers in Cornwall.
- Productivity, using the Full Time Equivalent (FTE) measure, equalled £35,700, 4% above the average for Cornwall.



## Earnings

- In 2007 median earnings for most categories of employees in the ICT sector across the UK were above the average for all employee earnings.
- Figures ranged from 5% above – database activities manufacture of television and radio receivers 6% above, software consultancy 81% above.

## Additional research required/data issues

Compilation of this profile has indicated a number of gaps in data available. The use of different sources of data by various organisations makes comparative work difficult.

## Caveats:

The size of the sector in this profile may differ to other research as each sector is made up by aggregating a number of other “subsectors” (see notes for employment SIC sectors incorporated in this profile). Other studies may use a broader or narrower definition.

**Totals from each profile should not be added as data included within one profile may also be included within another profile. For example, 3220 - Manufacture of television and radio transmitters... and 3230 - Manufacture of television and radio receivers ..., are included in both the ICT sector profile and the Creative Industries (Broad) sector profile. Fish processing is included in both food and drink and fishing.**

This profile only analyses the *economic* value of a sector. The social, cultural and environmental value of a sector should also be thoroughly considered.

Sector definitions used in this profile may vary slightly between GVA and employment as the GVA data does not have such a detailed sector breakdown. This is because calculating GVA on a local level relies upon numerous data sources, some of which are only available at a broad sector level. For this reason, it has not been possible to include GVA data for some of the more specific or cross-cutting sectors without further extensive research. In addition, the national accounting system’s classification limits the way in which we can understand the economy, for example, for the marine profile surf shops and wetsuit manufacturing cannot be drawn from the current structure, they are included in retail and rubber manufacturing, respectively. Again, further extensive research would be required to penetrate this detail.

All data in this profile refers to workplace.

### Business units

Business units, in this publication, refer to business premises and/or head offices. This is the most comprehensive measure of activity as it incorporates counts of individual branches or sites – this is more useful than mapping the enterprise or business alone as this would only provide a count of the location of each head office.

The source of the business units data is the Inter-Departmental Business Register. This register is produced by the Office for National Statistics using VAT (value added tax) and PAYE (pay as you earn) records, therefore, it captures all businesses that either trade over the VAT threshold – for 2006 a turnover of 61,000, and/or are PAYE registered – employ at least one member of staff who earns more than £94/week, or £408/month.

### Annual Business Inquiry (ABI) - Employee Analysis, Workplace Analysis

Data source: NOMIS. Based on a sample.

Discontinuities in 2003 and 2006 make comparisons difficult over a period of time. The 2006 discontinuity means that comparisons of the 2006 ABI employment estimates with earlier years do not provide a reliable comparison.

Elements contributing to the discontinuity include:

1. Change in reference date from December to September.
2. Use of Business Register Survey data within the ABI/1 results.
3. Change to the Minimum Domain Methodology.

NOMIS state that *'It is not possible to measure the impact of the changes made precisely, however the scale of the overall discontinuity between the 2005 and 2006 ABI/1 is estimated to be in the range of 150,000 to 350,000 (0.6 to 1.3 per cent of the total number of employees) in a downward direction.'*

All employment data from the ABI employee analysis has been rounded to the nearest 100 in line with release of data rules.

### Geographical anomalies

Data from different sources differs in its geographical coverage. The ABI covers Great Britain, ASHE data covers the United Kingdom.

### Earnings data

Earnings data by employment sector is only available at a UK level. Earnings levels in Cornwall are substantially lower and although it is expected that the difference applies across all sectors, the exact relationship is unknown, therefore care should be taken in interpreting the data.

## Data:

### Employment

The employment figures in this profile refer to the number of jobs in the food and drink sector. Figure 1 uses the total figure, thus incorporating both part and full time work.

#### ICT sector

	Part Time Workers	Full Time Workers	Total
2003	600	2,200	2,700
2004	500	2,400	2,900
2005	500	2,000	2,500
2006	300	2,400	2,700

Source: NOMIS, Annual Business Inquiry © Crown Copyright

### ICT sector employment as a percentage of all employment

	Cornwall and Isles of Scilly	South West	Great Britain
1999	1.9	4.4	4.7
2000	1.3	4.5	5.0
2001	1.6	4.8	4.9
2002	1.6	4.3	4.7
2003	1.5	4.1	4.5
2004	1.6	3.8	4.3
2005	1.4	3.9	4.2
2006	1.4	3.8	4.2

Source: NOMIS, Annual Business Inquiry © Crown Copyright

## Business units

### Sector units as a percentage of all business units

	Cornwall and Isles of Scilly	South West	Great Britain
	%	%	%
1999	3.3	7.0	7.7
2000	3.4	7.2	7.8
2001	3.7	7.1	7.9
2002	3.3	6.8	7.5
2003	3.4	6.6	7.2
2004	3.3	6.2	6.7
2005	3.1	5.8	6.5
2006	3.2	6.0	6.5

Source: NOMIS, Annual Business Inquiry © Crown Copyright

## Gross Value Added (GVA)

ICT GVA data has been sourced from the Local GVA model for Cornwall level data and the Office for National Statistics (ONS) for UK statistics. The following tables provide the raw data from which the graphs on page one were produced.

### GVA (£ million)

	Cornwall	UK
1999	70.1	49273
2000	56.3	53661
2001	80.6	55052
2002	80.4	56135
2003	95.2	59632
2004	104.9	61918
2005	88.7	na
2006	108.5	na

Source: Owen Nankivell, (2008) *Local GVA model*; ONS, (2006), *UK Input-Output Analyses*.

### GVA (% of total)

	Cornwall	UK
1999	1.7	6.2
2000	1.3	6.4
2001	1.7	6.2
2002	1.5	6.0
2003	1.6	6.1
2004	1.8	5.9
2005	1.4	na
2006	1.6	na

Source: Owen Nankivell, (2008) *Local GVA model*; ONS, (2006), *UK Input-Output Analyses*.

## Earnings

**Employee weekly pay – information and communications technology sector** [NB Earnings data by employment sector only available at a UK level].

### Weekly pay - Gross (£) - For all employee jobs: United Kingdom, 2007

Description	Code	Median	AS % of all
ALL EMPLOYEES		374.9	100.0
Manufacture of office machinery and computers	30	453.3	120.9
Manufacture of office machinery	3001	472.9	126.1
Manufacture of computers and other information processing equipment	3002	446.4	119.1
Manufacture of insulated wire and cable	3130	453.1	120.9
Manufacture of radio, television and communication equipment and apparatus	32	451.3	120.4

Manufacture of electronic valves and tubes and other electronic components	3210	383.8	102.4
Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy	3220	632.5	168.7
Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods	3230	390.0	104.0
Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment	3320	483.1	128.9
Manufacture of industrial process control equipment	3330	579.4	154.5
Wholesale of electrical household appliances and radio and television goods	5143	387.3	103.3
Wholesale of computers, computer peripheral equipment and software	5184	479.1	127.8
Wholesale of other office machinery and equipment	5185	509.8	136.0
Wholesale of other electronic parts and equipment	5186	479.5	127.9
Wholesale of other machinery for use in industry, trade and navigation	5187	432.7	115.4
Telecommunications	6420	567.5	151.4
Computer and related activities	72	635.5	169.5
Hardware consultancy	721	638.7	170.4
Hardware consultancy	7210	638.7	170.4
Software consultancy and supply	722	661.6	176.5
Publishing of software	7221	496.2	132.4
Other software consultancy and supply	7222	668.0	178.2
Data processing	7230	599.6	159.9
Database activities	7240	488.5	130.3
Maintenance and repair of office, accounting and computing machinery	7250	616.6	164.5
Other computer related activities	7260	560.1	149.4

Source: ONS, (2007), ASHE, Table 16.1a Weekly pay - Gross (£) - For all employee jobs: United Kingdom, 2007

#### **NB Earnings data by employment sector only available at a UK level.**

The table below shows earnings levels in Cornwall compared to both the South West and Great Britain. All data for 2007.

#### **Median Earnings by workplace 2007**

Area	All		All Full-time		All Part-time	
	£	%	£	%	£	%
Cornwall	304.9	81.3	373.3	81.7	140.4	97.6
South West	349.2	93.1	427.8	93.7	144.7	100.6
United Kingdom	374.9	100	456.7	100	143.9	100
Area	Male		Male full-time		Male part-time	
	£	%	£	%	£	%
Cornwall	358.9	77.3	399	80.1	149.7	108.6
South West	441.4	95	476.5	95.6	147.9	107.3
United Kingdom	464.5	100	498.3	100	137.8	100
Area	Female		Female Full-time		Female Part-time	
	£	%	£	%	£	%
Cornwall	239	83.1	344.4	87.4	138.7	95.3
South West	267	92.9	363.3	92.2	144	98.9
United Kingdom	287.5	100	394	100	145.6	100

Source: Annual Survey of Hours and Earnings, (2007). Table 7.1a Weekly pay - Gross (£) - For all employee jobs: United Kingdom, 2007.

## *References*

Enterprise Edge ICT Industry Market Sector Overview.

Greater London Authority, (2004), Connecting the capital: information and communications technology in London.

ICT Task Force Strategy, (2000), Information Communications Technology.

Organisation for Economic Cooperation and Development, (2002), Measuring the Information Economy.

Office for National Statistics, (2007), Annual Survey of Hours and Earnings - 2007, Weekly pay - Gross (£) - For all employee jobs.

## Notes:

### Spatial distribution

The maps indicating the spatial distribution of employment and business units use both ward and Lower Super Output Areas. The wards are those used for District Council elections. Super output areas are a new geographical hierarchy designed to improve the reporting of small level statistics. They are now used in preference to administrative boundaries such as wards as they are of roughly equal population levels and are based on the area's characteristics, not historical events. The lower super output areas have a mean population size of 1,500.

### Gross Value Added (GVA)

#### What is Gross Value Added?

GVA measures the contribution each sector, industry or producer makes to the economy, and when added, the total value of economic activity in a particular area. It is used as an indicator of the value of economic activity that takes place within a sector, or area.

The ICT Definition used in this profile is that adopted by the OECD for the reporting of ICT sector data in 2002. The codes are set out under the European NACE Rev.1 The 51.64 and 51.65 codes were changed when SIC 2003 replaced SIC 92.

ICT in this profile refers to the following SIC(2003) activities:

3001 : Manufacture of office machinery  
3002 : Manufacture of computers and other information processing equipment  
3130 : Manufacture of insulated wire and cable  
3210 : Manufacture of electronic valves and tubes and other electronic components  
3220 : Manufacture of television and radio transmitters and apparatus for line telephony and line telegraphy  
3230 : Manufacture of television and radio receivers, sound or video recording or reproducing apparatus and associated goods  
3320 : Manufacture of instruments and appliances for measuring, checking, testing, navigating and other purposes, except industrial process control equipment  
3330 : Manufacture of industrial process control equipment  
5143 : Wholesale of electrical household appliances and radio and television goods  
5184 : Wholesale of computers, computer peripheral equipment and software  
5185 : Wholesale of other office machinery and equipment  
5186 : Wholesale of other electronic parts and equipment  
5187 : Wholesale of other machinery for use in industry, trade and navigation  
6420 : Telecommunications  
7133 : Renting of office machinery and equipment including computers  
7210 : Hardware consultancy  
7221 : Publishing of software  
7222 : Other software consultancy and supply  
7230 : Data processing  
7240 : Data base activities  
7250 : Maintenance and repair of office, accounting and computing machinery  
7260 : Other computer related activities

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For further information about this or the other profiles in the series please contact Peter Wills, Corporate Economy and Europe Unit, Cornwall County Council: 01872 322520, [pwills@cornwall.gov.uk](mailto:pwills@cornwall.gov.uk)