

14 June 2010

#### **ICT Sector Indicators**

Provisional results. Year 2008

# Turnover of the manufacturing companies in the ICT sector reaches 6,388 million euros in the year 2008

## Companies in the ICT sector spend 1,233 million euros on R&D investments

Turnover of the manufacturing companies in the ICT sector stood at 6,388 million euros in the year 2008. These companies generated an added value of 1,252 million euros.

The number of companies in the ICT manufacturing sector reached 980, whereas the number of persons employed in the manufacturing companies of the ICT sector stood at 23,710 persons.

# Production in the manufacturing industries of the ICT sector

ICT sector (CNAE-2009)	Total 2008
Number of companies	980
Turnover (in thousands of euros)	6,388,002
Sales of products (in thousands of euros)	4,559,494
Added value (in thousands of euros)	1,252,852
Number of employed persons	23,710

Source: Industrial Companies Survey

#### Internal R&D expenditure of companies in the ICT sector

Companies in the ICT sector invested a total of 1,233 million euros in R&D in 2008. This figure accounted for **15.3% of total business expenditure** on R&D activities.

By branch of activity, the branch with the greatest expenditure on R&D in the year 2008 was *Programming, consultancy and other activities related to IT*, with 636 million euros.

Current expenses accounted for 83.0% of the total expenditure on R&D of companies in the ICT sector. In turn, capital expenses represented the remaining 17.0%.

## Internal R&D expenditure in the ICT sector in 2008

Economic data in thousands of euros					
	Current		Capital		
ICT sector (CNAE 2009)	expenses	%	expenses	%	Total
1. Manufacturing	157,526	88.9	19,639	11.1	177,166
2. Services	866,692	82.0	190,010	18.0	1,056,702
a. ICT trade industries	92,741	87.5	13,201	12.5	105,941
b. ICT services industries	773,952	81.4	176,810	18.6	950,761
- Publishing of computer programmes	47,375	88.0	6,459	12.0	53,834
- Telecommunications	132,918	58.8	93,271	41.2	226,189
- Programming, consultancy and other activities related					
to IT	564,241	88.6	72,316	11.4	636,557
- Websites, data processing, Hosting	25,634	84.9	4,565	15.1	30,199
- Repair of computers and communications equipment	3,783	95.0	199	5.0	3,983
Total ICT sector	1,024,218	83.0	209,649	17.0	1,233,868
Total business sectors	6,555,490	81.2	1,518,031	18.8	8,073,521

Source: Statistics on Activities in Scientific Research and Technological Development.

### Personnel employed in the ICT sector

In 2008, the ICT sector concentrated 17.8% of the total personnel dedicated to R&D tasks in the business sector, and 17.7% of the researchers.

The personnel employed in R&D tasks, on a Full-Time Equivalent (FTE), dedicated to R&D tasks in the ICT sector, reached 16,976.3. Women accounted for 22.4% of them.

In turn, there were 8,205.7 researchers dedicated to R&D, 20.8% of whom were women.

By branch of activity, *Programming, consultancy and other activities related to IT* was the branch that employed the most workers, with a total of 10,213.5 on FTE. Of this figure, 4,784.4 were researchers.

#### R&D personnel (on FTE) in 2008

Total personnel		Researchers				
ICT sector (CNAE 2009)		%	Total	Women	%	Total
Manufacturing     Services	471.9 3,322.8	17.6 23.3	2,688.6 14,287.7	257.3 1,447.8	16.0 22.0	1,611.6 6,594.1
a. ICT trade industries	227.5	16.7	1,365.1	34.2	5.5	619.0
b. ICT services industries	3,095.3	24.0	12,922.6	1,413.6	23.7	5,975.1
- PUBLISHING OF COMPUTER PROGRAMMES	157.1	17.1	918.3	74.6	17.2	434.5
- TELECOMMUNICATIONS	263.2	22.7	1,158.4	119.6	22.5	531.8
- PROGRAMMING, CONSULTANCY AND OTHER ACTIVITIES RELATED TO IT	2,480.6	24.3	10,213.5	1,162.3	24.3	4,784.4
- WEBSITES, DATA PROCESSING, HOSTING	184.3	34.6	532.6	55.6	28.4	195.9
- REPAIR OF COMPUTERS AND COMMUNICATIONS EQUIPMENT	10.1	10.1	99.8	1.5	5.3	28.5
TOTAL ICT SECTOR	3,794.7	22.4	16,976.3	1,705.2	20.8	8,205.7
TOTAL BUSINESS SECTORS	28,652.1	30.1	95,207.4	13,604.4	29.3	46,375.2

Source: Statistics on Activities in Scientific Research and Technological Development.

### Companies carrying out innovative activities

During the year 2008, **45.7%** of the companies in the ICT sector carried out innovative activities. By sector, 60.6% of manufacturing companies and 44.3% of companies in the services sector carried out innovative activities.

Regarding total expenditure on innovative activities, the ICT sector represented 20.4% of the business sector.

Within the ICT sector, expenditure of ICT manufacturing industries on innovative activities stood at 240.1 million euros, whereas ICT services companies spent 3,831.3 million euros. This figure accounted for 20.4% of total business expenditure on innovative activities.

### Innovative activities in the ICT sector in 2008

Economic data in thousands of euros				
ICT sector (CNAE 2009)	% of companies Expenditure on		% expenditure over the total	
Manufacturing	60.6	240,089	5.9	
Services	44.3	3,831,391	94.1	
Total ICT sector	45.7	4,071,480	100	
Total business sectors	17.8	19,918,946		

Source: Technological Innovation in Companies Survey

### Production value of goods in the ICT sector

According to the Industrial Products Survey, the production value of ICT goods decreased 6.0% in the year 2008, reaching 5,948.4 million euros.

Among the groups of products in the ICT sector, worth noting was the production value of *Audio and video equipment*, which accounted for 37.3% of the total.

The group of *Electronic components* presented the greatest increase as compared with the year 2007 (5.5%). Conversely, the production value of *Computer equipment* registered a 48.0% drop, and that of *Telecommunications equipment* decreased 21.6%.

## Production value of ICT goods in 2008

Economic data in millions of euros				
Groups of products (Prodcom 2008)	Production value	% over total ICT sector	% over total industrial sector	% variation as compared with 2007
1. Telecommunications equipment	712.4	12.0	0.2	-21.6
2. Computer equipment	220.1	3.7	0.1	-48.0
3. Electronic components	1,537.8	25.9	0.4	5.5
4. Audio and video equipment	2,218.6	37.3	0.5	-4.0
5. Other ICT products	1,259.5	21.2	0.3	2.9
Total ICT sector	5,948.4	100	1.4	-6.0
Total industrial production	431,191.1		100	-3.1

Source: Industrial Products Survey

### Foreign trade of ICT products

The trade balance of ICT products in 2008 presented a negative balance of 19,879.6 million euros.

Exports totalled 5,996.3 million euros, whilst imports reached 25,875.8 million euros.

Amongst the groups of products of the ICT sector, worth noting were the exports of *Audio* and *video* equipment, which represented 41.7% of the total for the ICT sector. Regarding imports, *Electronic components* accounted for 34.3% of the total.

## Foreign trade of the ICT sector, by group of products, in 2008

Economic data in millions of euros  Groups of products (NC 2008)	Exports	Imports	Trade balance	Coverage rate	% variation of trade balance as compared with 2007
Telecommunications equipment	779.4	5,940.7	-5,161.3	13.1	-7.5
Computer equipment	573.8	4,642.5	-4,068.7	12.4	11.6
Electronic components	1,283.2	8,875.5	-7,592.2	14.5	-61.4
Audio and video equipment	2,501.7	4,336.4	-1,834.7	57.7	21.1
Other ICT products	858.1	2,080.8	-1,222.7	41.2	-5.0
Total ICT sector	5,996.3	25,875.8	-19,879.6	23.2	-13.0
Total	189,227.9	283,387.8	-94,159.9	66.8	5.9

Source: Compilation with data from the State Tax Administration Agency

## **Methodological annex**

The ICT Sector is comprised of the manufacturing and services industries whose main activity is linked to the development, production, commercialisation and intensive use of Information and Communications Technologies. The ICT Sector is characterised by high rates of innovation, technological progress and productivity.

In statistical terms, the definition of the ICT Sector is developed through a comprehensive listing of the branches of activity corresponding to ICT companies (**focus by sector**) and ICT products (**focus by product**).

In order to determine the list of activities and products in the ICT sector, we have begun with the methodological work carried out by the OECD on the subject.

#### **Adaptation to National Classification of Economic Activities 2009**

Today, the National Statistics Institute (INE) is publishing the Indicators of the information and communications technologies sector, referring to the year 2008, using the new **National Classification of Economic Activities of 2009 (CNAE-09)**, passed by Royal Decree 475/2007, of 13 April.

The data published up to the year 2008 (data referring to years 2003 to 2007) used the National Classification of Economic Activities of 1993 (CNAE-93).

Some of the changes between CNAE-93 and CNAE-09 regarding the manufacturing industry are the following: the creation of new divisions to represent industrial activities that are important or that have experienced an increase in economic relevance; the disappearance of the *Publishing* activity, which has been moved to another section outside of the industrial scope, and *The manufacture of computers and other computer equipment*, which was previously classified with the manufacture of the corresponding elements, and is now grouped into three different classes.

On the INE website (<u>www.ine.es</u>), the 2003-2007 series is published with CNAE-93, while the series as of 2008 is published with CNAE-09.

#### Information sources

The statistical information on the ICT Sector has been obtained from the following INE statistical operations:

Industrial Companies Survey; Annual Services Survey; Statistics on R&D Activities; Technological Innovation in Companies Survey; Quarterly Labour Cost Survey; Industrial Products Survey and Survey on the Use of Information and Communications Technologies and Electronic Commerce in Companies.

Information has also been obtained from the Foreign Trade Statistics of the State Tax Administration Agency.

# Branches of activity of the ICT Sector, according to the National Classification of Economic Activities (CNAE-2009)

List of branches of activity of the ICT sector, according to CNAE 2009

	ICT manufacturing industries
CNAE 2611	Manufacture of electronic components
CNAE 2612	Manufacture of assembled printed circuits
CNAE 2620	Manufacture of computers and peripherals
CNAE 2630	Manufacture of telecommunications equipment
<b>CNAE 2640</b>	Manufacture of electronic products for consumption
CNAE 2680	Manufacture of magnetic and optical supports
	ICT trade industries
CNAE 4651	Wholesale trade of computers, peripherals and computer programmes
CNAE 4652	Wholesale trade of electronic equipment and telecommunications equipment and components thereof
	ICT services industries
	PUBLISHING OF COMPUTER PROGRAMMES
CNAE 5821	Publishing of videogames
CNAE 5829	Publishing of other computer programmes
<u> </u>	TELECOMMUNICATIONS
CNAE 6110	Cable telecommunications
CNAE 6120	Wireless telecommunications
CNAE 6130	Satellite telecommunications
CNAE 6190	Other telecommunications activities
	PROGRAMMING, CONSULTANCY AND OTHER ACTIVITIES RELATED TO IT
CNAE 6201	Computer programming activities
CNAE 6202	Computer consultancy activities
CNAE 6203	IT resource management
CNAE 6209	Other services related to information technologies and computers
	WEBSITES, DATA PROCESSING, HOSTING AND RELATED ACTIVITIES
CNAE 6311	Data processing, hosting and related activities
CNAE 6312	Websites
	REPAIR OF COMPUTERS AND COMMUNICATIONS EQUIPMENT
CNAE 9511	Repair of computers and peripherals
CNAE 9512	Repair of communications equipment