

18 June 2013

## ICT Sector Indicators Year 2011

### Main results

- Turnover for ICT sector companies decreases 3.3% in 2011, reaching 88,395.2 million euros.
- The number of companies in the ICT sector increases 1.9%, and the added value decreases 1.7%.
- 40% of companies in the ICT sector carry out innovative activities during the year 2011.
- In 2011, the companies and personnel in the ICT sector dedicated to R&D tasks increases 6.0% and 3.8%, respectively.
- The ICT sector reduces its negative trade balance by 14.2%, as compared with that registered in 2010.

Turnover for companies in the Information and Communication Technologies (ICT) sector stood at 88,395.2 million euros in the year 2011, that is, 3.3% less than the previous year. These companies generated an added value of 33,195.1 million euros, 1.7% less than in 2010.

The number of companies in the ICT sector stood at 44,298, 1.9% more than the previous year. In turn, the number of persons employed in the ICT sector stood at 399,783 persons, a 0.8% increase.

### Main variables in the ICT sector. Year 2011

Economic data in millions of euros

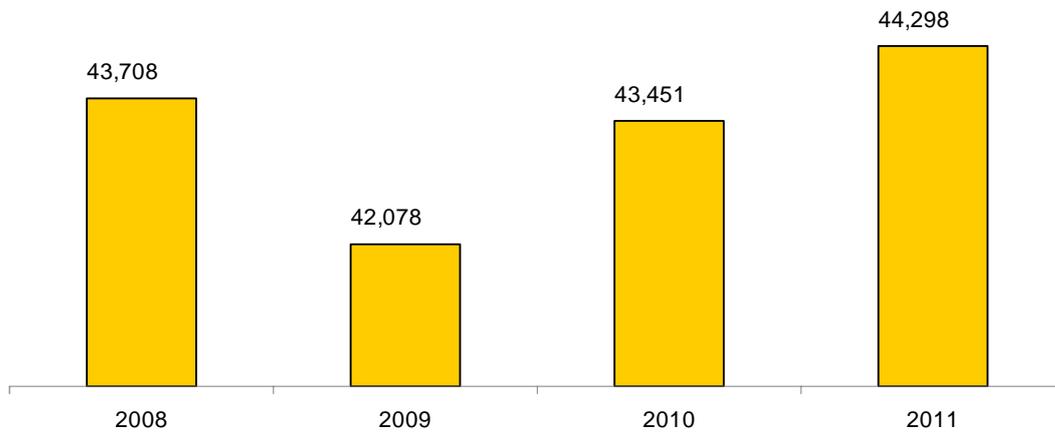
ICT Sector (CNAE-2009)	2010	2011	% variation
Number of companies	43,451	44,298	1.9
Turnover	91,427.0	88,395.2	-3.3
Added value	33,781.3	33,195.1	-1.7
Number of employed persons	396,543	399,783	0.8

Source: Industrial Companies Survey and Annual Services Survey

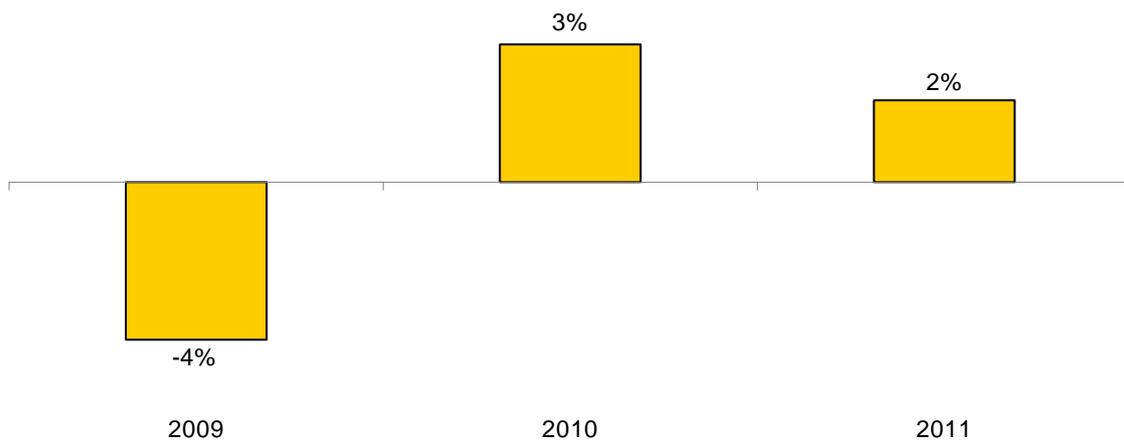
**Evolution of the number of companies and the number of persons employed in the ICT sector (2008 – 2011)**

Both the number of companies and the personnel employed decreased between 2008 and 2009. However, from that year onwards, they registered positive growth rates.

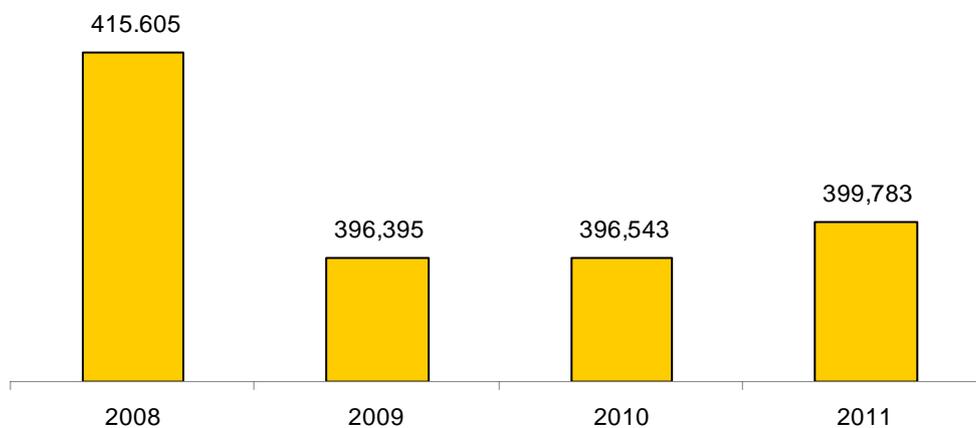
**Number of companies**



**Interannual variation rate of the number of companies**



**Number of employed persons**



**Interannual variation rate of the number of employed persons**



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

Companies in the ICT sector invested a total of 1,035.5 million euros on R&D in 2011. This figure accounted for 14% of the total business expenditure on R&D activities.

Within the ICT services industries, the industry with the greatest expenditure on R&D was *Programming, consultancy and other activities related to IT*, with 597.3 million euros.

Current expenses accounted for 91.6% of the total expenditure on R&D by companies in the ICT sector. In turn, capital expenses represented the remaining 8.4%.

### Internal R&D expenditure in the ICT sector in 2011

Data in millions of euros

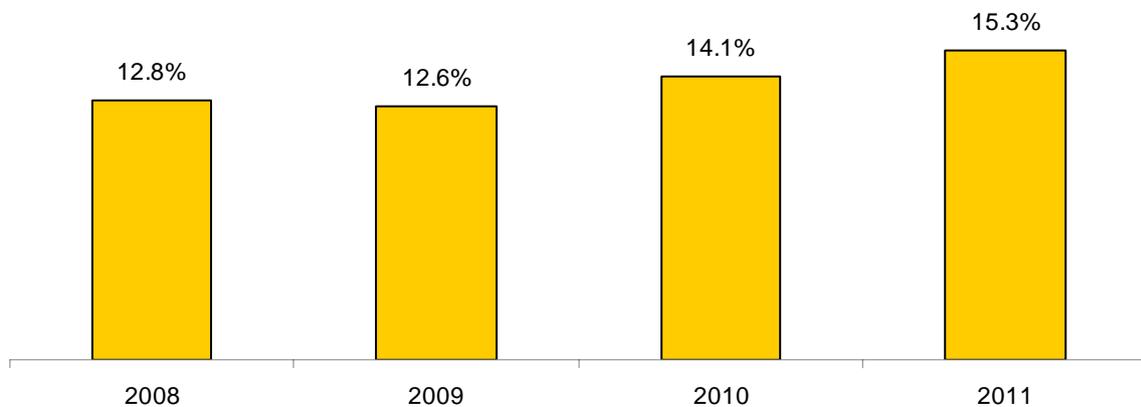
ICT Sector (CNAE 2009)	Current expenses	%	Capital expenses	%	TOTAL
1. Manufacturing	113.4	94.6	6.5	5.4	120.0
2. Services	1,782.7	91.4	168.4	8.6	1,951.0
a. ICT trade industries	59.8	88.7	7.6	11.3	67.4
b. ICT services industries	774.8	91.4	73.3	8.6	848.2
- Publishing computer programmes	22.0	91.9	1.9	8.1	23.9
- Telecommunications	145.1	84.6	26.4	15.4	171.4
- Programming, consultancy and other activities related to IT	563.2	94.3	34.1	5.7	597.3
- Websites, data processing, hosting and related	41.4	79.3	10.8	20.7	52.2
- Repair of computers and communications equipment	3.2	96.4	0.1	3.6	3.4
<b>TOTAL ICT SECTOR</b>	<b>948.0</b>	<b>91.6</b>	<b>87.5</b>	<b>8.4</b>	<b>1,035.5</b>
<b>TOTAL business sectors</b>	<b>6,483.3</b>	<b>87.7</b>	<b>913.0</b>	<b>12.3</b>	<b>7,396.4</b>

Source: Statistics on Scientific Research and Technological Development Activities.

**Evolution of the ICT sector companies that carry out R&D activities (2008 – 2011)**

The number of companies in the ICT sector that carry out R&D activities increased since 2009. In absolute figures, the number of companies decreased between 2009 and 2010. However, it increased between 2010 and 2011.

**% Companies in the ICT sector that carry out R&D activities of the total number of companies that carry out R&D activities**



**Interannual variation rate of the number of companies in the ICT sector that carry out R&D activities**



### Personnel employed in the ICT sector

In 2011, the ICT sector concentrated 18.3% of the total personnel dedicated to R&D tasks in the business sector, and 18.5% of the total researchers.

Personnel employed in R&D tasks, on a Full-Time Equivalent (FTE), dedicated to R&D tasks in the ICT sector, were 16,489.5. Women accounted for 23.2% of them.

In turn, there were 8,311.9 researchers dedicated to R&D, 21.9% of whom were women.

Within the ICT services industries, *Programming, consultancy and other activities related to IT* was the industry that employed most workers, with a total of 10,664.2 on FTE. Of this figure, 5,297.8 were researchers.

### R&D Personnel (on FTE). Year 2011

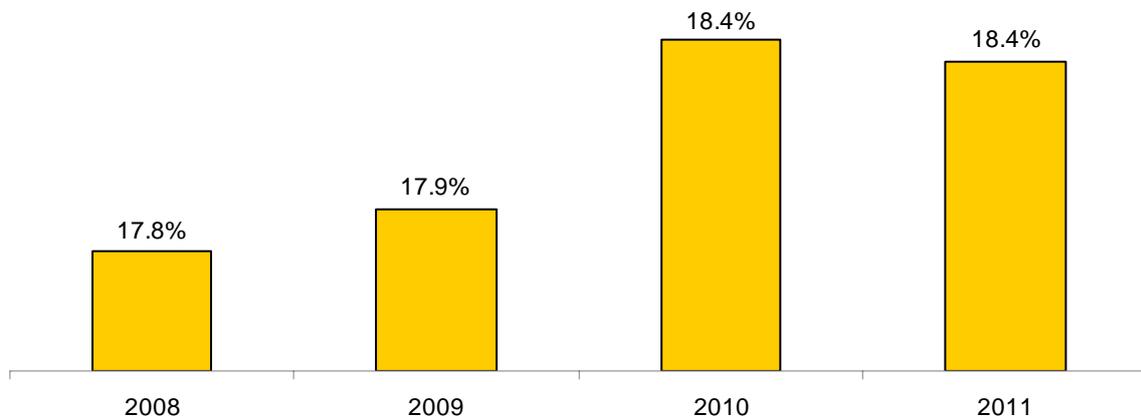
ICT Sector (CNAE 2009)	Total Personnel			Researchers		
	Women	%	TOTAL	Women	%	TOTAL
1. Manufacturing	303.5	15.5	1,961.5	144.0	13.9	1,033.3
2. Services	3,517.7	24.2	14,528.0	1,676.6	23.0	7,278.6
a. ICT trade industries	145.0	20.2	716.5	87.4	18.6	468.7
b. ICT services industries	3,372.7	24.4	13,811.5	1,589.2	23.3	6,809.9
- Publishing computer programmes	61.3	14.1	436.1	30.1	11.8	254.5
- Telecommunications	498.1	26.2	1,900.9	215.2	25.4	848.6
- Programming, consultancy and other activities related to IT	2,627.9	24.6	10,664.2	1,264.4	23.9	5,297.8
- Websites, data processing, hosting and related activities	175.3	24.3	722.3	78.5	21.3	368.2
- Repair of computers and communication equipment	10.1	11.5	88.0	1.0	2.5	40.8
<b>TOTAL ICT sector</b>	<b>3,821.2</b>	<b>23.2</b>	<b>16,489.5</b>	<b>1,820.6</b>	<b>21.9</b>	<b>8,311.9</b>
<b>TOTAL business sectors</b>	<b>27,644.6</b>	<b>30.8</b>	<b>89,841.1</b>	<b>13,545.0</b>	<b>30.2</b>	<b>44,914.9</b>

Source: Statistics on Scientific Research and Technological Development Activities.

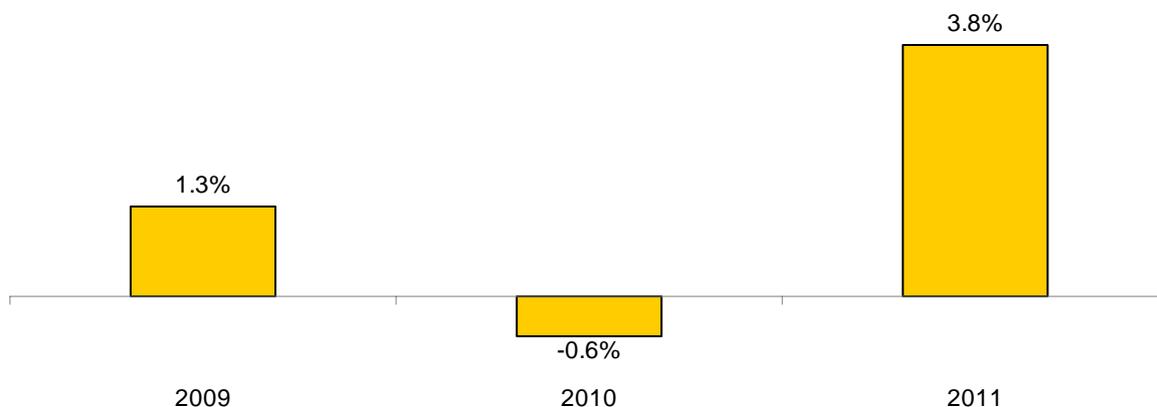
**Evolution of the personnel in the ICT sector dedicated to R&D (2008 – 2011)**

With regards to the total personnel employed, the personnel employed in the ICT sector dedicated to R&D tasks stood above 18% in 2010 and 2011. In absolute figures, it decreased between 2009 and 2010, however, it increased (3.8%) between 2010 and 2011.

**% Personnel in the ICT sector dedicated to R&D of the total personnel dedicated to R&D**



**Interannual variation rate of the personnel in the ICT sector dedicated to R&D**



### Companies carrying out innovative activities

During the year 2011, 40.0% of the companies in the ICT sector carried out innovative activities. By sector, 61% of manufacturing companies and 38.3% of companies in the services sector carried out innovative activities.

Within the ICT Sector, expenditure by ICT manufacturing industries on innovative activities stood at 153.7 million euros, whereas ICT services companies spent 2,330.1 million euros.

ICT sector expenditure accounted for 16.8% of total business expenditure on innovative activities.

### Innovative activities in the ICT sector. Year 2011

Data in millions of euros

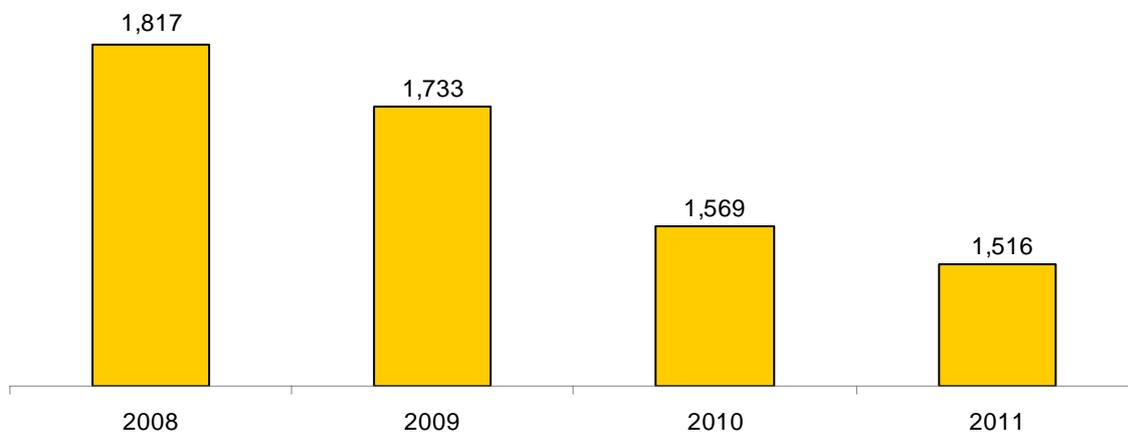
ICT Sector (CNAE 2009)	% of companies with innovative activities	Expenditure on innovative activities	% Expenditure over the Total
Manufacturing	61.0	153.7	6.2
Services	38.3	2,330.1	93.8
TOTAL ICT Sector	40.0	2,483.8	100.0
TOTAL business sector	12.5	14,755.8	

Source: Survey on Innovation in Companies

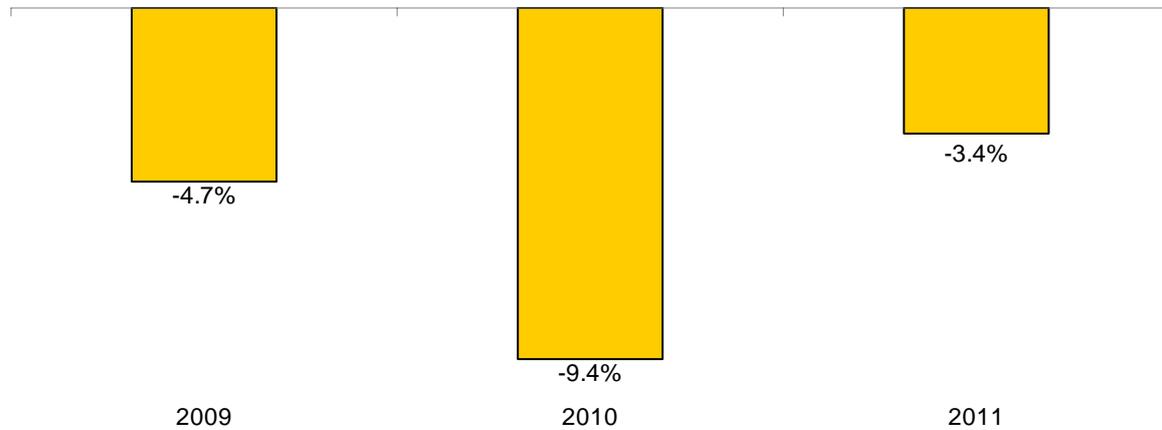
### Evolution of companies carrying out innovative activities (2008 – 2011)

In absolute figures, the number of companies in the ICT sector that carry out innovative activities decreased from 2008 to 2011. This drop was, in absolute values, slighter between 2010 and 2011.

Companies carrying out innovative activities in the ICT sector



**Interannual variation rate of companies carrying out innovative activities in the ICT sector**



**Production value of goods in the ICT sector**

According to the Industrial Products Survey, the production value of ICT goods decreased 23% in the year 2011, as compared to the previous year, reaching 3,324.3 million euros.

By group, all the groups registered a decrease in the production value, except *Computer equipment* (10.5% increase). The production value in the groups: *Audio equipment*; *Telecommunications equipment* and *Electronic components* decreased 68.7%, 11.7% and 10.8%, respectively.

Worth noting was the production value of *Electronic components*, which accounted for 37.4% of the total ICT sector.

**Production value of ICT goods. Year 2011**

Data in millions of euros

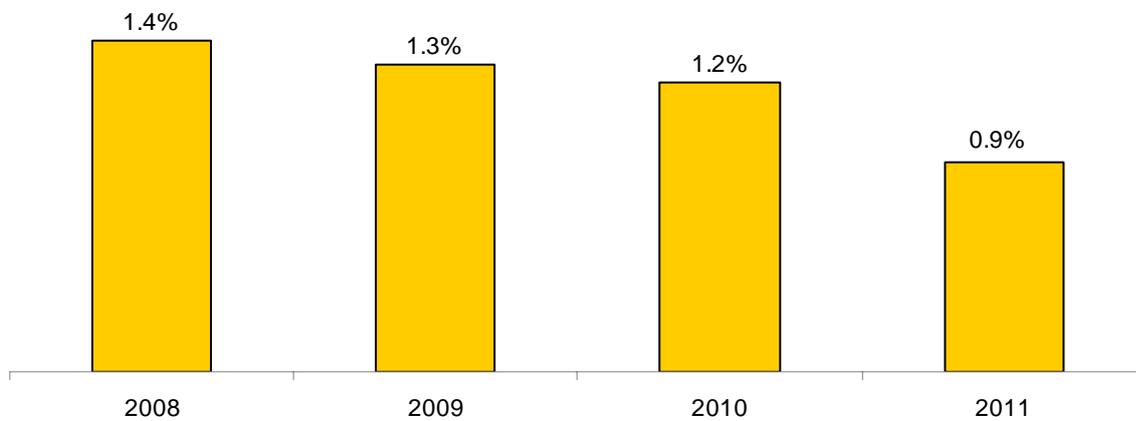
Groups of products (PRODCOM 2011)	Production value	% over the ICT sector total	% over the industrial sector	% Variation compared with
1. Telecommunications equipment	549.7	16.5	0.1	-11.7
2. Computer equipment	108.2	3.3	0.0	10.5
3. Electronic components	1,244.7	37.4	0.3	-10.9
4. Audio and video equipment	309.8	9.3	0.1	-68.7
5. Other ICT products	1,111.9	33.4	0.3	-8.3
TOTAL ICT sector	3,324.3	100.0	0.9	-23.0
TOTAL industrial production	382,380.8		100.0 #	6.3

Source: Industrial Product Survey

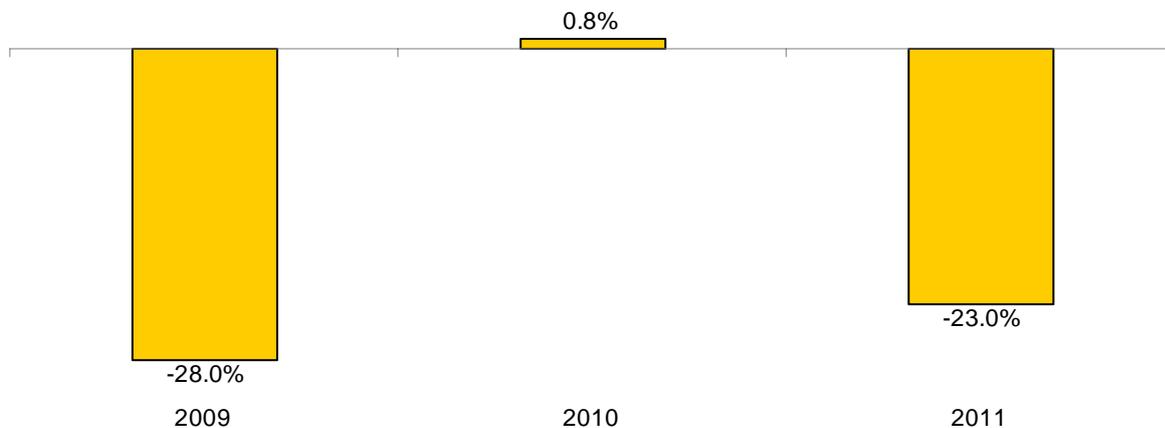
### Evolution of the production value of ICT goods (2008 – 2011)

Regarding the total value of the industrial production, the production of ICT goods maintained its participation around 1%. However, while between 2009 and 2010 it remained almost stable, between 2010 and 2011 it decreased 23%.

**% Production value of goods in the ICT sector of the total industrial production value**



**Interannual variation rate of the production value of goods in the ICT sector**



### Foreign trade of ICT products

The trade balance of ICT products in 2011 registered a negative balance of 11,184.2 million euros. This trade deficit for the sector was 14.2% higher than in 2010.

Exports totalled 5,244.5 million euros, whilst imports reached 16,428.7 million euros.

Amongst the groups of products of the ICT sector, worth noting were the exports of *Electronic components*, which represented 28.1% of the total for the ICT sector. Regarding imports, *Telecommunications equipment* accounted for 32.8% of the total.

### Foreign trade of the ICT Sector, by group of products. Year 2011

Data in millions of euros

Groups of products (NC <sup>1</sup> 2010)	Exports	Imports	Trade balance	Coverage rate	% Variation Trade Balance compared with 2010
1. Telecommunications equipment	1,064.3	5,388.0	-4,323.7	19.8	-5.59
2. Equipos de ordenadores	695.1	3,554.4	-2,859.3	19.6	17.2
3. Electronic components	1,476.1	2,335.9	-859.7	63.2	38.1
4. Audio and video equipment	984.4	3,155.1	-2,170.7	31.2	26.8
5. Other ICT products	1,024.6	1,995.4	-970.8	51.3	14.8
TOTAL ICT sector	5,244.5	16,428.7	-11,184.2	31.9	14.2
TOTAL	215,230.4	263,140.7	-47,910.4	81.8	10.1

Source: INE compilation with data from the State Tax Administration Agency

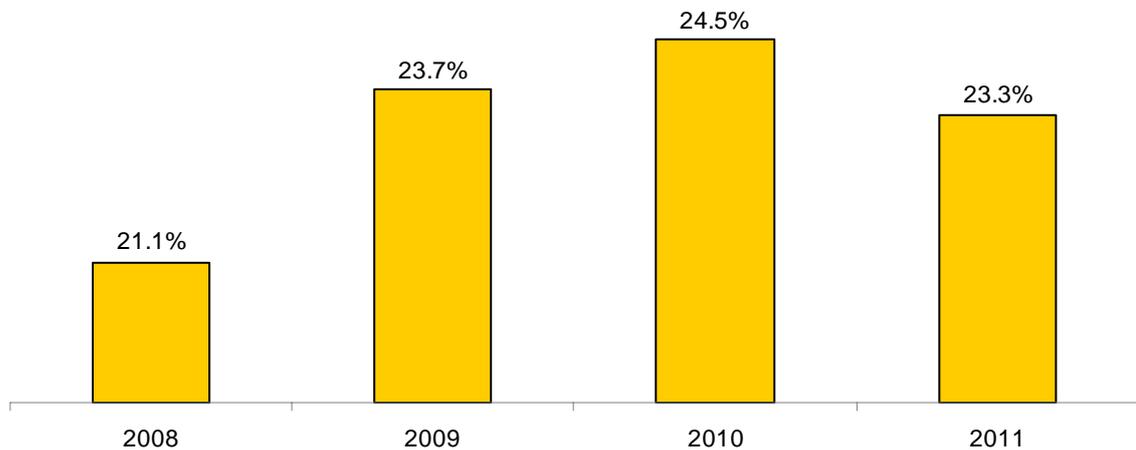
<sup>1</sup> Combined Nomenclature

**Evolution of foreign trade of the ICT sector (2008 – 2011)**

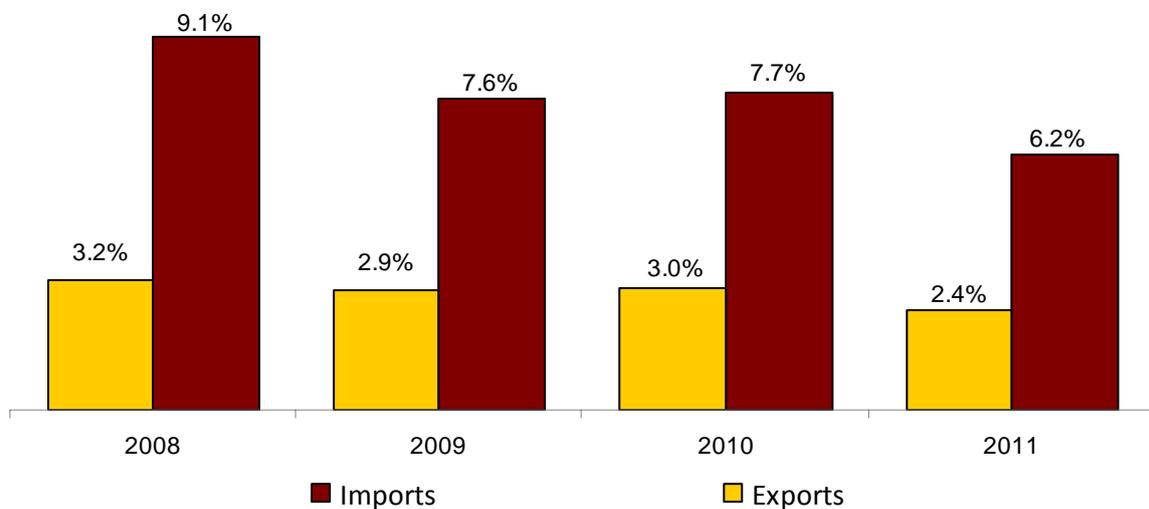
The participation in the trade balance of ICT products in the total trade balance remained around 23.5% since 2009. Between 2008 and 2010 said participation increased two percentage points by year, between 2010 and 2011 it decreased 1.2 percentage points.

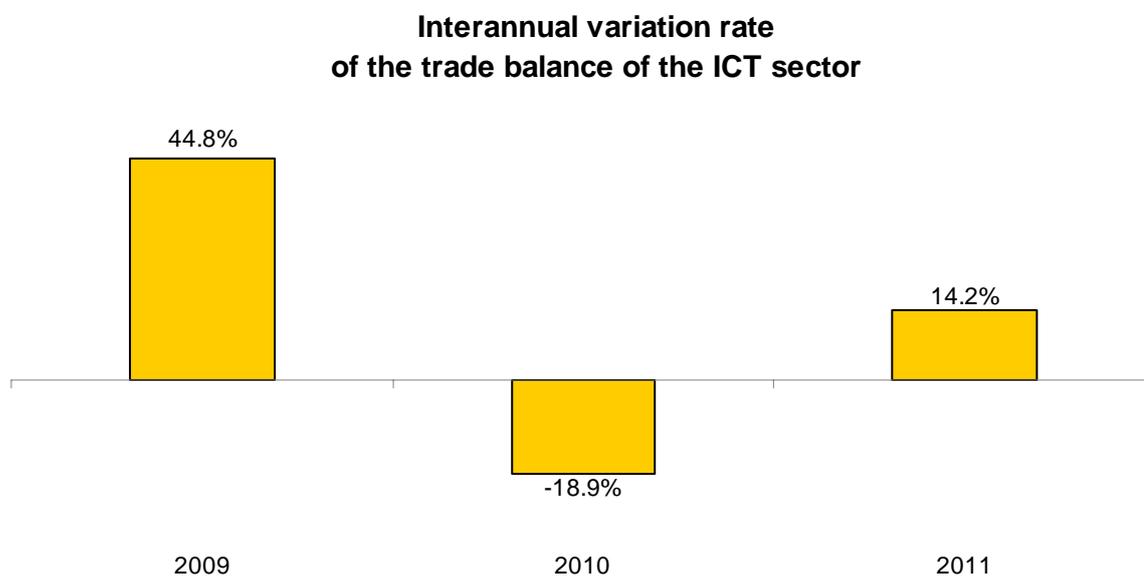
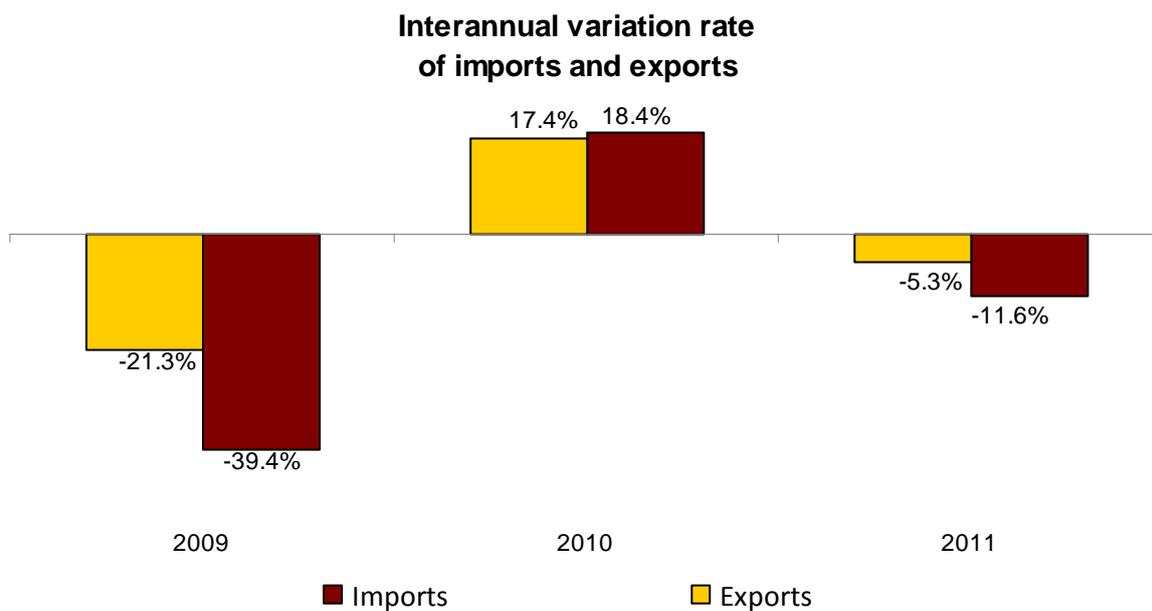
Regarding the national imports and exports, both imports and exports in the ICT sector increased every year. However, between 2010 and 2011, they decreased 5.3% and 11.6%, respectively.

**% Trade balance of ICT sector of the total trade balance**



**% Imports and exports in the ICT sector of the total national imports and exports**





## **Methodological annex**

The so-called 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.

### **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**

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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
CNAE 2640	Manufacture of electronic products for consumption
CNAE 2680	Manufacture of magnetic and optical supports

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**ICT Trade industries**

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CNAE 4651	Wholesale trade of computers, peripherals and computer programmes
CNAE 4652	Wholesale trade of electronic equipment and telecommunications equipment and computers thereof

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**ICT Services industries**

PUBLISHING OF COMPUTER PROGRAMMES

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CNAE 5821	Publishing of videogames
CNAE 5829	Publishing of other computer programmes

TELECOMMUNICATIONS

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CNAE 6110	Cable telecommunications
CNAE 6120	Wireless telecommunications
CNAE 6130	Satellite telecommunications
CNAE 6190	Other telecommunication activities

PROGRAMMING, CONSULTANCY AND OTHER ACTIVITIES RELATED TO IT

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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

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CNAE 6311	Data processing, hosting and related activities
CNAE 6312	Websites

REPAIR OF COMPUTERS AND COMMUNICATIONS EQUIPMENT

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CNAE 9511	Repair of computers and peripherals
CNAE 9512	Repair of communication equipment

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