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One in two enterprises provides staff with portable devices for mobile Internet connection

ICT usage in enterprises 2012

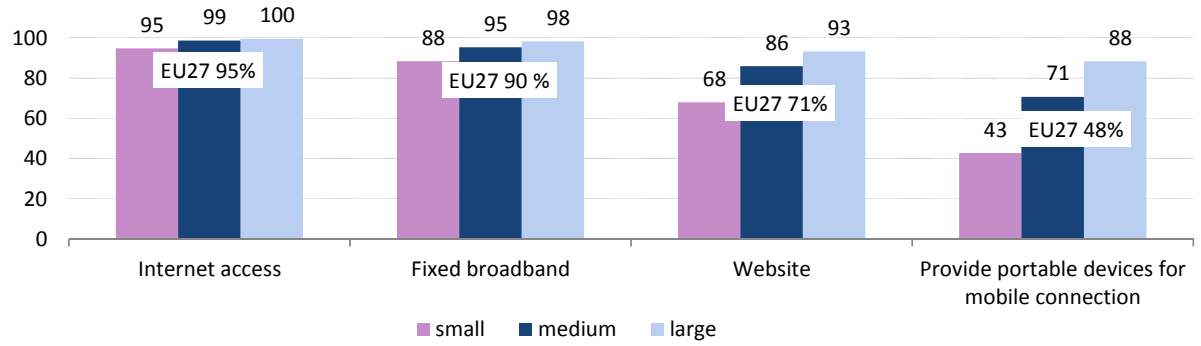
Use of Information and Communication Technologies (ICT), and in particular new ways of accessing and using the Internet efficiently, is driving the way that enterprises run their business and organise e-commerce.

In 2012, nine out of ten enterprises in the 27 EU Member States had **access to and used the Internet** through a **fixed broadband** connection, and almost half of all enterprises used a **mobile connection** and provided staff with **portable devices** for business use.

With these portable devices European enterprises could offer their staff more "ubiquitous connectivity" exploiting a wide range of existing technologies, from wireless "hot spots" in public locations, to Internet access over mobile telephone networks.

Some 45 % of the enterprises providing portable devices said they were to be used with **dedicated business software applications** over the Internet, e.g. for sales management (Figure 3).

Figure 1: Internet access, enterprises with a website, provision of portable devices for mobile connection to the Internet, by size class, EU27, 2012 (% of enterprises)



Source: Eurostat (online data codes: isoc_ci_in_en2, isoc_ci_it_en2, isoc_bde15b_e)

Internet access and use of fixed broadband technologies reaching saturation

The percentage of EU enterprises that have **Internet access** and use **fixed broadband** Internet connections seems to have reached saturation level in 2012 (at 95 % and 90 % respectively) with a small increase (+0 pp, +3 pp respectively), compared to previous year.

The share of enterprises that have **Internet access** was similar in most countries. In 19 out of 27 EU countries 95 % or more of enterprises reported having **Internet access**. The lowest shares were reported by enterprises in Hungary, Bulgaria and Romania (89 %, 87 % and 79 % respectively).

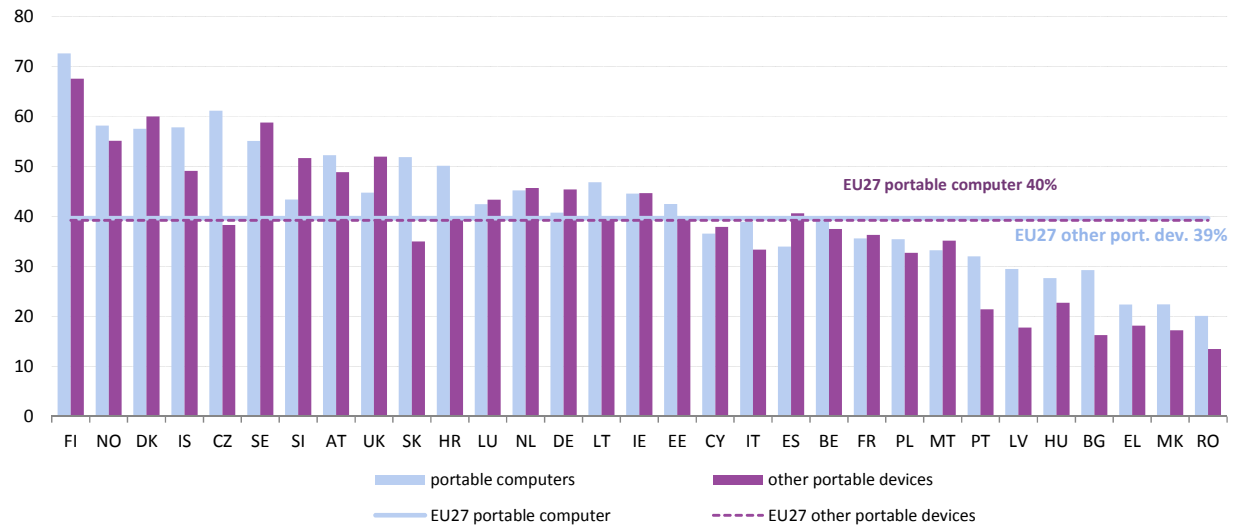
Table 1: Internet access, fixed broadband connection to the Internet, enterprises providing portable devices for mobile connection to the Internet, by size class (% of enterprises)

	Internet access		Fixed broadband connection		Provide portable devices to persons employed for mobile connection, 2012			
	2011	2012	2011	2012	all enterprises	small	medium	large
EU27	**95**	**95**	**87**	**90**	**48**	**43**	**71**	**88**
BE	96	97	86	94	45	39	70	87
BG	87	87	69	76	31	27	44	67
CZ	96	97	87	91	63	57	86	94
DK	98	99	91	90	65	60	88	94
DE	97	97	88	88	52	46	74	91
EE	96	96	90	94	50	45	65	80
IE	93	94	90	88	50	46	68	93
EL	93	91	76	80	27	23	46	56
ES	97	96	96	95	45	41	71	88
FR	96	99	92	97	44	38	73	90
IT	94	96	84	92	47	43	75	92
CY	91	95	88	95	47	42	67	91
LV	92	91	82	86	32	28	48	69
LT	98	100	87	95	52	48	67	85
LU	97	98	93	95	53	48	69	90
HU	89	89	84	85	32	27	53	75
MT	95	95	94	94	40	35	51	68
NL	100	100	91	96	53	47	75	87
AT	98	98	82	86	58	53	83	97
PL	94	93	73	77	41	36	59	89
PT	95	95	83	87	35	30	60	85
RO	79	79	54	63	22	20	28	57
SI	97	98	92	97	61	56	80	94
SK	97	98	76	90	55	51	69	87
FI	100	100	96	98	78	74	92	99
SE	96	98	94	95	63	59	85	95
UK	95	94	92	93	56	51	81	93
IS	:	99	:	98	64	57	88	98
NO	97	97	87	85	68	64	90	94
HR	96	96	80	88	54	49	69	85
MK	82	88	74	87	25	23	34	57

IS 2011: No survey

Source: Eurostat (online data codes: isoc_ci_in_en2, isoc_ci_it_en2, isoc_bde15b_e)

Figure 2: Enterprises providing portable devices for mobile connection to the Internet, by type of device, 2012 (% of enterprises)



Source: Eurostat (online data code: isoc_cimobe_dev)

The main business use of portable devices was mobile access to e-mail

In 2012, 48 % of enterprises in the EU provided staff with portable devices that allowed a mobile connection to the Internet for business use (Table 1). Portable devices fall into two main groups: **portable computers** (e.g. laptops, notebooks and tablets) and **other portable devices** like smartphones and personal digital assistant (PDA) phones.

Roughly equal proportions of EU enterprises provided staff with one of the two types of portable devices. Some 40 % of enterprises provided **portable computers** and 39 % of enterprises provided **other portable devices** (Figure 2). In general, the former have higher computing power, more capabilities and bigger screens.

Around nine out of ten **large** enterprises provided their staff with **portable devices** that allowed a **mobile connection to the Internet** for business use (Figure 1). The share for **small** and **medium-sized** enterprises was 43 % and 71 % respectively.

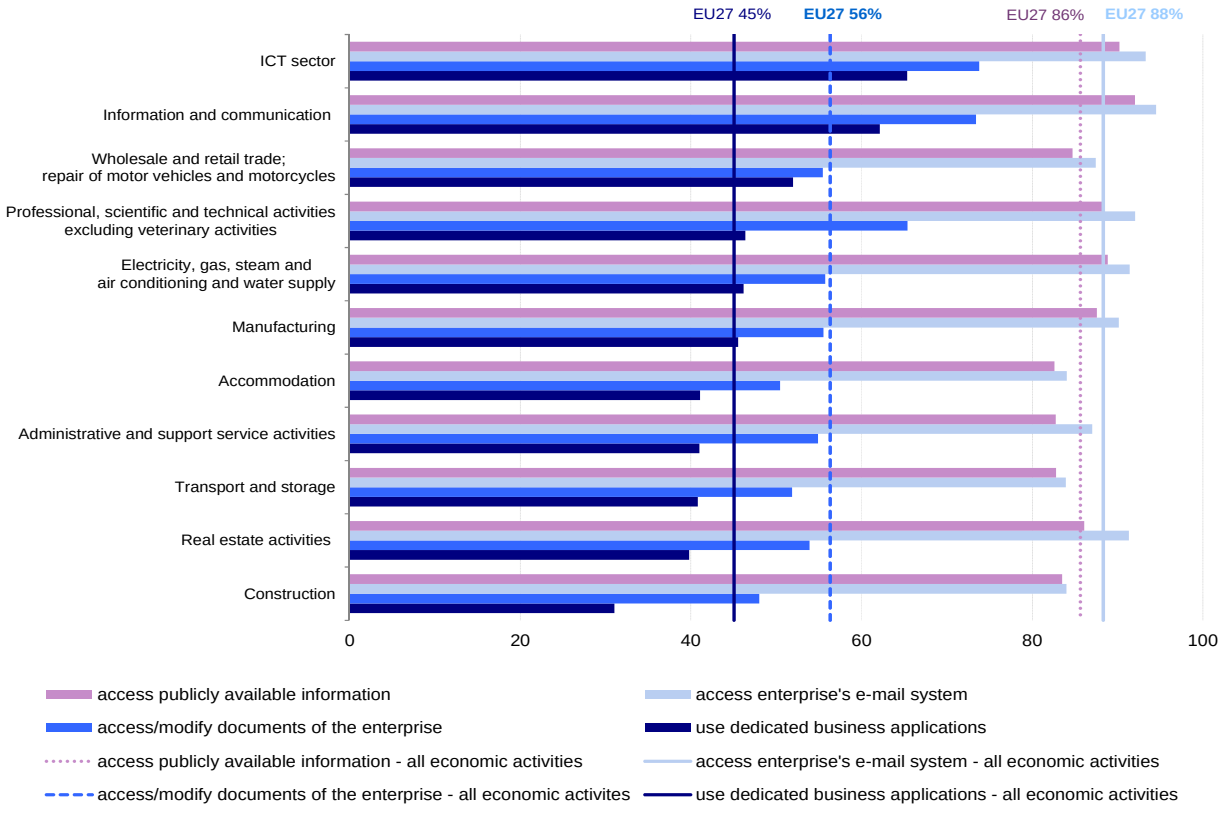
Concerning the purpose and the deployment of portable devices for accessing the Internet over telephone networks, respondents were given various options, reflecting two important issues: firstly, the **level of security** required for accessing and using the Internet via portable devices; secondly, the usage of **dedicated or customised business software applications** e.g. for sales management, enterprise resource planning or customer relationship management.

Some 86 % of enterprises that provided their staff with portable devices reported that they were used for business to access **publicly available information** on the Internet (Figure 3).

With reference **to restricted access** requiring specific access rights but not the use of dedicated business software, 88 % of enterprises used portable devices to access the **enterprise's e-mail** and 56 % to access and amend **documents**. In particular, access to the **enterprise's e-mail** and access to **publicly available information** on the Internet were common among enterprises scoring above 80 % in all economic sectors (Figure 3).

Some 45 % of enterprises reported that portable devices were used over the Internet via mobile telephone networks for **dedicated business applications** that additionally required specific user access rights (Figure 3).

Figure 3: Enterprises providing portable devices for mobile connection to the Internet by purpose and economic activity, EU27, 2012 (% of enterprises providing portable devices)



Source: Eurostat (online data code: isoc_cimobe_use)

Problems with connectivity and high operating costs were the main obstacles limiting the use of portable devices for mobile Internet connection

Important obstacles may limit or prevent enterprises from using portable devices effectively for mobile connection to the Internet. Indeed, enterprises may consider a range of technical or non-technical, internal or external issues that may need to be addressed.

Some 21 % of all EU enterprises reported **connectivity problems** to mobile telephone networks (e.g. low speed, poor or no telephone network signal) as a limitation.

High costs for the subscription or use of the Internet over telephone networks were also an obstacle for 21 %.

Some 17 % of enterprises expressed concerns about **security-related risks** such as interception of data resulting in disclosure of information, or the destruction or corruption of data.

Technical obstacles or high costs for **integrating mobile connection** to the Internet in the enterprise's existing business applications were reported as a limitation by 17 %.

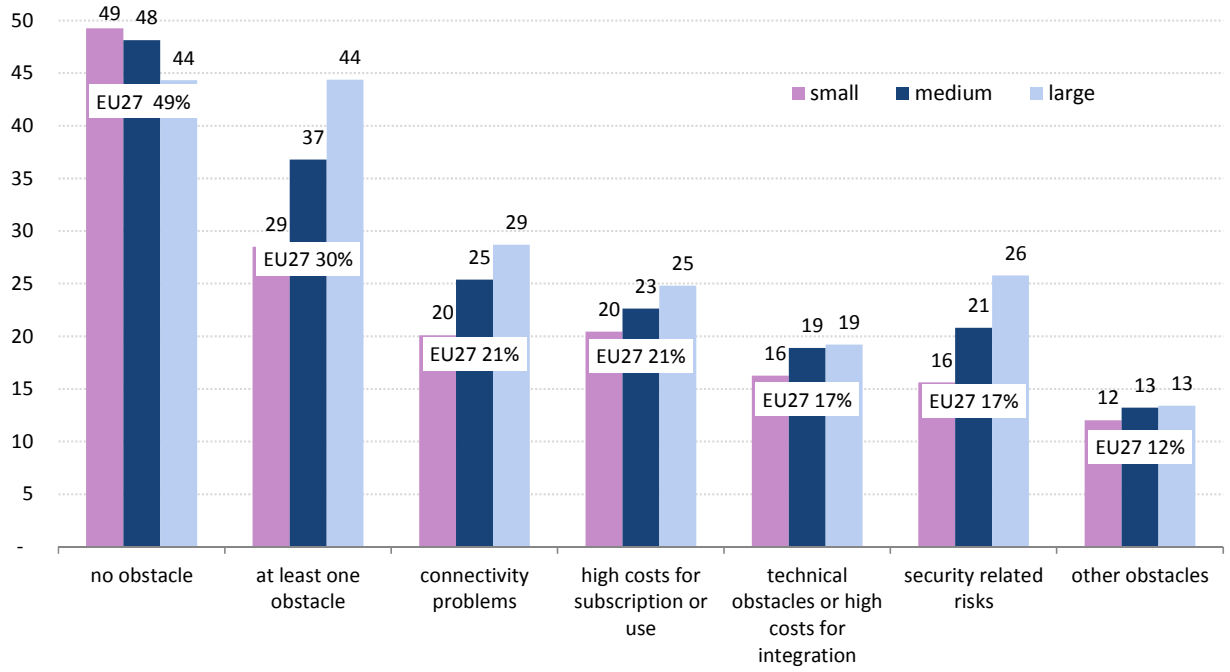
Some 12 % of enterprises reported **other obstacles** that may broadly concern a lack of skills or knowledge, adaptability to new working practices or legal barriers.

While 49 % of all EU enterprises did not consider **any of the above obstacles,** 30 % reported **at least one obstacle** that limited or prevented the business use of portable devices for a mobile telephone connection to the Internet.

To a certain extent, respondents' views of the obstacles vary according to enterprises' size.

S**mall** enterprises see **connectivity** problems and **high costs** for subscription or use of the Internet as the main limitations (both 20 %). **Large** enterprises see **connectivity** problems and **security-related risks** as more important (29 % and 26 % respectively).

Figure 4: Obstacles preventing or limiting the use of portable devices that allowed a mobile connection to the Internet, EU27, 2012 (% of enterprises)



Source: Eurostat (online data code: isoc_cimobe_obs)

Seven out of ten enterprises have a website but only one out of ten sells on the web

Enterprises consider it important to be visible on the Internet. Consequently, **websites** are increasingly offered by enterprises or by third parties on the enterprises' behalf for various purposes. Websites usually display information about the enterprise, a description of the products, links to social media or enterprises' privacy policy.

Specific e-commerce methods enable customers to buy more quickly and efficiently. These methods can be broadly divided into **web sales** and **EDI-type** sales referring to the way private customers or businesses place their orders.

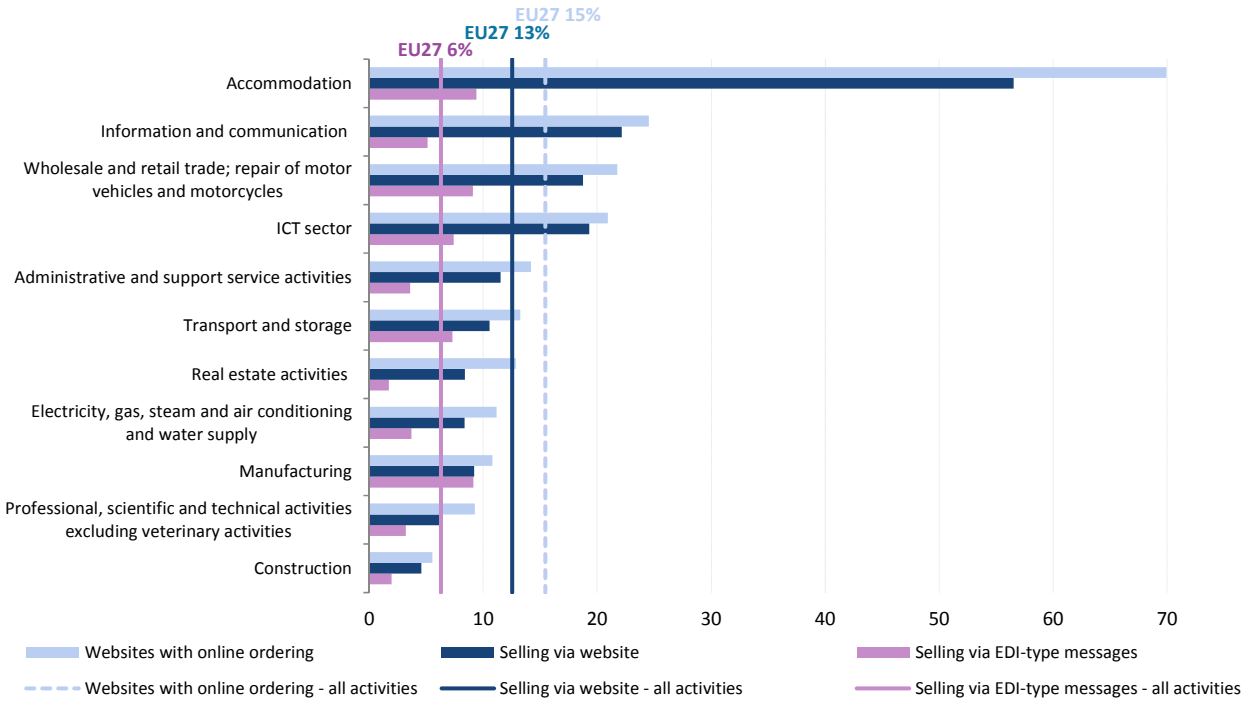
In particular, **websites** allow customers to purchase by placing their orders electronically **(web sales)**. In addition, enterprises may receive orders in a format that allows automated processing (**EDI-type sales**) using Electronic Data Interchange or Extensible Markup Language (XML) format for example.

In 2012, seven out of ten EU enterprises had a website or a homepage, but fewer than two out of ten (15%) had one that allowed customers to **order online**, or to make a **reservation** or a **booking** electronically (Figure 5).

The highest percentage of EU enterprises offering online shopping was for enterprises in the services sector 'Accommodation' (70%), followed some way behind by enterprises in the sector 'Information and communication' (24%).

In 2011, 13% of enterprises in the EU-27, conducted sales via a **website** and 6% of enterprises received orders via **EDI-type** messages.

Figure 5: Enterprises with electronic sales, having a website with online ordering, by economic activity, EU27, 2012 (% of enterprises)



Electronic sales refer to 2011
Source: Eurostat (online data codes: isoc_bde15dec, isoc_ci_cd_en2)

In particular, in 2011, almost six out of ten enterprises (56%) belonging to the 'Accommodation' sector received orders for products or services via a **website**.

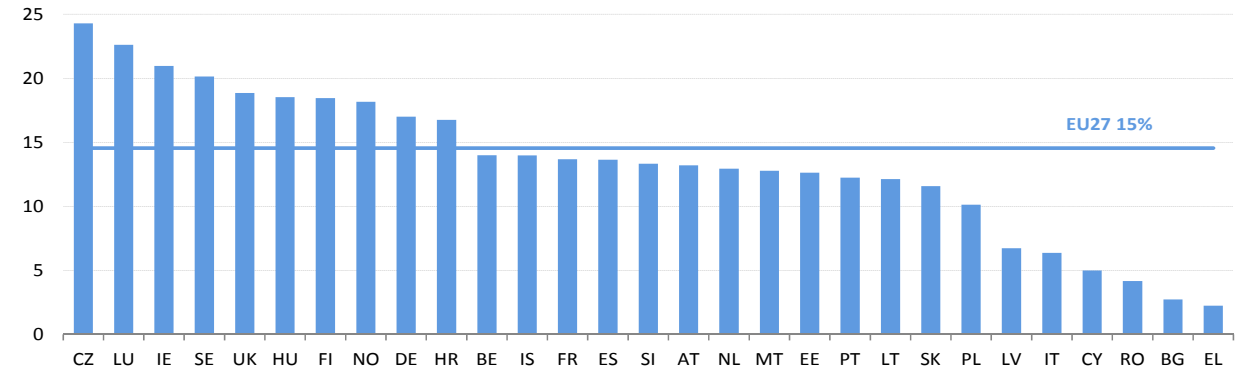
Additionally, 9% of enterprises in the 'Accommodation' sector received orders via **EDI-type** messages, the same as for enterprises in 'Wholesale and retail trade' and in 'Manufacturing' (both 9%).

The percentage of 'Manufacturing' enterprises that conducted e-sales via a **website** or via **EDI-type** messages was in both cases 9%, while in all other sectors it was mainly websites that were used for receiving orders.

Wide variation in the share of turnover from e-commerce within the EU

EU enterprises obtained 15 % of their total turnover from e-commerce in 2011, consisting of orders from a **website** or via **EDI-type** messages. However, the percentage varied widely between countries, from 5 % or less in Cyprus, Romania, Bulgaria and Greece, to 20 % or more in Sweden, Ireland, Luxembourg and the Czech Republic (Figure 6).

Figure 6: Enterprises' turnover from e-commerce, 2011 (% of total turnover)



DK, MK: unreliable data
Source: Eurostat (online data code: isoc_ec_evaln2)

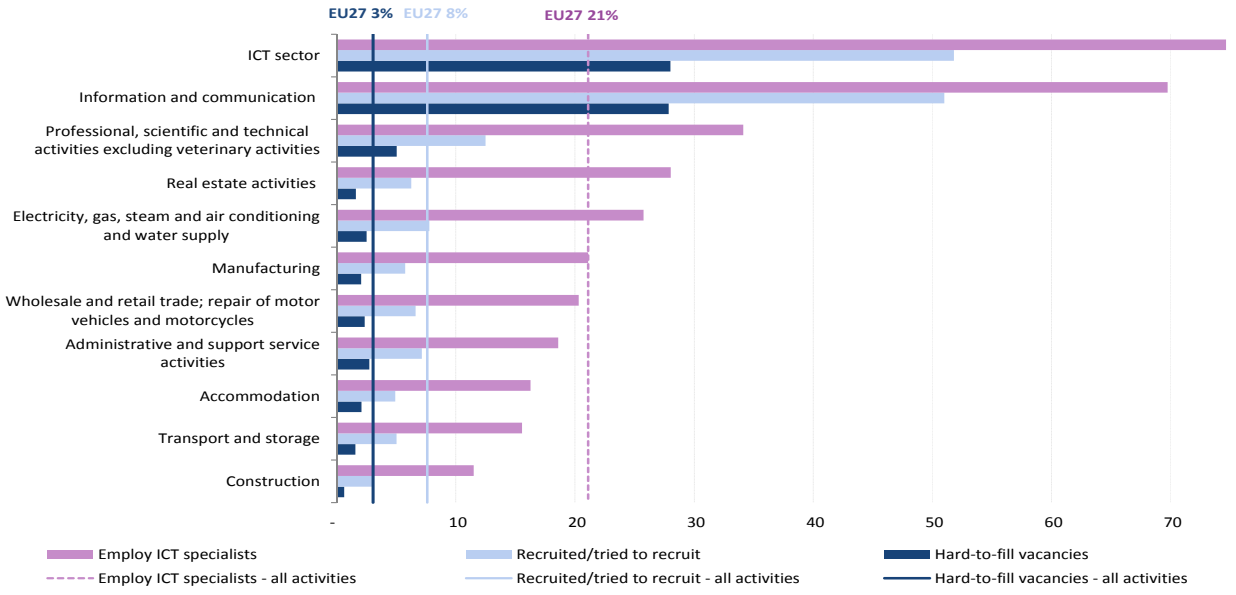
Almost one in ten enterprises recruited or tried to recruit an ICT specialist

ICT specialists are defined here as people who have ICT as their main job and hence are capable of dealing with a wide range of tasks concerning the enterprises' ICT systems.

In 2012, one out of five EU enterprises employed ICT specialists (21 %). In 2011, 8 % of enterprises recruited or tried to recruit and 3 % of enterprises reported having hard-to-fill vacancies for jobs requiring persons with relevant ICT skills. With reference to enterprises that recruited or tried to recruit ICT specialists in 2011, 40 % reported having hard-to-fill vacancies. The largest proportion of enterprises employing and recruiting ICT specialists, was in the 'ICT sector'.

The 'ICT sector' includes enterprises in all economic sectors with ICT relevant activities — mainly the 'Information and Communication' sector — and accounts for 4 % of all EU enterprises with at least 10 persons employed.

Figure 7: Enterprises employing, recruiting and having hard-to-fill vacancies for ICT specialists, EU27, 2012 (% of enterprises)



Figures on recruitment of ICT specialists and hard-to-fill vacancies refer to 2011
Source: Eurostat (online data codes: isoc_ske_itspen2, isoc_ske_itrcrn2)

METHODOLOGICAL NOTES

Source: Data presented in this publication are based on the results of the 2012 European Union survey on 'ICT usage and e-commerce in enterprises'. Statistics were obtained from enterprise surveys conducted by National Statistical Authorities in 2012. The surveys' reference period was January 2012 or for some questions the year 2011.

Sample size: In 2012, 143 000 out of 1.5 million enterprises in the EU27 were surveyed. Out of the 1.5 million enterprises approximately 83 % were enterprises with 10-49 persons employed (small), 14 % with 50-249 (medium) and 3 % with 250 or more (large).

Country codes: European Union (27 countries): Belgium (BE), Bulgaria (BG), the Czech Republic (CZ), Denmark (DK), Germany (DE), Estonia (EE), Ireland (IE), Greece (EL), Spain (ES), France (FR), Italy (IT), Cyprus (CY), Latvia (LV), Lithuania (LT), Luxembourg (LU), Hungary (HU), Malta (MT), the Netherlands (NL), Austria (AT), Poland (PL), Portugal (PT), Romania (RO), Slovenia (SI), Slovakia (SK), Finland (FI), Sweden (SE) and the United Kingdom (UK). Iceland (IS), Norway (NO), Croatia (HR), The former Yugoslav Republic of Macedonia (MK).

Symbols: Data in some tables are shown as ':' and refer to not available, unreliable, confidential or not applicable. Unreliable data are included in the calculation of European aggregates.

Main concepts: The observation statistical unit is the **enterprise**, as defined in the Council Regulation (EEC) No 696/93 of 15 March 1993. The survey covered **enterprises** with at least 10 persons employed.

Economic activities correspond to the classification NACE Revision 2. The sectors covered are manufacturing, electricity, gas and steam, water supply, construction, wholesale and retail trades, repair of motor vehicles and motorcycles, transportation and storage, accommodation and food service activities, information and communication, real estate, professional, scientific and technical activities, administrative and support activities and repair of computers and communication equipment.

The 'ICT sector' includes enterprises in the following detailed economic sectors 26.1-26.4, 26.8, 46.5, 58.2, 61, 62, 63.1 and 95.1. Enterprises are broken down by size; small (10-49), medium (50-249) and large enterprises (250 or more persons employed).

Enterprises that provide their staff with portable devices that allow a mobile connection to the Internet for business use are those that additionally pay for all, or at least up to a limit, of the subscription and the use costs.

A mobile connection to the Internet means the use of portable devices connecting to the Internet through **mobile telephone networks**.

Portable devices that allow a mobile connection to the Internet refer to **a)** portable computers (e.g. notebook, netbook, laptop, ultra-mobile PC (UMPC), tablet PC) and **b)** other portable devices such as a smartphone or PDA phone.

E-commerce refers to the placing of orders (an order is a commitment to purchase/sell goods or services) via computer networks. Payment and delivery are not necessarily made via computer networks. **E-commerce** may be effectively done via websites (which allow for online ordering or reservation or booking, e.g. a shopping cart) or via EDI-type messages. **EDI-type** (Electronic Data Interchange) e-commerce refers to structured transmission of data or documents between enterprises by electronic means allowing automated processing; it excludes normal e-mail messages.

Hard-to-fill vacancies refer to a range of situations in which enterprises find it hard to find persons with particular skills (hard-to-fill vacancies due to skill shortages).

Data presented in this Statistics in Focus could differ from the data in the database, due to updates made after the data extractions used for the publication.

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