

# Statistics in focus

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# The digital divide in Europe

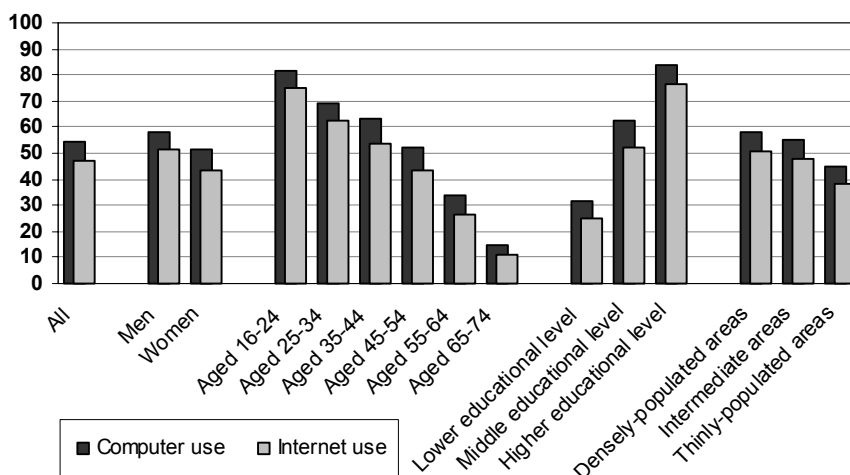
During the past decade, Information and Communications Technologies (ICTs) have become available, i.e. accessible and affordable, for the general public. However, a gap remains between users and non-users or between “haves” and “have-nots”. There are several reasons for this “digital divide”: from missing infrastructure or access, to missing incentives to use ICTs, to a lack of computer literacy or skills necessary to take part in the information society.

This edition of *Statistics in Focus* takes a closer look at the magnitude of this divide, at some possible explanations for its existence, and at whether the gap is narrowing.

## Highlights

- The digital divide is mainly a matter of age and education, whereas the gender gap is small. Among 16 to 24 year olds the proportion of computer or Internet users is three times higher than among persons aged 55 to 74. A similar degree of inequality is observed when comparing persons with higher education with the less educated.
- Looking at the degree of urbanisation, penetration by computers and Internet remains lower in thinly populated, rural areas of the EU.
- The presence of children in a household is a major factor in access to ICTs: the proportion of homes with a personal computer is 50% higher among households with children than for childless households. The same applies to home Internet connections and broadband.
- Despite increasing levels of ICT usage in all sections of society, the divide is not being bridged.
- Small businesses are catching up with larger enterprises when it comes to Internet access, mainly because penetration is reaching saturation point among the latter group.

**Graph 1 – Individuals’ use of computers and Internet (2004), EU-25**  
(as percentage of total number of individuals aged 16 to 74)



Source: Eurostat, Community survey on ICT usage in households and by individuals

Notes:

(i) “Use” means use in the three months preceding the interview.

(ii) EU-25: excluding BE, FR and MT ; educational level: excluding BE, FR, MT and NL; degree of urbanisation: excluding BE, FR, IE, MT and NL and estimates for PL and UK.

## Presence of children is a major factor in household access to ICTs

In 2004 on average 54% of the households in the EU had a personal computer at home (Table 1), while 43% had a home Internet connection. About one in three connected households had a broadband connection to the Internet (15% compared to 43%).

As expected, the presence of children in the household has a big impact on the take-up of ICTs. A personal computer can be found in 70% of all homes with children but in only 46% of all childless households. Similar gaps are also observed for possession of an Internet connection or a broadband connection.

Big differences are observed between countries: while more than two out of every three households had a PC and more than half had Internet in Denmark, Germany, Luxembourg, the Netherlands, the UK, Iceland and Norway, under one in three had a PC and under one in six had Internet in Latvia, Lithuania, Hungary, Bulgaria, Romania and Turkey. In the last three – all candidate countries – penetration by PCs or Internet at home is below the lowest rate observed among the Member States.

Looking at the regional dimension, we see that the degree of urbanisation is an important factor in access to, or use of, ICTs. Penetration by computers and, especially, the Internet remains lower in thinly

populated, rural areas throughout the European Union. Furthermore, there appears to be a divide not only between haves and have-nots but also within the haves, where a divide between have-more and have-less groups can be observed. In rural areas, only about one in four connected households has a broadband connection. The availability of broadband technology in remote areas probably plays a role in this discrepancy. A similar phenomenon is observed when comparing economically prosperous regions with relatively poorer regions (regions where development is lagging behind and which are eligible for support from the EU's Structural Funds under Objective 1, i.e. regions where per capita GDP is below 75% of the EU average). Internet penetration is almost twice as high (55% compared to 29%) in the relatively prosperous regions of the Union.

Based on data collected in 14 countries (AT, CY, DK, EL, LV, LU, HU, NL, PL, PT, SI, SK, TR and NO), the main reasons why people did not have Internet at home in 2004 appear to be that the access and/or equipment costs are too high and they lack the skills to use the Internet (unfortunately, as income data are missing for most countries, this aspect could not be further analysed). Factors such as security or privacy concerns tend to play a less significant role.

**Table 1 – Households' access to ICTs (2004)**  
(as percentage of total number of households with at least one member aged 16 to 74)

	EU25	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	NL	AT	PL	PT	SI	SK	FI	UK	BG	RO	TR	IS	NO
<b>Personal computer at home</b>																												
All households	54	30	79	69	36	29	52	50	46	47	47	26	27	67	32	74	59	36	41	58	39	57	65	15	12	10	86	72
With dependent children	70	51	:	91	52	43	:	:	61	62	52	38	44	76	60	:	80	52	61	84	50	85	82	22	:	11	94	92
Without dependent children	46	17	:	62	21	19	:	:	34	40	43	19	13	60	18	:	51	22	26	34	30	48	57	11	:	8	74	62
Densely-populated areas	58	33	81	70	44	39	59	53	:	51	52	32	41	61	40	74	59	42	48	64	48	59	63	:	:	:	n/a	74
Intermediate areas	57	28	82	67	n/a	26	50	54	:	45	54	23	n/a	70	36	74	59	:	38	61	39	56	74	:	:	:	87	71
Thinly-populated areas	44	27	75	67	33	22	41	43	:	41	38	20	18	76	25	73	58	25	32	54	35	52	62	:	:	:	83	71
In Objective1 regions	42	28	n/a	63	36	29	47	:	46	42	n/a	26	27	n/a	32	78	55	36	41	58	:	48	61	n/a	n/a	n/a	n/a	n/a
Outside Objective1 regions	64	42	79	70	n/a	n/a	59	:	n/a	50	47	n/a	n/a	67	n/a	74	59	n/a	n/a	n/a	:	59	66	n/a	n/a	n/a	n/a	n/a
<b>Internet connection at home</b>																												
All households	43	19	69	60	31	17	34	34	40	34	53	15	12	59	14	65	45	26	26	47	23	51	56	10	6	7	81	60
With dependent children	55	33	:	82	46	23	:	:	51	43	57	22	18	66	25	:	62	34	39	67	29	77	71	14	:	7	91	84
Without dependent children	38	11	:	53	17	12	:	:	30	30	49	10	6	53	9	:	38	19	16	28	19	42	48	8	:	6	66	49
Densely-populated areas	46	24	72	61	41	23	40	37	:	38	57	20	20	50	24	64	47	31	32	44	31	53	53	:	:	:	n/a	60
Intermediate areas	46	20	72	59	n/a	19	31	38	:	32	54	11	n/a	62	16	65	42	:	24	54	23	49	65	:	:	:	82	61
Thinly-populated areas	32	15	65	59	26	12	22	26	:	27	45	10	6	72	7	66	44	15	18	43	21	45	54	:	:	:	77	60
In Objective1 regions	29	17	n/a	51	31	17	27	:	40	29	n/a	15	12	n/a	14	65	39	26	26	47	:	40	48	n/a	n/a	n/a	n/a	n/a
Outside Objective1 regions	55	35	69	62	n/a	n/a	42	:	n/a	37	53	n/a	n/a	59	n/a	65	45	n/a	n/a	n/a	:	54	57	n/a	n/a	n/a	n/a	n/a
<b>Broadband connection at home</b>																												
All households	15	4	36	18	20	>1	15	:	3	:	2	5	4	16	6	31	16	8	12	10	4	21	16	4	:	0	45	30
With dependent children	18	7	:	26	29	0	:	:	4	:	2	7	6	18	11	:	20	11	18	15	4	36	22	6	:	:	55	40
Without dependent children	12	3	:	16	12	0	:	:	2	:	2	4	2	15	3	:	14	5	8	6	3	16	13	3	:	:	32	26
Densely-populated areas	19	8	41	20	33	0	20	:	:	:	4	9	7	13	11	36	26	12	20	15	7	25	18	:	:	:	n/a	43
Intermediate areas	16	3	40	18	n/a	0	14	:	:	:	0	2	n/a	19	6	29	14	:	7	14	3	18	15	:	:	:	54	34
Thinly-populated areas	8	2	26	13	15	0	6	:	:	:	1	2	1	19	2	25	9	1	4	5	2	12	9	:	:	:	32	23
In Objective1 regions	8	3	n/a	10	20	0	12	:	3	:	n/a	5	4	n/a	6	30	12	8	12	10	:	16	9	n/a	n/a	n/a	n/a	n/a
Outside Objective1 regions	21	12	36	20	n/a	n/a	19	:	n/a	:	2	n/a	n/a	16	n/a	31	16	n/a	n/a	n/a	:	23	17	n/a	n/a	n/a	n/a	n/a

Source: Eurostat, Community survey on ICT usage in households and by individuals.

Notes: (i) Data not available for BE, MT and SE. (ii) Percentages for EU-25 are based on the available EU countries; different subsets of countries may have been used depending on the subject or breakdown. (iii) Degree of urbanisation: estimates for PL (non-comparable two-category breakdown) and UK (degree of urbanisation only available for 87% of the sampled households).

## Computer and Internet usage in Estonia and Slovakia already around EU average

While the previous section focused on access, now we will take a closer look at ICT usage. Table 2 below and Graph 1 on the front page teach us that, on average, 55% of citizens in the 16 to 74 age group use computers while some 47% use the Internet and 17% buy goods or services on line. However, when looking at the different subgroups of society, deep divides emerge.

There seems to be no significant gender gap. In Ireland, Finland and the Baltic countries the percentage of computer or Internet users is even almost identical for men and women. Age plays a major role in the digital divide: 75% of individuals aged under 24 use the Internet against only 11% in the oldest age group (64 to 74 years). Graph 2 indicates that the small gap between

men and women is mainly due to lower proportions for older women than for men in the same age group. With increasing age, use of computers and the Internet gradually decreases, but among citizens aged over 54 the decrease appears to be particularly sharp (see Graph 1). This can partly be explained by the fact that people in these age groups might lack the skills to use modern tools. Also, a significant proportion of this group might have left the labour market (and their work access to ICTs).

Going into the breakdown by employment situation, take-up of ICTs is highest among students and lowest among retired persons. Although much lower than the figures for employees, those for the unemployed seem to be only slightly below the overall average.

**Table 2 – Individuals' use of computers, Internet and e-commerce (2004)**  
(as percentage of total number of individuals aged 16 to 74)

	EU-25	CZ	DK	DE	EE	EL	ES	IE	IT	CY	LV	LT	LU	HU	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	RO	TR	IS	NO
<b>Computer use</b>																												
All individuals	55	42	81	70	53	26	49	41	39	42	41	37	74	41	:	60	40	37	48	58	75	86	69	23	16	17	85	79
Men	58	45	83	73	53	29	54	41	45	45	41	37	83	44	:	65	41	40	51	61	75	86	72	23	17	23	86	82
Women	51	39	80	66	54	23	44	41	34	40	41	37	66	38	:	55	39	34	46	55	75	85	66	23	15	10	84	77
Aged 16 to 24	82	78	94	96	82	55	83	53	69	77	79	83	96	79	:	85	78	73	82	82	97	99	85	50	33	32	98	96
Aged 25 to 34	69	53	92	89	68	36	67	51	55	58	56	44	84	55	:	80	52	54	72	69	94	95	85	31	20	20	93	89
Aged 35 to 44	63	52	89	83	66	32	56	48	47	44	46	36	82	47	:	69	39	38	57	68	89	92	78	25	17	13	91	91
Aged 45 to 54	52	42	84	74	44	19	40	38	38	29	31	26	78	32	:	59	29	29	41	60	75	87	72	18	12	8	84	82
Aged 55 to 64	34	22	73	48	28	5	21	21	18	14	15	11	58	17	:	35	16	13	12	21	62	77	52	7	4	2	67	63
Aged 65 to 74	15	3	41	25	11	1	6	7	4	5	3	3	22	3	:	12	4	4	4	7	19	55	27	1	1	0	40	33
Lower educated	31	31	71	59	43	7	23	22	18	18	24	33	52	24	:	39	34	22	25	28	58	74	36	10	1	6	78	50
Middle educated	62	40	82	70	48	38	72	48	63	44	38	27	84	63	:	64	36	83	50	66	78	84	76	20	14	38	86	80
Higher educated	84	82	95	84	72	58	86	66	79	74	73	49	92	81	:	83	79	92	91	84	92	96	91	51	58	70	98	93
Employees	70	54	88	84	64	37	64	52	54	49	51	44	85	54	:	73	53	48	63	68	87	90	81	30	26	34	87	89
Unemployed	47	22	78	66	30	20	43	18	38	53	15	12	49	26	:	54	30	23	29	31	68	87	63	9	10	22	:	73
Students	92	94	97	98	93	70	95	68	84	93	89	98	99	95	:	96	91	96	94	89	97	98	93	70	58	64	99	99
Retired	18	6	43	31	7	1	9	13	9	8	3	2	41	6	:	20	10	6	7	9	26	51	28	2	2	4	36	41
Densely-populated areas	58	48	86	71	57	36	56	:	43	49	47	49	71	53	:	63	48	44	60	65	79	93	67	:	:	:	n/a	89
Intermediate areas	55	40	83	69	n/a	25	46	:	37	43	32	n/a	74	45	:	63	:	33	51	57	72	87	75	:	:	:	88	81
Thinly-populated areas	45	38	75	68	52	20	38	:	33	30	36	28	79	32	:	57	26	29	42	56	64	83	68	:	:	:	80	75
<b>Internet use</b>																												
All individuals	47	32	76	61	50	20	40	34	31	32	33	29	65	28	69	52	29	29	37	46	70	82	63	16	12	13	82	75
Men	51	34	79	65	50	23	45	34	37	36	34	30	74	30	74	58	30	32	39	51	70	83	67	17	13	19	84	79
Women	43	29	73	57	51	16	36	33	26	28	33	29	57	26	63	46	28	27	35	42	71	80	59	15	12	8	81	71
Aged 16 to 24	75	64	92	92	81	41	75	44	58	64	69	72	88	67	91	78	66	64	71	73	96	97	83	40	29	27	97	94
Aged 25 to 34	62	40	86	85	66	29	58	43	46	44	47	35	75	36	83	73	37	43	60	55	93	93	80	23	15	16	93	90
Aged 35 to 44	54	39	86	74	60	25	44	40	37	32	36	26	75	27	78	59	22	30	35	52	85	89	69	15	12	9	89	85
Aged 45 to 54	43	29	78	61	41	12	30	29	28	19	22	18	67	21	68	47	19	20	29	46	68	82	63	10	9	6	80	78
Aged 55 to 64	27	14	65	36	25	3	14	15	12	10	9	8	49	9	49	27	10	8	10	14	53	69	42	3	3	2	62	54
Aged 65 to 74	11	2	30	17	10	1	3	6	3	4	2	2	15	2	21	9	2	2	1	5	12	49	23	1	0	0	33	22
Lower educated	25	24	64	51	42	4	16	16	13	13	19	27	41	13	:	32	28	14	16	22	54	70	28	7	1	4	75	43
Middle educated	52	28	76	61	45	28	61	38	51	30	29	21	75	45	:	54	23	73	36	52	71	79	69	14	10	30	84	74
Higher educated	77	74	91	76	69	48	77	59	71	61	64	38	87	68	:	78	67	84	84	76	89	94	87	37	50	60	96	91
Employees	60	39	83	74	59	28	52	42	42	35	41	33	76	33	82	63	36	37	48	53	82	86	74	19	19	27	85	85
Unemployed	40	14	65	57	32	13	37	17	29	49	10	8	42	17	76	43	17	15	19	24	62	86	51	6	8	21	:	63
Students	85	81	96	94	92	55	90	57	74	81	79	87	94	87	90	93	81	91	86	83	97	96	94	58	51	53	100	99
Retired	13	3	34	23	7	1	6	11	6	7	2	1	32	3	54	15	6	3	4	6	20	45	24	1	1	3	29	33
Densely-populated areas	51	39	81	62	51	27	47	:	35	40	39	40	63	42	72	57	36	36	52	56	75	90	61	:	:	:	n/a	85
Intermediate areas	48	31	78	61	n/a	23	37	:	29	31	22	n/a	65	28	68	54	:	25	39	44	65	79	68	:	:	:	86	77
Thinly-populated areas	38	26	69	60	50	15	30	:	25	19	28	21	70	18	64	48	16	21	30	46	60	79	60	:	:	:	76	70
<b>E-commerce</b>																												
All individuals	17	3	22	29	4	1	5	10	:	3	2	1	32	2	24	13	3	3	4	6	24	30	28	1	0	0	25	31

Source: Eurostat, Community survey on ICT usage in households and by individuals.

Notes: (i) Data not available for BE, FR and MT. (ii) Percentages for EU-25 are based on the available EU countries; different subsets of countries may have been used depending on the subject or breakdown. (iii) Degree of urbanisation: estimates for PL (non-comparable two-category breakdown) and UK (degree of urbanisation only available for 87% of the sampled households).

Among highly educated persons in the EU (i.e. persons who have completed tertiary education), use of computers and the Internet is, respectively, 2.5 and 3 times higher than among the less educated (i.e. persons with no more than lower secondary education at most). Within each educational level, the profiles for men and women are comparable, but amongst the less educated, men score much higher on use of computers, Internet and e-commerce than their female counterparts (see Graph 3).

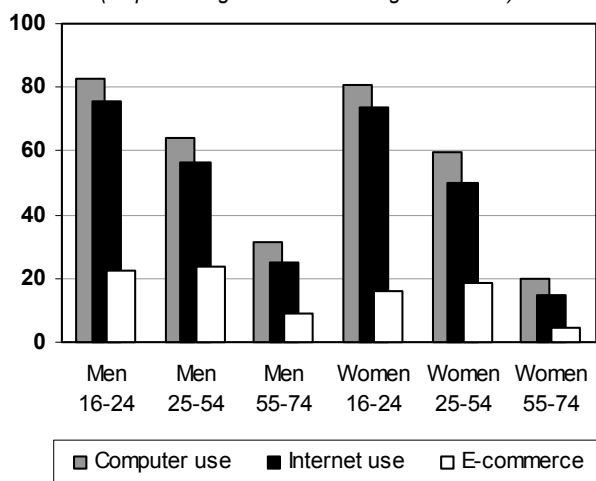
Use of computers and Internet is highest in the Nordic countries - especially in Sweden and Iceland on more than 80% - while the lowest rates are reported in the candidate countries (Bulgaria, Romania and Turkey). Within the EU, Internet use drops below 25% in only one Member State, Greece. In most of the new Member States, about one in three individuals uses the Internet.

However, in Slovakia and Estonia Internet use lies around 50%.

About one in six EU citizens shops on line (Table 2), but participation in e-commerce appears to be particularly high in Luxembourg (32%), Sweden (30%), Germany (29%) and the UK (28%). In none of the new Member States does use of e-commerce exceed 7%. The same is also true of Spain, Portugal and Greece.

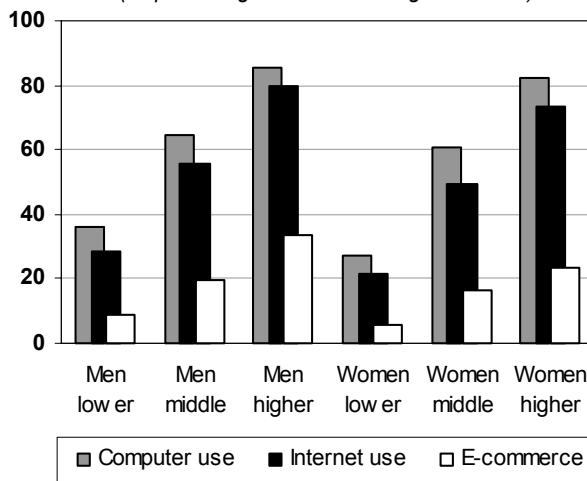
Looking at the regional aspect, i.e. the degree of urbanisation, the digital divide between urban and rural areas is 13 percentage points, both for computer use and for Internet use. The divide is wider than the EU average in the southern countries (Greece, Spain, Portugal and Italy) and in the new Member States (but Slovakia and Estonia are again the exception).

**Graph 2 – Individuals' use of computers and Internet (2004), by gender and age group, EU-25**  
(as percentage of individuals aged 16 to 74)



Source: Eurostat, Community survey on ICT usage in households and by indiv.  
Note: EU-25: excluding BE, FR and MT (computer use: excluding NL; e-commerce: excluding IT).

**Graph 3 – Individuals' use of computers and Internet (2004), by gender and educational level, EU-25**  
(as percentage of individuals aged 16 to 74)



Source: Eurostat, Community survey on ICT usage in households and by indiv.  
Note: EU-25: excluding BE, FR, MT and NL (e-commerce: excluding IT).

## One in four Internet users connect only at places other than their home

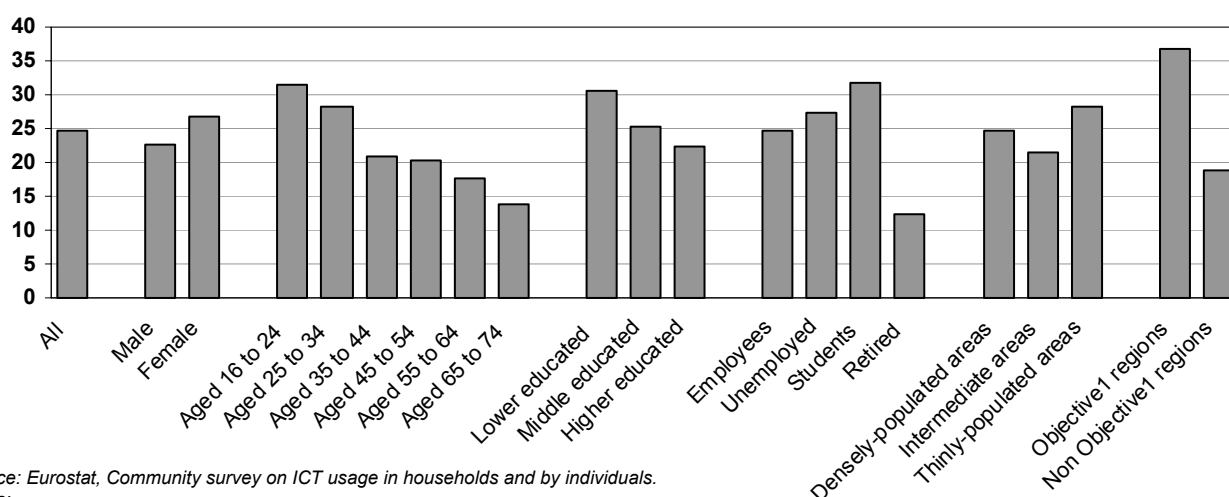
One frequently quoted cause of the digital divide is the threshold in terms of access to ICTs (availability as well as costs). One way round this barrier is, for example, to use the Internet at places other than home, for instance in the office, at school or in public places.

From Graph 4 we can see that almost one in four users only use the Internet outside their home (most probably because they have no home connection). For some segments of society who are generally considered to be relatively more deprived of the information society, other places offer the possibility to go on line. This is clearly the case for people living in economically poorer Objective 1 regions and for less educated people. Even for the unemployed access outside the home appears to

be important although this group, by definition, has no access at the workplace (the most common alternative place for Internet access, see Table 3). Table 3 (first row) also shows that in Latvia, Lithuania, Slovakia and the candidate countries, fewer than half of Internet users connect at home compared with more than six out of seven users in Denmark, Germany, Luxembourg and the Netherlands.

Older age groups - and especially retired persons - are less inclined to use the Internet outside their home environment, but more than three in ten in the youngest age group access the Internet only at places other than home.

**Graph 4 – Internet users accessing the Internet only outside their home (2004), EU-25**  
(as percentage of Internet users aged 16-74)



Source: Eurostat, Community survey on ICT usage in households and by individuals.

Notes:

Percentages for EU-25 are based on the available EU countries; different subsets of countries may have been used depending on the subject or breakdown.

Degree of urbanisation: estimates for PL (non-comparable two-category breakdown) and UK (degree of urb. only available for 87% of the sampled households)

Looking in more detail at where EU citizens access the Internet (Table 3), home access predominates (75% of Internet users), followed by the place of work (41%). The highest proportion of individuals accessing the Internet at work is recorded in Denmark (70%) which is not surprising considering that Denmark has the highest level of Internet penetration in enterprises (see Table 4). Taking into account that only a small proportion of the population is still at school, access at a place of education seems relatively high (17%). Amongst other places of Internet access, use of neighbours', friends' or relatives' Internet connection tends to be the most popular (20%). In terms of the digital divide, it is more meaningful to see to what extent certain places are the only means of access to the Internet as this can be taken as an indicator of how far they can help to include more citizens in the information society, in other words to narrow the digital divide (second part of Table 3). Only a few alternative places seem to make a significant

contribution – namely place of work (9%), place of education (2%) and neighbours', friends' or relatives' home (3%) – which means that the abovementioned 25% of individuals who are not accessing the Internet at home generally have more than one alternative entry to the Internet. The pattern across Member States is, however, varied. For instance, in Slovakia – a country with a relatively high percentage of Internet users (see Table 2) but a low home access penetration rate – almost one in three Internet users (32%) declare their place of work as the only place of access.

The table shows that in the EU about 7% of the Internet users do so in Internet cafés, but very few (1%) exclusively. However, in Bulgaria and Turkey more than 40% of Internet users go to Internet cafés. In Turkey, this is the only place where the Internet is accessed for almost two thirds of the Internet users.

**Table 3 – Internet users access to the Internet (2004), by place of access and by only place of access**  
(as percentage of Internet users aged 16 to 74)

	EU-25	CZ	DK	DE	EE	EL	ES	IE	IT	CY	LV	LT	LU	HU	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	RO	TR	IS	NO
<b>Place of accessing the Internet</b>																												
Home	75	63	89	86	64	60	63	67	68	70	33	37	90	52	89	72	52	58	70	48	70	85	81	41	39	32	79	83
Place of work	41	45	70	30	41	45	44	44	47	45	52	42	41	36	47	47	30	50	54	56	53	45	47	40	35	41	50	54
Place of education	17	24	16	14	25	21	19	14	13	18	21	38	11	24	11	10	27	25	22	23	22	14	17	14	18	9	16	17
Other people's place	20	:	9	20	20	8	:	4	:	18	23	26	10	23	3	6	29	20	:	16	24	:	27	16	17	11	:	:
Public library	7	:	4	:	11	2	:	3	:	1	4	10	:	10	:	0	3	9	:	5	14	:	9	2	1	:	:	:
Internet café	7	:	1	4	11	10	:	3	:	10	15	17	3	10	2	1	19	3	:	21	5	:	8	43	35	41	:	:
<b>Unique place of accessing the Internet</b>																												
Only at home	34	:	31	45	28	27	:	39	29	28	7	12	46	20	:	39	25	0	19	48	19	37	29	16	:	16	34	27
Only at place of work	9	:	7	5	11	21	:	20	17	18	18	20	6	15	:	18	12	1	17	32	11	9	6	19	:	24	16	8
Only at place of education	2	:	1	1	3	9	:	7	2	3	5	11	2	6	:	3	7	0	1	11	1	2	2	1	:	2	2	2
Only at other people's place	3	:	1	3	5	1	:	2	:	3	4	4	:	:	:	3	7	0	:	2	3	:	3	2	:	2	:	:
Only at public library	0	:	0	:	1	0	:	1	:	:	0	0	:	:	:	:	0	:	:	0	1	:	1	0	:	:	:	:
Only at Internet café	1	:	0	0	1	3	:	1	:	1	2	3	:	:	:	0	3	:	:	4	0	:	0	19	:	26	:	:

Source: Eurostat, Community survey on ICT usage in households and by individuals.

Notes: (i) Data not available for BE, FR and MT. (ii) Percentages for EU-25 are based on the available EU countries; different subsets of countries may have been used depending on the subject or breakdown. (iii) Degree of urbanisation: estimates for PL (non-comparable two-category breakdown) and UK (degree of urbanisation only available for 87% of the sampled households)

## In every country more than 90% of large enterprises have Internet access

Although the digital divide usually means a gap in participation in the information society between different groups of persons, the discussion can be expanded to the business environment. On average, 89% of European enterprises with 10 or more employees have an Internet connection. Comparing countries across Europe, no large deviations are observed. In general, Internet penetration tends to be lower in the new Member States and in the Mediterranean countries. For the Mediterranean group, the structure of the economy – typically with large numbers of small enterprises – certainly affects take-up of the Internet by businesses.

Virtually all large enterprises (with 250 or more employees) in the EU are now connected to the Internet. Even in European countries with low overall penetration rates, more than 90% of large enterprises have Internet. Among small businesses (10 to 49

employees), 87% have an Internet connection and in every EU Member State at least two out of every three small businesses are connected. Within the group of small businesses connected to the Internet, about 30% make purchases on line. Among large enterprises this percentage climbs to 45%, which could be explained by the fact that larger enterprises generally have more advanced networks, allowing systems such as EDI.

On-line purchases by enterprises feature prominently in Germany and the UK where half of the businesses with an Internet connection tend to purchase goods or services on line. However, at EU level, only 27% of enterprises have used this facility, with large differences both between countries and depending on the size of the enterprises. Almost half of all large enterprises purchase on line, but only one in four small businesses and one in three medium-sized firms.

**Table 4 – Enterprises' access to Internet (2004) and on-line purchases (2003), by size of enterprise.**  
(as percentage of total number of enterprises)

	EU-25	BE	CZ	DK	DE	EE	EL	ES	IE	IT	CY	LV	LT	LU	HU	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	RO	NO
<b>Enterprises having Internet access</b>																											
All enterprises (10 empl. or more)	89	96	90	97	94	90	87	87	92	87	82	74	81	90	78	88	94	85	77	93	71	97	96	87	62	52	86
Small (10-49 employees)	87	95	88	97	93	89	86	86	90	86	79	70	77	88	75	87	93	81	73	91	67	97	95	84	57	45	84
Medium-sized (50-249 employees)	97	99	97	99	99	96	97	95	98	97	98	91	91	96	87	95	99	98	95	98	91	99	99	97	77	67	94
Large (250 employees or more)	99	99	99	100	100	98	100	99	100	98	100	96	99	94	97	97	100	100	100	100	98	99	100	99	94	90	96
<b>Enterprises having purchased over the Internet or via other networks</b>																											
All (10 employees or more)	27	41	19	28	47	32	14	3	33	:	14	1	13	34	14	22	22	9	8	17	3	19	38	50	4	:	27
Small (10-49 employees)	25	38	19	27	44	30	13	3	32	:	14	1	13	32	14	20	21	8	6	16	3	18	37	47	4	:	26
Medium-sized (50-249 employees)	34	50	20	32	58	38	20	3	35	:	16	1	14	39	17	26	23	11	15	17	3	19	45	61	4	:	34
Large (250 employees or more)	45	61	20	:	61	57	24	6	51	:	14	1	14	56	26	39	34	16	22	33	5	32	57	73	6	:	37

Source: Eurostat, Community survey on ICT usage and e-commerce in enterprises.

Notes: EU-25 for Internet access: excluding FR and MT; EU-25 for on-line purchases: excluding FR, IT and MT.

## ICT take-up increasing in all groups, but not yet converging

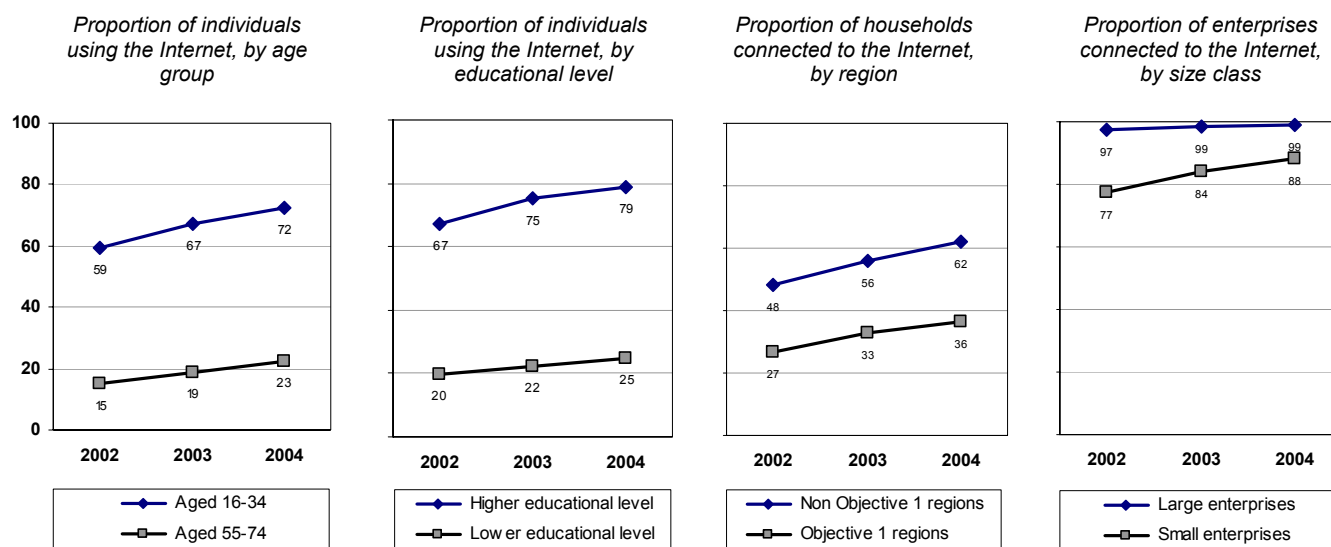
So far, we have looked at the digital divide between privileged and less privileged groups in society in 2004. Graph 5 shows the degree of convergence between the different subpopulations, in other words the evolution of the gap over time by comparing the 'upper' and 'lower' subgroups for selected points.

For households and individuals, the results show that, although Internet use is growing within all of the groups considered (younger versus older, less educated versus highly educated, poorer versus more prosperous regions), the difference or gap between groups tends to remain stable over time in terms of percentage points. However, as the probability of being an Internet user rather than a non-user is growing at a slower pace in

the disadvantaged groups, the relative divide is actually widening. Younger and highly educated persons and households in economically more prosperous regions are thus further consolidating their leading position in the information society.

Among enterprises, the gap between small and large enterprises is closing in terms of percentage points, partly because large enterprises are close to saturation point. Nevertheless, small businesses without Internet connections are still moving into the group of connected enterprises more slowly than large enterprises – although the latter are much closer to saturation point – meaning the divide is not yet narrowing.

Graph 5 – Evolution of the digital divide (2002, 2003, 2004)



Source: Eurostat, Community survey on ICT usage in households and by individuals and Community survey on ICT usage and e-commerce in enterprises.  
 Note: Figures are based on a subset of countries for which data are available for all three years (Graph 5A: DK, DE, EL, ES, IT, LU, NL, AT, PT, FI, SE and UK ; Graph 5B: DK, DE, EL, ES, IT, LU, AT, PT, SE and UK ; Graph 5C: DK, DE, EL, LU, PT and FI ; Graph 5D: DK, DE, EL, ES, IE, IT, NL, AT, PT, FI, SE, UK and NO)

## ➤ ESSENTIAL INFORMATION – METHODOLOGICAL NOTES

### ABBREVIATIONS

EU or EU-25 (European Union, including the 25 Member States);  
 BE (Belgium), CZ (Czech Republic), DK (Denmark),  
 DE (Germany), EE (Estonia), EL (Greece), ES (Spain),  
 FR (France), IE (Ireland), IT (Italy), CY (Cyprus), LV (Latvia),  
 LT (Lithuania), LU (Luxembourg), HU (Hungary), MT (Malta),  
 NL (Netherlands), AT (Austria), PL (Poland), PT (Portugal),  
 SI (Slovenia), SK (Slovakia), FI (Finland), SE (Sweden),  
 UK (United Kingdom);  
 BG (Bulgaria), RO (Romania), TR (Turkey);  
 IS (Iceland), NO (Norway).

### SYMBOLS

“.” confidential or unavailable  
 “n/a” not applicable

### AGGREGATION OF RESULTS

An EU-25 aggregate is calculated only if the available countries represent at least 55% of the number of Member States and at least 60% of the EU population.

DATA EXTRACTED ON: 26/08/2005 (Graph 5D: 15/04/2005).

### COMMUNITY SURVEY ON ICT USAGE IN HOUSEHOLDS AND BY INDIVIDUALS (2004)

Survey period: in general, the second quarter of 2004 (SK: January 2005).  
 Sample size: 141 219 households and 204 029 individuals in all respondent countries were surveyed.

Scope (individuals): individuals in the 16 to 74 age group;

Scope (households): households with at least one member in the age group 16 to 74.

Weighting of the results: by the number of households or individuals.

Educational level:

Lower: ISCED 0, 1 or 2 (no formal education, primary education or lower secondary education);

Middle: ISCED 3 or 4 (upper secondary or post-secondary non-tertiary education);

Higher: ISCED 5 or 6 (tertiary programmes which normally require successful completion of ISCED 3 or 4, or second stage tertiary education that leads to an advanced research qualification).

Notes:

“Individuals’ use or access” generally means use or access in the three months prior to the survey.

### COMMUNITY SURVEY ON ICT USAGE AND E-COMMERCE IN ENTERPRISES (2004)

Survey period: in general, the first quarter of 2004.

Sample size: 105 998 enterprises in all respondent countries were surveyed.

Scope: enterprises with 10 persons employed or more in selected activities (see below).

Activities covered: enterprises in the following categories of the NACE Rev. 1.1 classification:

Section D – Manufacturing;

Section F – Construction;

Section G – Distributive trades;

Section H, Groups 55.1 and 55.2 – Hotels and accommodation;

Section I – Transport, storage and communication;

Section K – Real estate, renting and business activities;

Section O, Groups 92.1 and 92.2 - Motion picture, video, radio and television activities.

For a full overview of the NACE, see RAMON, Eurostat’s classification server: <http://europa.eu.int/comm/eurostat/ramon>.

Weighting of the results: by the number of enterprises.

## Further information:

Databases: [EUROSTAT Website/Home page/Data](#)

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  - [-]  **Information society statistics**
  
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Eurostat set up with the members of the 'European statistical system' a network of support centres, which will exist in nearly all Member States as well as in some EFTA countries.

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