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SIBIS

SIBIS Pocket Book 2002/03

Measuring the Information Society in the EU, the EU Accession Countries, Switzerland and the US

This booklet has been prepared by empirica Gesellschaft für Kommunikations- und Technologieforschung mbH, Bonn (Germany) in the context of the IST-26276-SIBIS project ("SIBIS Statistical Indicators Benchmarking the Information Society") in co-operation with the other partners in the project.

All publications of the SIBIS project – including this booklet – are available in electronic format on the Internet at:
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FOREWORD

For some years now statistical indicators on the Information Society have been central in the policy making process. This has been best demonstrated through the benchmarking exercise of the eEurope 2002 Action Plan, and its further inclusion as a key activity in eEurope 2005. Having recognised this need and driven by the difficulties in obtaining reliable and appropriate statistics, the IST programme supported a pan-European research effort during Framework Programme 5. The prime objective has been to develop and make available methodologies, tools and new statistical indicators which can help remedy the deficit in this field.

It is in this context that the SIBIS project was launched (IST-26276, "Statistical Indicators Benchmarking the Information Society", www.sibis-eu.org). This document, "SIBIS Pocket Book 2002/03", presents the project's main indicators and statistics so far.

There are at least two main reasons that make this document interesting. First, it is one of the few original attempts to have a coherent and comprehensive approach in measuring the Information Society. As such it is expected to stimulate further debate and research among the professional statistical community, leading to an improved statistical competence in Europe. Second, it provides a unique single source of data in real time which supports many of the new IST research areas, at the launch of Framework Programme 6.

Building on the original SIBIS research, in particular on the results of the indicator surveys, the project has also produced 9 Topic Reports, selected from those addressed by eEurope.

The SIBIS work attracts further interest since it also supports the eEurope 2005 initiative. SIBIS is carrying out an evaluation and a benchmarking of the eEurope 2005 initiative for the 15 EU Member States and the 10 EU accession countries which will become available later in 2003. The "SIBIS Benchmarking Highlights 2002", the Topic Reports and the "SIBIS Pocket Book 2002/03" can be obtained from the SIBIS website.

The publication of the SIBIS project results is a timely and direct contribution to benchmark progress on key issues of the information society in general and the eEurope initiative in particular.

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1 INTRODUCTION

SIBIS[1] is an IST Programme project aiming to produce new methods and data that will contribute to the European effort to measure and benchmark the Information Society. As the Information Society extends to all aspects of social and economic life, good indicators are needed to track its evolution and its impacts. SIBIS has approached the task of developing and testing such indicators in a systematic manner. To begin with, an assessment was made of the state-of-the-art in Information Society benchmarking. Available indicators were collected and analysed, including ones that have been used for actual benchmarking purposes, ones that have been used in small-scale and non-representative studies and ones that have been proposed but not yet applied in practice.

A core set of "SIBIS" indicators were then developed, with the emphasis on those aspects of the Information Society that have been the focus of attention in the eEurope context. These indicators were tested and applied in benchmarking surveys in all 15 EU Member States, in the US, Switzerland and the EU accession countries (i.e. the Newly Associated States - NAS) Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovenia and Slovakia.

The surveys collected robust and representative data for benchmarking purposes, enabling comparisons to be made across the EU Member States and, for the first time, between the EU and US on exactly the same set of indicators at the same point in time.

The SIBIS work on indicator development and testing has helped advance our understanding of what aspects of the Information Society should be benchmarked and how best to benchmark these. This is currently being used in an evaluation of the eEurope 2005 benchmarking proposals.

Apart from this direct contribution to the eEurope exercise, SIBIS will also make the methodological developments from its work more generally available for others to use. To facilitate this, the SIBIS indicators will be compiled into a handbook to support the benchmarking activities of EU and national agencies.

This report focuses primarily on presenting some statistics and indicator results from the SIBIS benchmarking surveys. The survey fieldwork was carried out in April – May 2002 and January 2003. A representative General Population Survey (GPS) was conducted in 2002 in all 15 EU Member States, as well as Switzerland and the US, involving a total achieved sample size of 11,832 and in the above 10 Newly Associated States in 2003, involving a total sample size of 10,407. A representative survey of establishments - the Decision Maker Survey (DMS) - covered 7 EU Member States, including the five largest Member States (Germany, Spain, France, Italy and the UK) as well as Finland, expected to be an information society frontrunner, and Greece, expected to be less well advanced. This involved a total achieved sample size of 3,139 establishments.

Annex 1 of this report presents details of the samples and other methodological aspects of the surveys. In the main body of the report each statistic/ indicator provides the corresponding bases, sources and a reference to the relevant question number(s) in the survey instruments. The actual questions themselves can be found in the survey questionnaires which are made available in Annex 2 and on the SIBIS website: http://www.sibis-eu.org/statistics/questionnaires.htm.

The initial results of the benchmarking surveys have been presented in a series of reports on nine aspects of the Information Society in Europe[2] (author in brackets):

- Telecommunications and access (Technopolis)
- Internet for research and development (Fachhochschule Solothurn)
- Security and trust (RAND Europe)
- Education (Danish Technological Institute)
- Work, employment and skills (empirica)
- Social inclusion (Work Research Centre)
- eCommerce (Databank Consulting)
- eGovernment (RAND Europe)
- eHealth (Work Research Centre).

This pocket book draws on these reports to present an integrated portrait of the Information Society in Europe, the Newly Associated States (NAS), Switzerland and the US and a benchmarking of EU and Member State as well as NAS performances.

No. 1 Internet connections by age

Internet access connections by age groups

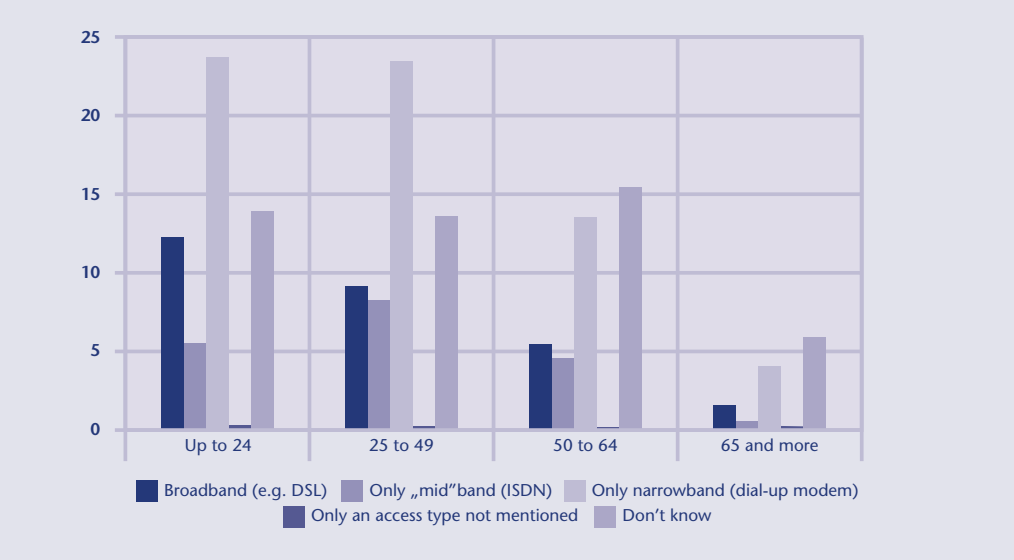
EU-15	Up to 24	25-49	50-64	65 and more	Total
Broadband (e.g. ADSL)	12	9	5	2	8
Only „mid"band (ISDN)	6	8	5	1	6
Only narrow band (Dial-up modem)	24	24	14	4	18
Only an access type not mentioned	0	0	0	0	0
Don't know	14	14	16	6	13
No Internet access at home	44	45	61	88	56

NAS-10	Up to 24	25-49	50-64	65 and more	Total
Broadband (e.g. ADSL)	1	0	0	-	0
Only „mid"band (ISDN)	2	1	1	0	1
Only narrow band (Dial-up modem)	10	8	4	1	6
Only an access type not mentioned	4	2	2	0	2
Don't know	2	3	2	0	2
No Internet access at home	81	79	72	54	73
Never heard of the Internet	1	7	19	45	15

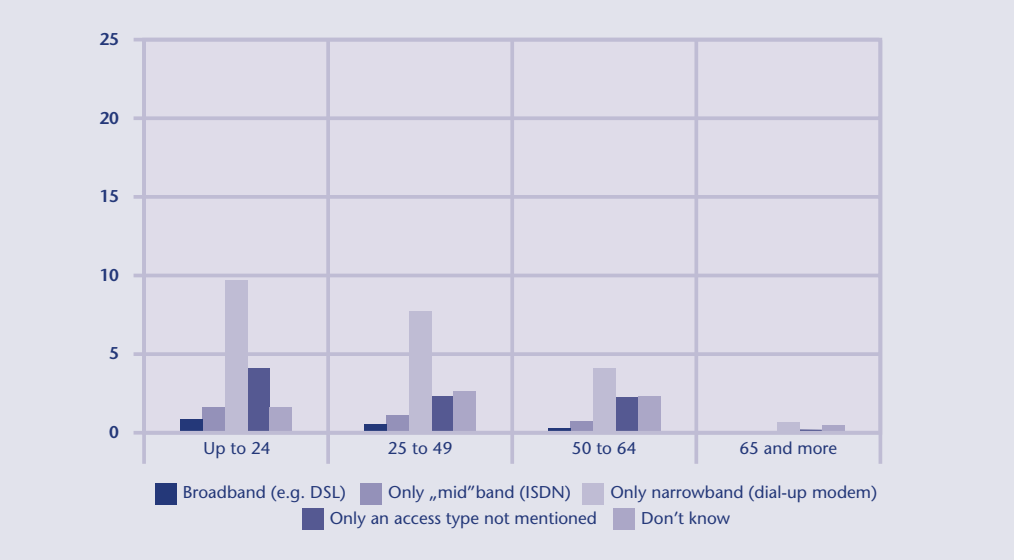
Base: All respondents, weighted column percentages
Questions: A5, A11a, A11b
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Looking at Internet connections at home according to age groups, SIBIS results indicate that people in the age groups "up to 24" and "25 to 49" show higher adoption rates of both high speed and low speed at-home Internet connections. Although the share of at-home Internet connections in the NAS is in general much lower than in EU-15, the tendency of higher adoption rates in the first two age groups can also be observed. This tendency correlates well with other indicators. For example, the young are also more likely to migrate from lower speed to higher speed connections, and are traditionally described as early technology adopters. It is also the young who tend to be more interested in downloading digital media, and therefore they show a much larger interest in upgrading to broadband.

At home Internet connections according to age groups in EU-15 (% of each age group)



At home Internet connections according to age groups in NAS-10 (% of each age group)



No. 2 Migrators snapshot

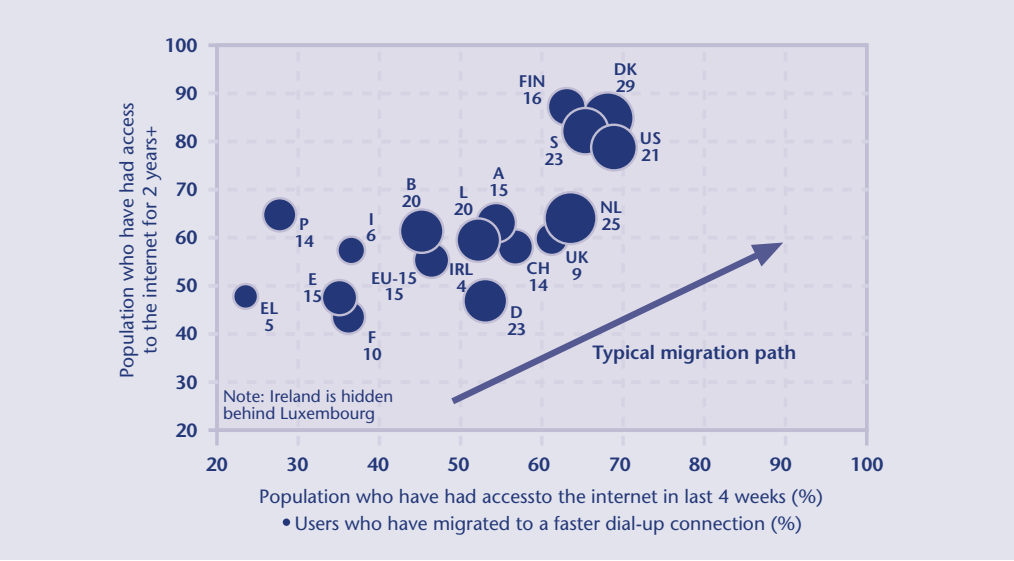
Internet usage, experience of online usage and migration to faster connection types than dial-up modem

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Internet usage*																													
Regular (last 4 weeks)	45	68	53	24	35	36	51	37	52	63	54	28	63	66	61	46	21	33	52	18	30	28	20	13	37	24	21	57	69
Occasional users	8	9	8	10	9	6	14	8	6	10	5	6	7	8	9	8	5	6	7	5	5	9	4	6	8	6	5	9	8
Non Users (incl. don't know)	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23
Experience of Internet usage**																													
More than 2 years	61	84	47	47	46	44	56	58	59	63	62	64	86	83	59	55	46	40	59	55	44	52	56	47	69	36	50	57	79
Less than 2 years	39	16	53	52	53	56	44	42	41	37	37	34	14	17	40	45	54	58	40	45	55	45	41	53	29	63	48	40	21
Don't know	0	0	0	1	0	0	1	1	-	-	0	2	-	-	1	1	1	2	1	0	1	2	3	-	2	1	2	3	0
Migrators to a faster connection than dial-up**																													
Migrators	20	29	23	5	16	10	4	6	20	25	15	14	16	23	9	15	-	-	-	-	-	-	-	-	-	-	-	14	21
Non migrators	48	53	55	64	51	62	55	62	59	61	60	56	54	54	48	55	-	-	-	-	-	-	-	-	-	-	-	51	60
Don't know or other connection type	32	18	22	31	34	27	42	33	22	14	25	30	30	23	43	29	-	-	-	-	-	-	-	-	-	-	-	35	19

Base*: All respondents, weighted column percentages
Questions*: A7, A8
Base**: Internet users, weighted column percentages; Migrators: NAS data not available
Questions**: A7, A8, A10; Migrators: A12
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Traditionally two factors have influenced when Internet users migrate to a faster connection. Based on the experiences of the US and Nordic markets, it has been noted that once the majority of a total population has Internet access, there is a migration of users with tenure, commonly defined as those with two years or more Internet experience, to faster connections. They seek a better online experience, e.g. quicker downloads and always on connections. The clustering of the US, Sweden, Finland and Denmark illustrates this. Not only do they have relatively high percentages of regular (those who access the Internet at least once in the last four weeks) and tenure experienced Internet users, but the size of the group with faster connections than dial-up is large too. In comparison, there is a clear second cluster of countries where this migration level is lower.

Migrators snapshot



No. 3 Broadband access and experience of online usage*

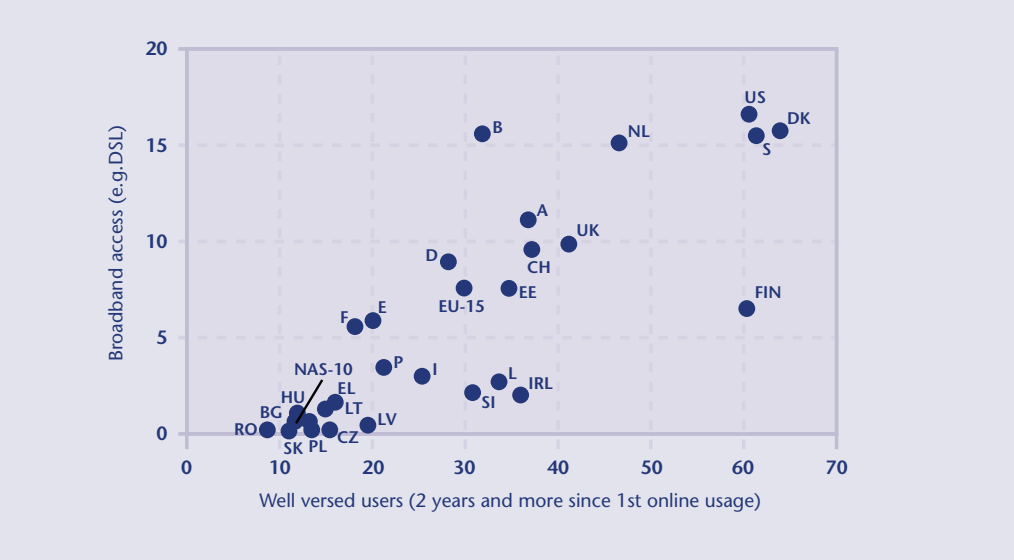
Broadband access

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Broadband access (e.g. DSL)	16	16	9	2	6	5	2	3	3	15	11	3	6	15	10	8	1	0	7	1	1	0	0	0	2	0	0	10	17
Lower bandwidth (incl. ISDN)	14	37	30	10	15	17	30	24	37	48	26	12	35	36	23	24	8	14	15	9	7	5	11	4	27	8	9	31	35
Don't know about type of connection	11	11	11	5	10	8	21	13	10	10	10	6	17	15	25	13	1	4	4	1	2	2	2	1	5	1	2	20	12
No Internet access at home	60	36	50	83	70	70	47	59	50	28	53	79	42	34	42	56	64	72	67	78	70	86	73	76	62	76	73	40	37
Never heard of the Internet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	9	6	12	20	6	14	19	4	15	15	-	-

Base: All respondents, weighted column percentages
Question: A12
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003
*for corresponding data on experience of online usage see No. 4 Internet user experience

According to the survey results, having a long online tenure (more than 2 years since first use of the Internet) plays a mayor role in the share of broadband users among the online population. Focussing on the percentage of broadband users who have a higher tenure than two years, it is possible to distinguish again at least three different clusters of countries. Firstly, there is a cluster of leading and more mature Internet countries where there is a higher proportion of users connecting at home via broadband. This group includes the US, Sweden, Denmark, and following closely are the Netherlands and Belgium. Secondly, it is possible to distinguish a group of intermediate countries including Austria, Switzerland, the UK, Germany, Estonia (as the leader among the candidate countries), EU-15, and following closely France, and Spain. Finally there is a third cluster of laggard countries with lower broadband penetration and tenure levels including Ireland, Luxembourg, Slovenia, Italy, Portugal, Greece and following behind the rest of the candidate countries, where in some (Czech Republic and Slovakia) broadband access is not established at all. The exception in this chart is Finland, which is separated from the rest of countries in the chart, since it registers a large proportion of users with 2 years + tenure (similar figure to the US) but still has a very low penetration level of broadband users compared to the other Nordic countries.

No. 3) Broadband access and experience of online usage (% of population)



No. 4 Internet user experience

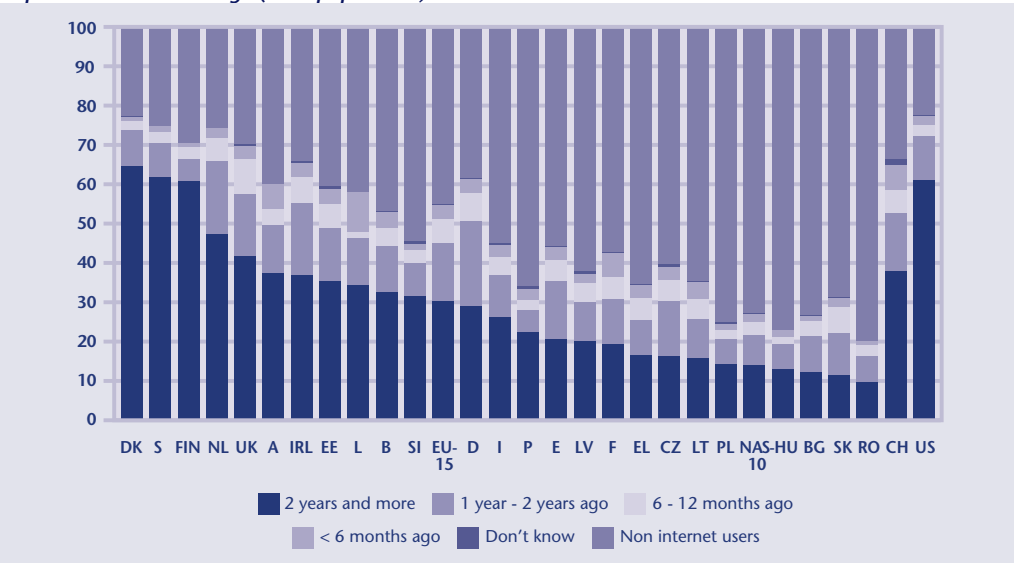
When did you use the Internet for the first time?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
2 years and more ago	32	64	28	16	20	19	36	26	34	47	37	22	60	61	41	30	12	16	35	12	15	20	14	9	31	11	13	38	61
1 year to 2 years ago	12	9	22	9	15	12	18	11	12	18	12	6	6	9	16	15	9	14	13	6	10	10	6	7	9	10	8	15	11
6 to 12 months ago	5	2	7	6	5	5	7	4	2	6	4	2	3	3	9	6	4	6	6	2	5	5	2	3	3	7	3	6	3
Less than 6 months ago	4	1	4	3	3	6	3	3	10	2	6	3	1	1	3	4	2	3	4	2	4	2	2	1	2	2	2	6	3
Don't know	0	0	0	0	0	0	1	0	-	-	0	1	-	-	1	0	0	1	1	0	0	1	1	-	1	0	0	2	0
Non Internet users	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Question: A10
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

It is interesting to observe the diversity of patterns across the different countries in terms of experience of online usage. Firstly, it is possible to highlight a group of leading and more sophisticated countries which register a high share of experienced users (e.g. those with two years plus online tenure, and who have accessed the Internet at least once in the last four weeks). These countries are Denmark, Sweden, Finland, which register similar or even higher rates than the US. Secondly, there is a group of countries with high intermediate levels of experienced users, which in the graph includes the Netherlands, the UK, Austria, Ireland, Estonia (again the leader in the NAS), Luxembourg, Belgium and Slovenia. These are countries that register between 50% and 30% of experienced online users among their population. Thirdly, it is possible to highlight countries, mainly Mediterranean and candidate countries, with less than 30% users with two years plus online tenure.

Experience of online usage (% of population)



No. 5 Internet usage by location

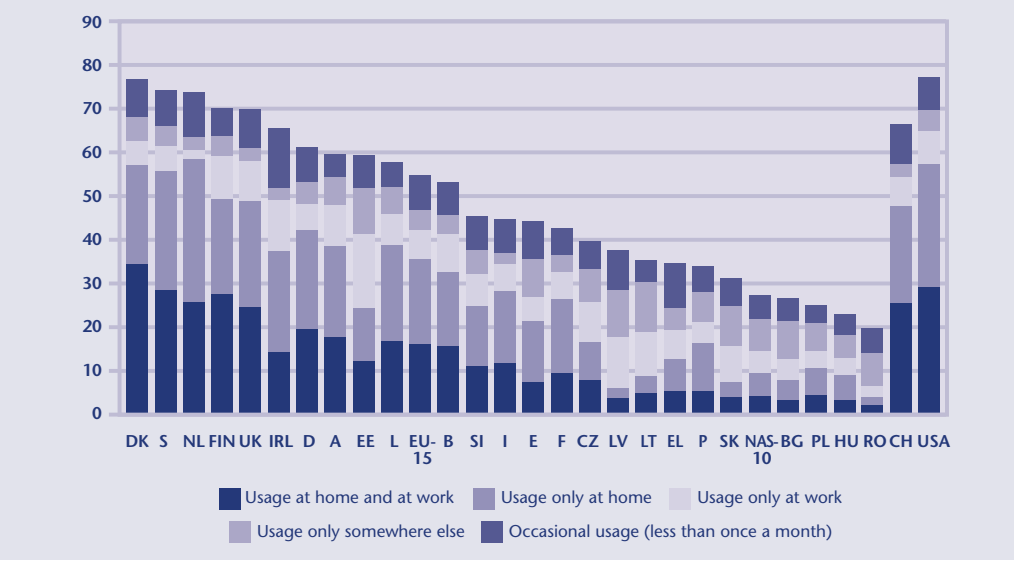
From where have you accessed the Internet in the last four weeks?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Usage at home and at work	15	34	19	5	7	9	14	11	16	25	17	5	27	28	24	16	3	7	12	3	4	3	4	2	11	3	4	25	29
Usage only at home	17	23	22	7	14	17	23	17	22	33	21	11	22	28	24	20	5	9	12	6	4	2	6	2	14	3	5	22	28
Usage only at work	9	6	6	7	5	6	12	6	7	2	9	5	10	6	9	6	5	9	17	4	10	12	4	3	7	8	5	7	8
Usage only somewhere else	4	6	5	5	9	4	3	3	6	3	6	7	5	4	3	5	9	8	11	5	11	11	6	7	6	9	7	3	5
Occasional usage (less than once a month)	8	9	8	10	9	6	14	8	6	10	5	6	7	8	9	8	5	6	7	5	5	9	4	6	8	6	5	9	8
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Question: A9
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Different Internet access locations can lead to different online activities. Hence, for the development and implementation of the Information Society in Europe it is important to track from which locations users are accessing the Internet. Generally, countries with a high penetration of at-home and at-work Internet users are those countries with a more experienced Internet population, both at work and at home. These countries register lower penetration rates of Internet access from 'other locations' than at-home/at-work (whether paid or free Public Internet Access Points (PIAPs), access from a friend's house, a mobile phone, a school or any other location) and of occasional usage. In less mature Internet countries only at-home usage is more common, and since many users do not have at-home connections, there is also a higher proportion of people accessing the Internet from 'other locations'. Likewise occasional Internet usage is more common. In fact, in most European countries citizens are still not accessing the Internet frequently from more than one location.

Internet usage by location (% of population)



No. 6 Intensity of online usage

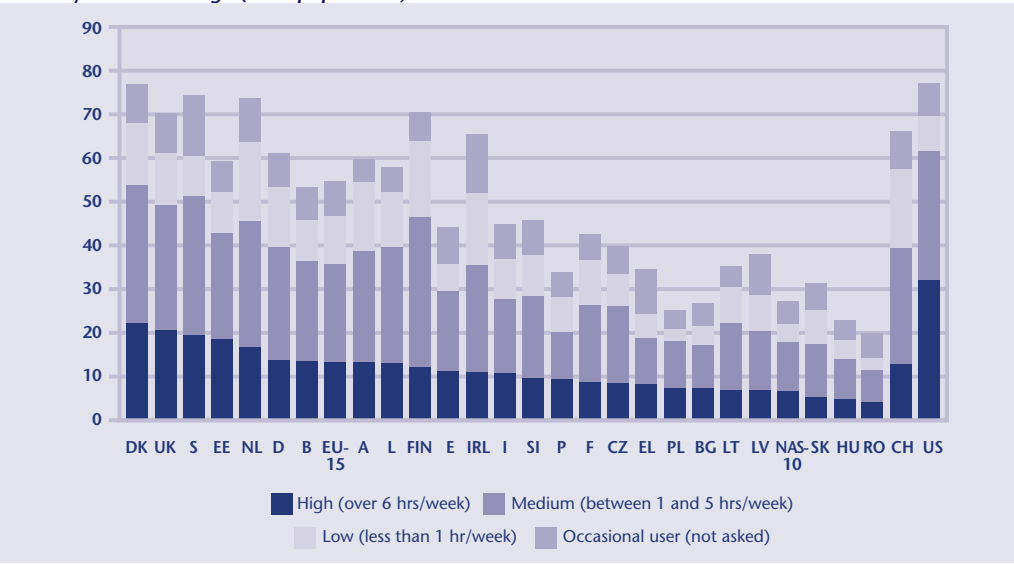
How much time do you spend in a typical week on using the Internet?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
High (over 6 hrs/week)	13	22	13	7	11	8	10	10	12	16	13	9	11	19	20	13	7	8	18	4	6	6	7	3	10	4	6	12	32
Medium (between 1 and 5 hrs/week)	23	32	26	11	18	18	25	17	27	29	26	10	35	32	29	22	10	18	24	9	16	14	11	7	18	12	11	27	30
Low (less than 1 hrs/week)	9	14	14	5	6	10	17	9	13	18	16	8	17	15	12	11	4	7	9	4	8	8	3	3	9	8	4	18	8
Occasional user (not asked)	8	9	8	10	9	6	14	8	6	10	5	6	7	8	9	8	5	6	7	5	5	9	4	6	8	6	5	9	8
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Questions: A9
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The pattern of weekly average time spent online at home seems to bring different levels of online intensity of use, which have been classified as low, medium, and high according to the weekly average time online users spent from any location. Across all the European countries surveyed, users in more mature online countries spend longer sessions using the Internet. In the US, Denmark, and Sweden over 50% of the population spend longer than one hour per week online, and about 20% of them spend 6 hours per week using the Internet (much higher than in Mediterranean countries and even higher in most of the candidate countries). An additional important factor to consider, when comparing time spent patterns online across the EU and the NAS, is that unmetered at-home connection rates are not currently available in all European markets, and having a flat-rate connection or a pay-per call connection, or a broadband or narrowband connection undoubtedly influences the time and the experience that users can have online (broadband users can watch a video online whereas for a narrowband user, just the mere fact of checking e-mail can be slow and painful).

Intensity of online usage (% of population)



No. 7 Mobile usage by age

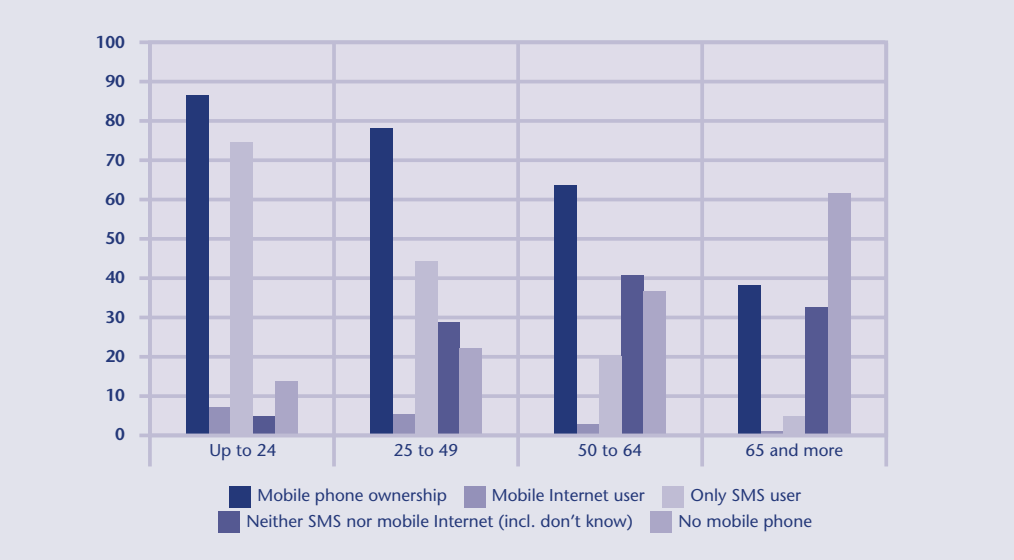
Do you have a mobile phone for your own personal use and do use it to view WAP pages or communicate via SMS?

EU-15	**Up to 24**	**25-49**	**50-64**	**65 and more**	**Total**
Mobile phone ownership	86	78	63	38	69
Thereof:					
Mobile Internet user	7	5	3	1	4
Only SMS user	75	44	20	5	37
Neither SMS nor mobile Internet (incl. don't know)	5	29	41	32	28
No mobile phone	14	22	36	62	31
NAS-10	**Up to 24**	**25-49**	**50-64**	**65 and more**	**Total**
Mobile phone ownership	62	55	32	12	44
No mobile phone	38	45	68	88	56

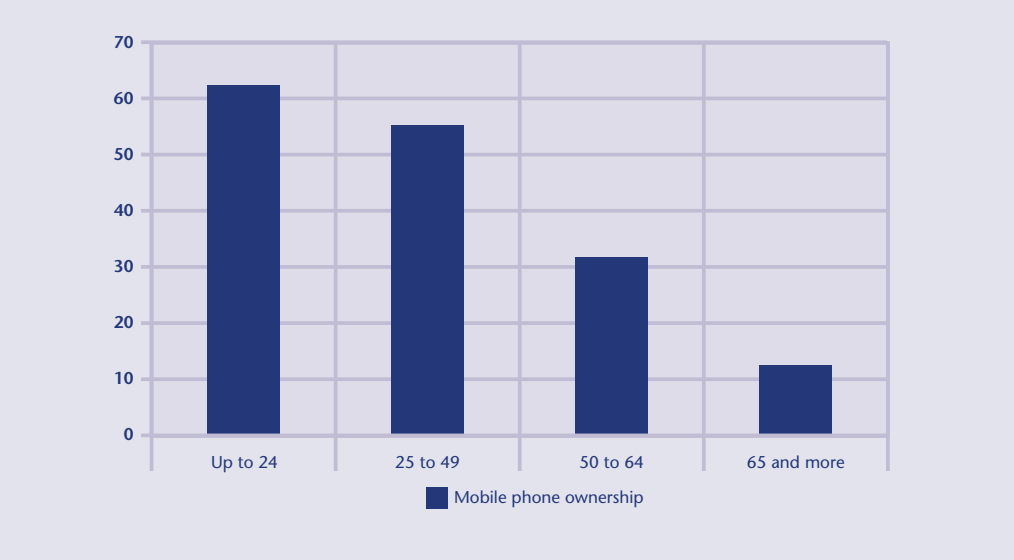
Base: Mobile phone owners, weighted column percentages
Questions: A19, A23, A26, A27 (NAS: A19, A27)
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Breaking down mobile usage patterns by age groups shows that EU-15 respondents under 25 are the most active SMS users. In addition, they access the Internet through their mobile phones to a larger degree than other age groups, though this figure still remains below 10%. It is not surprising that the majority of young mobile owners are also mobile data users, whether using only SMS, or both SMS and Internet data services. In other age groups there is a higher number of mobile users who only use voice calls and not mobile data (i.e. neither SMS nor mobile Internet). Also, a large proportion of respondents over 50 do not own a mobile phone for personal use. Hence, age plays a crucial role in the definition of mobile Internet user profiles. In the candidate countries, mobile phone penetration among the young is considerably higher than among citizens aged 50 and more, too, though overall penetration rates remain much below the EU-15 average.

Mobile usage according to age groups in EU-15 (% of each age group)



Mobile usage according to age groups in NAS-10 (% of each age group)



No. 8 Mobile telephony snapshot

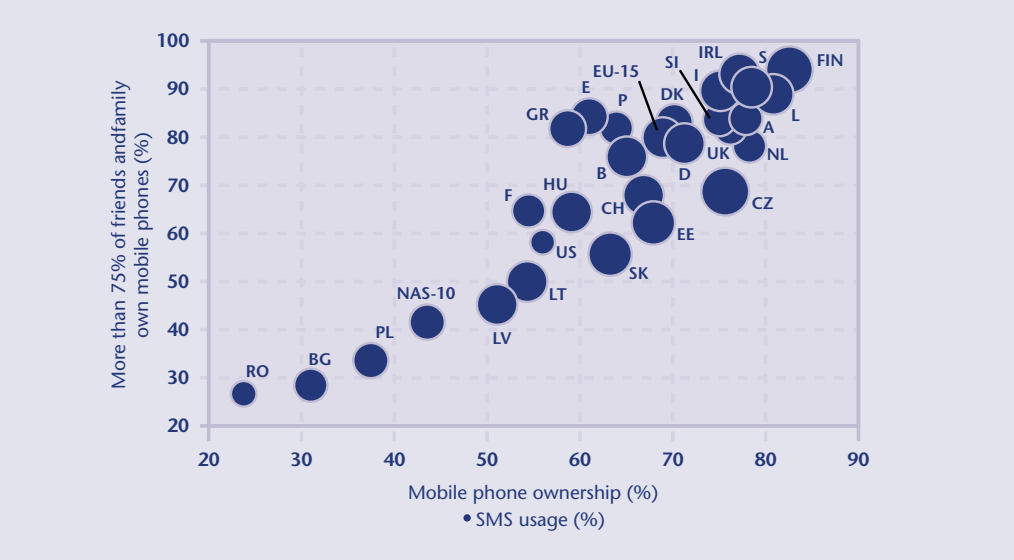
Mobile phone ownership, SMS usage and mobile phone usage of friends/ relatives

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Mobile phone ownership																													
Personal mobile phone	65	70	71	59	61	55	77	75	80	78	78	64	82	79	76	69	31	76	68	59	54	51	38	24	76	64	44	67	56
No personal mobile phone	35	30	29	41	39	45	23	25	20	22	22	36	18	21	24	31	69	24	32	41	46	49	62	76	24	36	56	33	44
Mobile phone usage of friends/ relatives: How many of friends/ relatives have a personal mobile phone?																													
All or almost all	58	68	61	71	77	45	76	83	80	62	72	75	85	76	68	67	16	50	45	47	35	31	19	20	79	34	28	49	41
About three quarters	18	12	17	10	8	19	15	6	10	17	13	6	9	13	15	14	12	19	17	17	15	14	14	6	6	21	13	18	17
About half	12	11	13	10	7	16	6	5	4	11	9	8	4	6	9	10	13	16	21	15	22	21	14	12	8	23	15	16	19
About one quarter	2	3	3	2	1	5	1	1	1	5	2	3	0	1	2	3	12	8	6	6	10	10	10	13	1	12	10	5	8
Only few or no-one	5	4	4	5	7	11	1	3	3	5	4	6	1	3	5	5	39	5	8	9	18	17	28	43	3	7	25	8	13
Don't know	4	2	2	1	1	2	1	3	2	1	0	3	0	1	1	2	8	3	2	6	0	7	15	6	3	2	9	4	2
SMS usage																													
SMS user	46	35	42	32	36	25	56	47	43	30	52	36	66	42	49	40	23	67	54	43	45	45	30	13	50	56	34	47	13
Non SMS user	54	65	58	68	64	75	44	53	57	70	48	64	34	58	51	60	77	33	46	57	55	55	70	87	50	44	66	53	87

Base: All respondents, weighted column percentages
Questions: A19, A20, A27
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Although mobile penetration is currently quite high in most western countries, differences in usage patterns between countries occur, as do divergences in the use of data mobile services for communication. In some countries voice calls are widely used and in other countries data calls are more common. Similarly, at the time of the SIBIS survey phase both France and the US were clearly behind the rest of the Western European countries in terms of mobile intensity penetration and usage. Further behind are most of the candidate countries with the exception of the Czech Republic, Slovakia, Estonia and Slovenia.

Mobile snapshot



No. 9 E-mail users

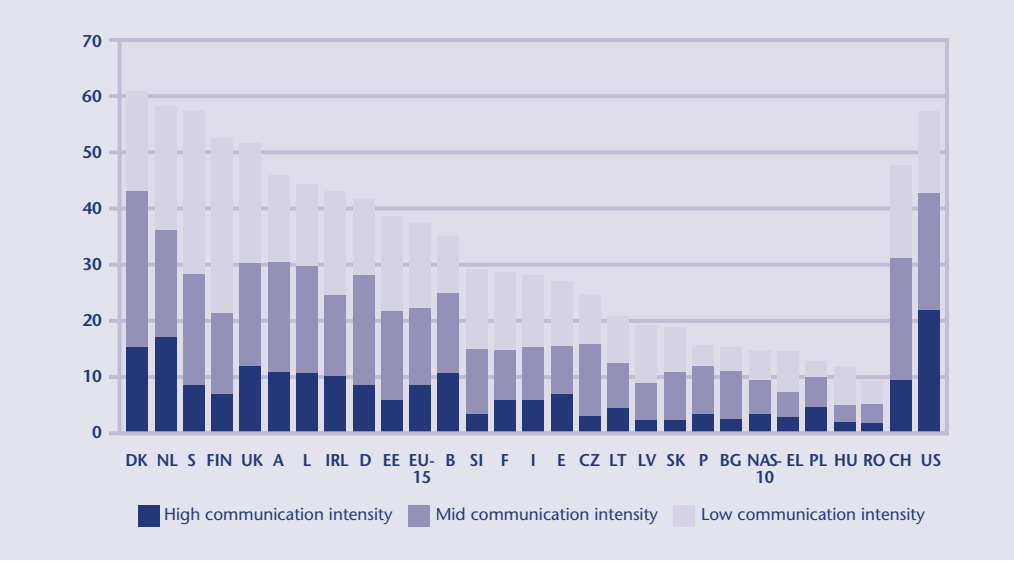
Have you sent or received any e-mail messages during the last four weeks and with how many of your friends/ relatives do you communicate regularly via e-mail?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
High communication intensity	10	15	8	2	7	6	10	6	11	17	10	3	7	9	12	8	2	3	5	2	4	2	4	1	3	2	3	9	22
Medium communication intensity	14	28	20	5	8	9	15	9	19	19	20	9	14	20	18	14	9	13	16	3	8	7	5	3	12	9	6	22	21
Low communication intensity	10	18	14	7	12	14	19	13	15	22	16	4	31	29	22	15	4	9	17	7	9	10	3	4	14	8	5	17	15
No e-mail usage (incl. don't know)	65	39	58	86	73	72	57	72	56	42	54	85	47	42	48	63	85	75	61	88	79	81	87	91	71	81	85	52	43

Base: All respondents, weighted column percentages
Questions: A3, A4a
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

For this indicator, respondents were asked to indicate their degree of usage of e-mail networks with friends and relatives. High usage intensity, i.e. people who communicate with more than 75% of their friends and relatives using e-mail, can be observed in the US, the Netherlands and Denmark. The Mediterranean and the candidate countries are clearly behind. This indicator demonstrates how far e-mail usage (which many people have initially used only at their workplace) has penetrated leisure life.

E-mail usage and intensity (% of population)



No. 10 SMS services by age

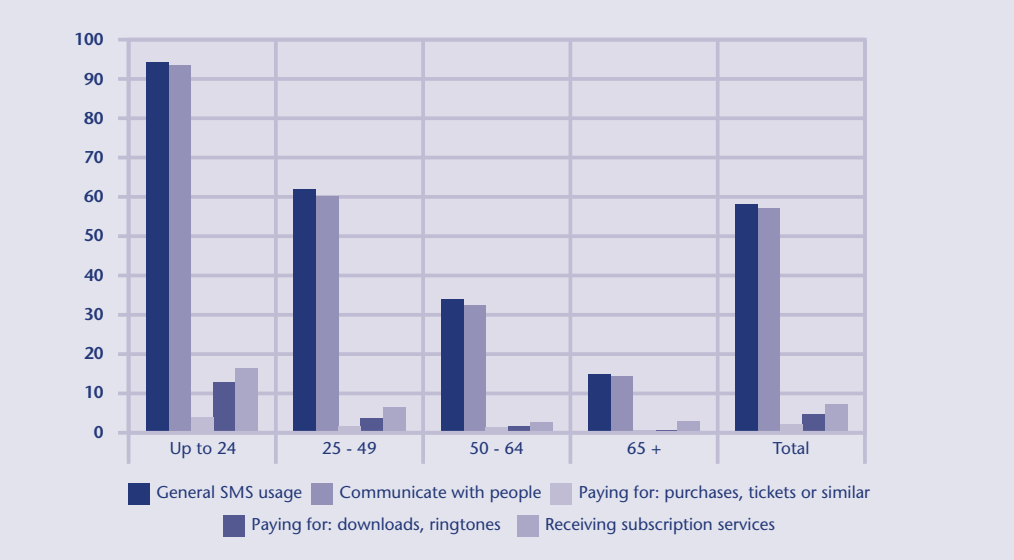
Have you used SMS messages in the last four weeks?

EU-15	Up to 24	25-49	50-64	65 and more	Total
General SMS usage	94	62	34	15	58
Communicate with people	94	61	33	14	57
Paying for: purchases, tickets or similar	4	2	1	1	2
Paying for: downloads, ringtones	13	4	1	0	5
Receiving subscription services	16	6	3	3	7
NAS-10	**Up to 24**	**25-49**	**50-64**	**65 and more**	**Total**
General SMS usage	92	80	62	30	77

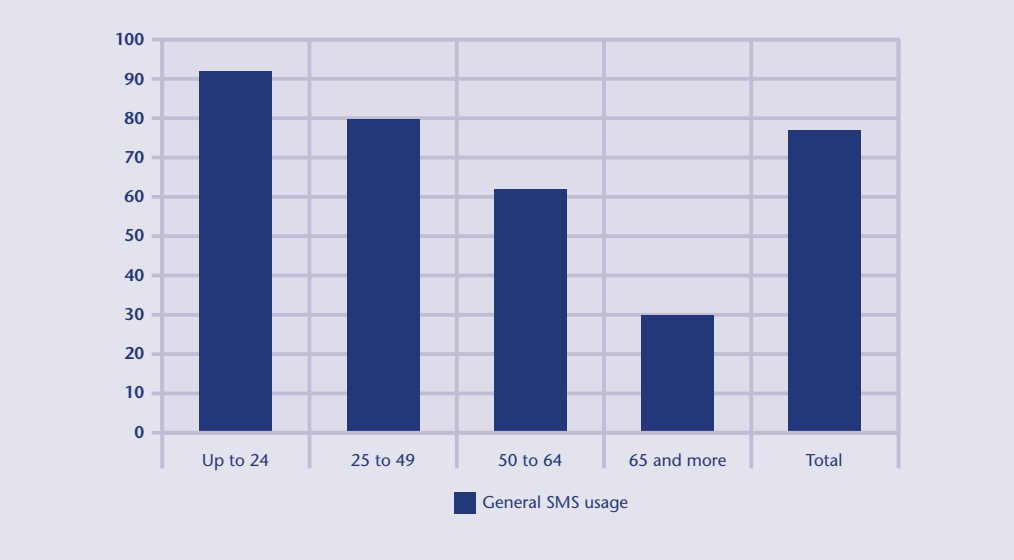
Base: Mobile phone owners, weighted column percentages
Question: A27
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The most popular use of SMS, out of all of the usage options given in the SIBIS survey, is for communication, and this is a common pattern among all age groups. Once SMS becomes a tool used ubiquitously, this indicator would be interesting as a way of looking at not only the penetration of other new SMS services per se but also by age groups. For example, are the young more likely to download ringtones and logos than other age groups? It would also be interesting to look at the types of services used in the area of WAP technology to see how different age groups are using the technology, particularly as the under 25s are the main target user base for future multiple connections methods. In contrast to most other indicators on ICT usage, the candidate countries show higher SMS usage than the EU-15. Here, three out of four mobile phone users make use of text messaging.

SMSs use according to age groups in EU-15 (Base: mobile owners; % of each age group; multi-response)



SMSs use according to age groups in NAS-10 (Base: mobile owners; % of each age group)



No. 11 Concerns regarding online security

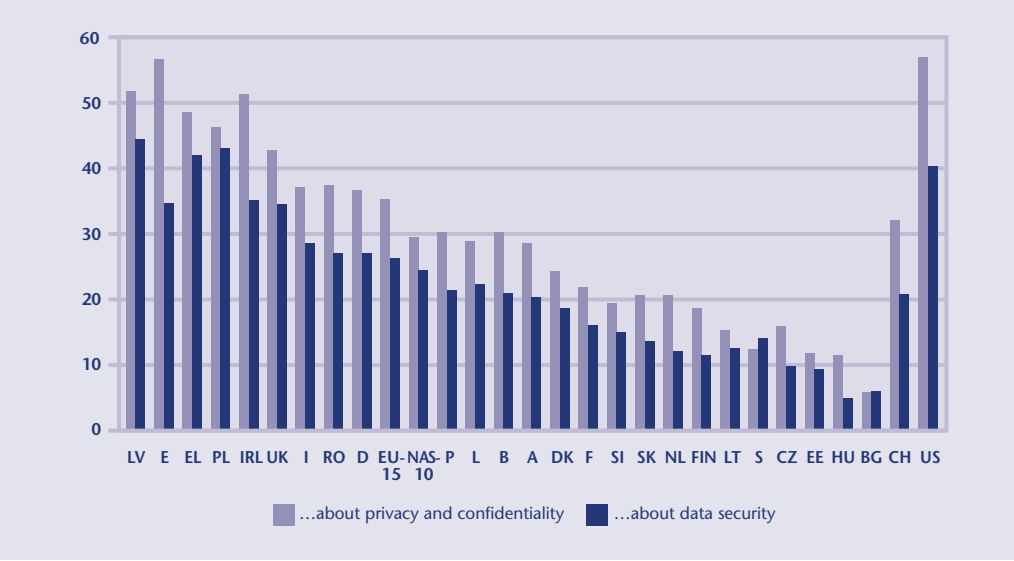
Concerns regarding online security

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Concerns about data security																													
Very concerned	21	18	27	42	34	16	35	28	22	12	20	21	11	14	34	26	6	9	9	5	12	44	43	27	15	13	24	20	40
Somewhat concerned	47	54	48	37	37	48	43	47	48	54	43	44	63	48	46	47	35	47	48	26	34	31	39	41	51	42	39	45	38
Not concerned	28	27	25	20	28	36	22	24	29	32	34	30	25	38	20	27	56	36	39	63	44	23	16	31	33	43	32	33	22
Don't know	4	1	0	2	-	1	-	1	2	2	3	5	1	1	0	1	4	7	4	6	10	1	3	2	2	2	4	1	-
Concerns about privacy and confidentiality																													
Very concerned	30	24	36	48	56	21	51	37	29	20	28	30	18	12	42	35	6	15	11	11	15	51	46	37	19	20	29	32	57
Somewhat concerned	43	54	46	32	25	47	37	43	44	46	40	44	57	48	45	44	36	46	47	25	36	27	44	37	47	47	41	39	31
Not concerned	24	21	17	16	19	31	12	20	26	32	28	23	24	39	12	21	55	34	38	59	36	19	8	25	32	30	27	28	12
Don't know	3	1	0	4	0	0	-	0	1	2	4	4	1	1	0	1	3	5	4	5	13	3	2	1	2	3	3	2	0

Base: Regular Internet users, weighted column percentages
Questions: J1a, J1b
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Citizens are generally concerned both about privacy/ confidentiality and data security. Concerns (particularly on privacy) seem to be lower in continental EU Member States and especially in most of the NAS countries – with Hungary as the lowest – than in the UK, Ireland or the US. The clear outsider from the general NAS tendency is Poland, where the share of Internet users stating they are "very" or "somewhat concerned" about data being mistreated is the highest of all countries. Differences between countries are likely to be caused by a large number of factors including the amount of negative experiences, the level of trust in the state and the functioning of society-at-large, and the level of awareness of issues surrounding data protection and privacy.

Concerns regarding online security (people feeling very concerned ... ; % of regular Internet users)



No. 12 Impact of security concerns on online shopping behaviour

Online shopping usage and effects of security concerns on online shopping behaviour

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Online shopping usage																													
Regular user	15	30	31	10	9	17	18	15	24	23	22	10	20	28	37	24	14	10	17	9	6	9	10	5	11	11	10	23	40
Occasional user	7	25	17	8	8	15	28	13	13	19	19	10	21	26	17	16	4	8	10	5	3	4	7	4	8	8	6	22	22
Non user (but Internet user)	77	45	52	82	84	68	55	72	63	58	60	80	59	47	46	60	82	82	72	85	90	87	83	92	81	81	84	56	38
Effects of security concerns on online shopping behaviour																													
Often stopped by concerns	21	22	25	35	31	31	30	40	28	21	22	20	16	19	27	28	3	4	5	5	7	10	9	4	4	6	6	31	22
Sometimes stopped	18	27	29	18	16	16	24	21	28	15	22	23	35	26	30	24	5	17	17	5	11	11	17	3	9	21	13	21	36
Never stopped	40	33	32	28	36	26	37	21	25	31	30	31	29	27	33	30	7	11	18	9	7	25	23	21	17	10	17	23	31
Don't know	3	5	1	3	2	2	1	3	2	6	2	4	3	1	1	2	4	2	4	-	10	3	4	-	0	2	3	1	1
Not concerned	18	14	13	17	16	26	9	15	17	28	24	21	17	28	9	16	54	36	38	59	45	18	9	24	29	31	28	24	11
Never tried to buy online	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	*)	26	30	19	22	20	33	37	48	39	31	34	*)	*)

Base: Regular Internet users, weighted column percentages
Questions: J2, B1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003
*) data not available

Security concerns have a significant impact on online shopping behaviour of European and US citizens. In the EU, for example, on average nearly a third of Internet users do not buy online due to security concerns. However, evidence suggests that there is a clear split between "front-runners", where online shopping usage is high and the impact of security concerns is relatively low (quadrant I) and the "laggards", where online shopping usage is low and the impact of security concerns is strong (quadrant III). As can be seen, the Nordic countries, the US, the UK, Austria and Germany appear as front-runners, while all Mediterranean countries (France, Italy, Spain and Greece) are the laggards. In comparison, all of the Central and East European candidate countries are located in the quadrant II, which means limited online shopping even though there is a low sensitivity to security concerns. This may be caused by lower usage of online shopping and less possibilities for eCommerce in these countries.

Security concerns and online shopping usage (% of regular Internet users)

No. 13 Information security breaches in European organisations

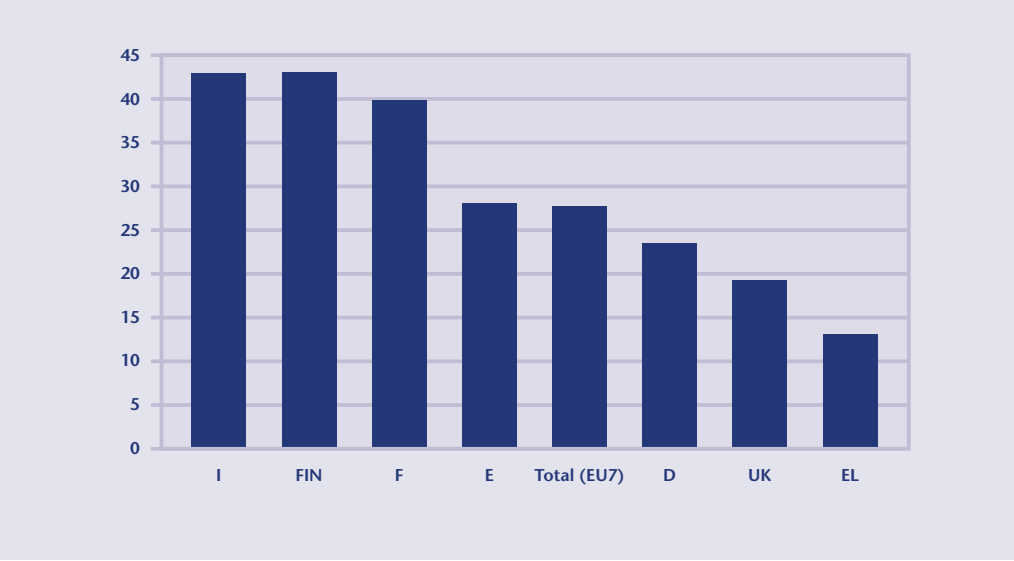
Have any breaches of your information security occurred in your establishment in the last 12 months?

	D	EL	E	F	I	FIN	UK	EU-7
Yes	23	13	28	40	43	43	19	27
No	75	84	72	59	57	53	77	70
Don't know	2	3	0	2	0	4	4	2

Base: Establishments with online presence, weighted column percentages
Question: D1
Source: SIBIS DMS 2002

This indicator describes cases of breach incidents (without classifying them). The highest number of information security breaches was reported in Italy and Finland. The lowest number was reported in Greece. This is probably a consequence of the fact that lower number of organisations being online in that country, making it a less attractive target for perpetrators.

Information security breaches occurred in the last 12 months (establishments with online presence; % of all establishments with online-presence)



No. 14 Types of security breaches in European organisations

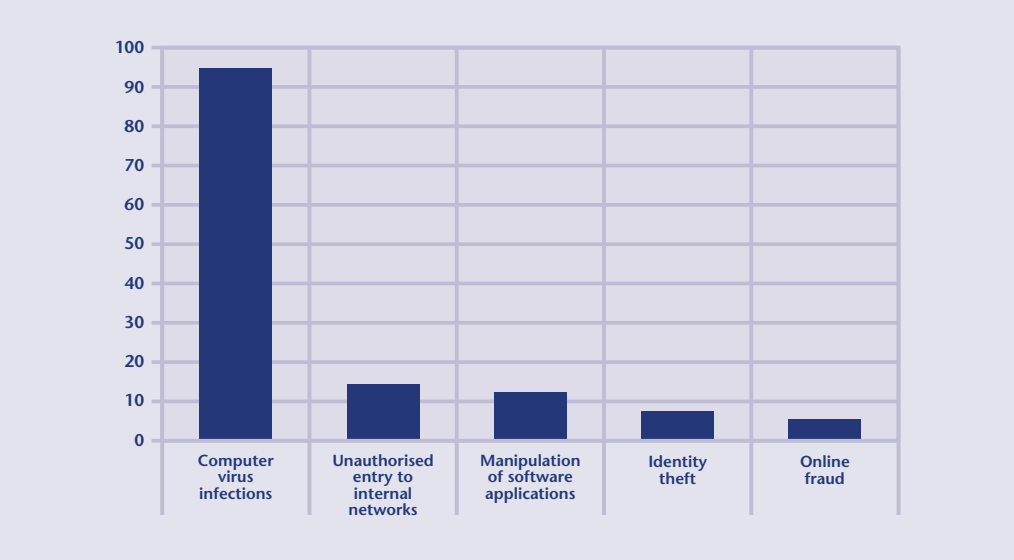
Which of the following types of information security breaches have occurred in your establishment in the last 12 months?

	D	EL	E	F	I	FIN	UK	EU-7
Identity theft	8	*)	4	14	4	0	5	7
Online fraud	6	*)	3	11	0	1	7	6
Manipulation of software applications	8	*)	10	23	8	6	15	12
Computer virus infections	89	*)	100	99	100	90	94	95
Unauthorised entry to internal networks	25	*)	12	11	8	23	7	15

Base: Establishments that were affected by security breaches in the last 12 months, weighted percentages, multi-response
Question: D2a
Source: SIBIS DMS 2002
*) data suppressed due to too small N

The data show that the most widespread information security breaches are computer virus infections. Almost all organisations have been affected by computer viruses in the 12 months prior to the survey. The numbers of businesses affected by other security breaches, such as unauthorised access to their networks or identity theft, are fairly low (but far from insignificant). Mainly two reasons can be brought forward for explaining why viruses are the major type of security breaches: firstly, many businesses may be unaware of other kinds of breaches, i.e. they have not noticed them; secondly, viruses are indeed likely to be the most common problem.

Types of security breaches occurred in EU7 organisations
(% of establishments that were affected by security breaches in the last 12 months)



No. 15 Major cause of security breaches in European organisations

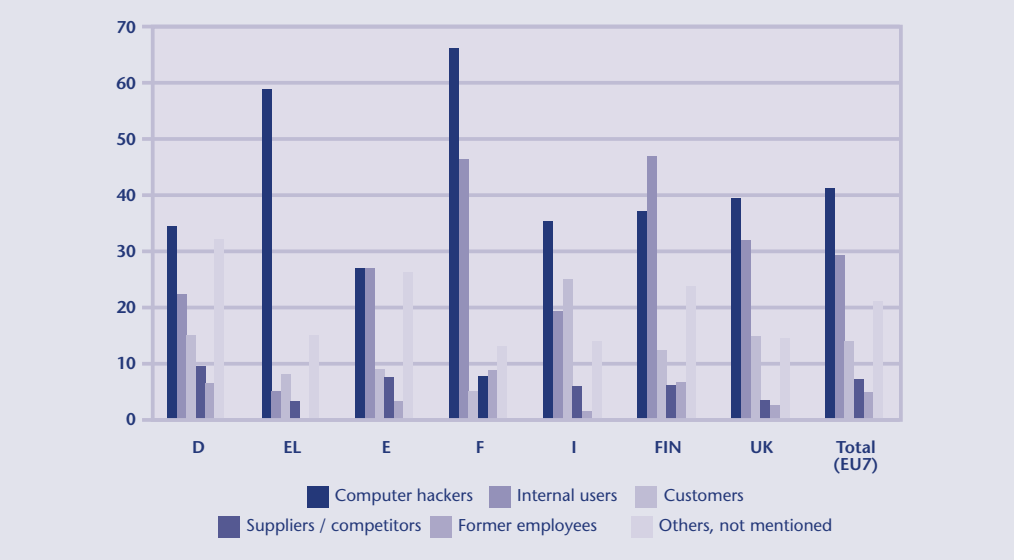
Where do you believe these breaches mainly came from?

	D	EL	E	F	I	FIN	UK	EU-7
Customers	15	*)	9	5	25	12	15	14
Suppliers/ Competitors	9	*)	7	7	6	6	3	7
Former employees	6	*)	3	9	1	6	2	5
Computer hackers	34	*)	27	66	35	37	39	41
Internal users	22	*)	27	46	19	47	32	29
Others, not mentioned yet	32	*)	26	13	14	23	14	21
Don't know	6	*)	11	3	5	0	7	6

Base: Establishments that were affected by security breaches in the last 12 months, weighted percentages, multi-response
Question: D3
Source: SIBIS DMS 2002
*) data suppressed due to too small N

Computer hackers are considered the major cause of security breaches by 40% of European organisations, closely followed by insiders (e.g. members of staff). Customers, suppliers and former employees, instead, are considered less relevant. The fact that internal users are believed to be a source for security breaches almost as often as computer hackers (and the viruses they create) is a clear sign that IT security measures can deliver the expected protection if all authorised users are aware of their pivotal "security" link of an organisation. Consequently, employees' education and training in information security activities are fundamental.

Supposed major origins of security breaches
(% of establishments that were affected by security breaches in the last 12 months)



No. 16 Information security policy in European organisations

Does your establishment have an information security policy?

	D	EL	E	F	I	FIN	UK	EU-7
Yes, formal policy	50	58	58	51	57	66	60	54
Yes, informal policy	23	19	21	27	16	17	18	21
Yes, policy type not specified	6	5	-	2	6	2	0	3
No policy	22	18	22	20	21	16	22	21

Base: Establishments with online presence, weighted column percentages
Questions: D5, D6
Source: SIBIS DMS 2002

The overall majority of organisations have an information security policy. Still only half of them have a clearly structured policy. With the exception of virus infections, the number of breaches appears to be fairly low which suggests that implementing a security policy brings results. The overwhelming presence of computer virus incidents suggests that information security policies are to be considered "living documents" since they need to be constantly updated in order to tackle new risks and vulnerabilities. Although general best-practices can be applied, it is important to emphasise that the implementation of information security policies needs to be tailored to specific risk and operational objectives of an individual organisation.

Presence of security policies (% of establishments with online presence)

No. 17 Tools for information security used by European organisations

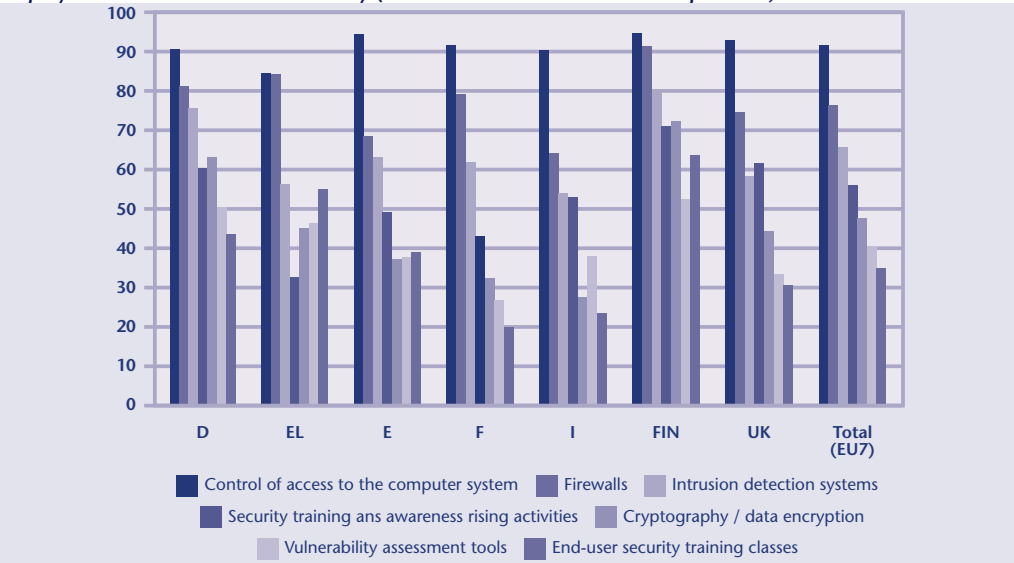
Which of the following tools do you use for information security in your establishment?

	D	EL	E	F	I	FIN	UK	EU-7
Control of access to the computer system	90	85	94	92	90	95	93	92
Cryptography/ data encryption	63	45	37	32	28	72	44	47
Vulnerability assessment tools	50	46	38	27	38	52	33	40
Firewalls	81	84	68	79	64	91	75	76
Security training and awareness raising activities	60	32	49	43	53	71	61	56
Intrusion detection systems	76	56	63	62	54	80	58	66
End-user security training classes	43	55	39	20	23	63	30	35

Base: Establishments with online presence, weighted percentages, multi-response
Questions: D9
Source: SIBIS DMS 2002

Access controls to computer systems are the most common information security tools. Training and awareness initiatives are less often used alternatives. Finnish organisations are the best equipped: every second establishment (with web presence) in this country makes use of all the tools listed.

Deployed tools for information security (% of establishments with online presence)



No. 18 Barriers to information security in European organisations

How important are the following factors as barriers to effective information security?

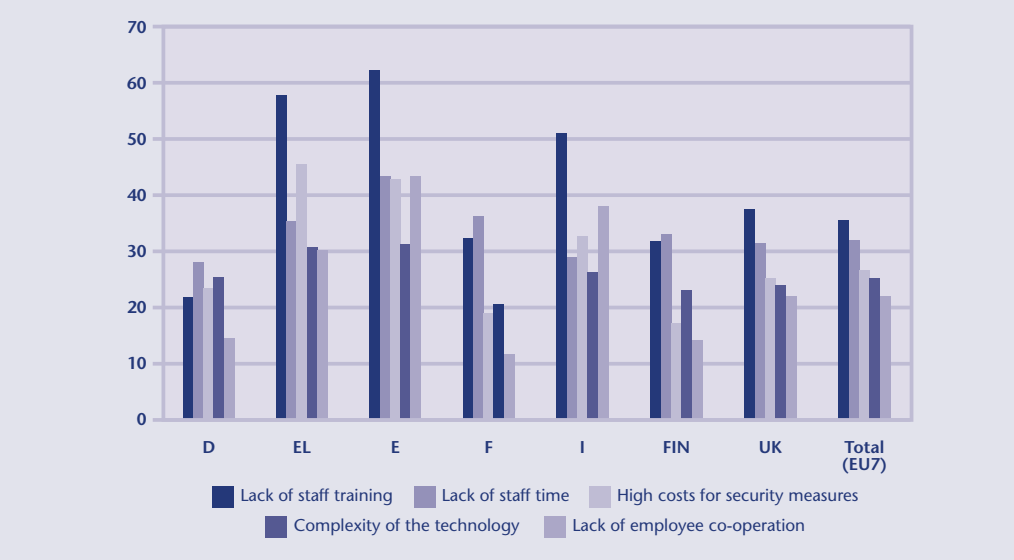
	D	EL	E	F	I	FIN	UK	EU-7
High costs for security measures								
Very important	24	46	43	19	33	17	25	27
Fairly important	38	37	42	54	48	43	50	45
Not important	33	16	10	23	15	36	20	24
Don't know	5	2	5	4	4	4	4	5
Lack of staff training								
Very important	22	58	62	33	51	32	38	36
Fairly important	30	33	27	37	35	47	37	33
Not important	45	10	9	27	9	17	22	28
Don't know	3	-	1	3	5	4	3	3
Lack of staff time								
Very important	28	35	43	36	29	33	31	32
Fairly important	27	47	38	36	29	41	42	34
Not important	43	18	15	25	34	22	22	31
Don't know	2	0	4	3	8	3	4	3

	D	EL	E	F	I	FIN	UK	EU-7
Complexity of the technology								
Very important	25	31	31	21	26	23	24	25
Fairly important	36	44	38	53	41	50	44	42
Not important	36	25	28	25	27	23	28	30
Don't know	2	1	2	1	6	4	4	3
Lack of employee co-operation								
Very important	15	30	43	12	38	14	22	22
Fairly important	28	38	29	39	34	33	27	30
Not important	55	31	26	46	25	49	46	45
Don't know	2	0	2	3	3	4	4	3

Base: Establishments with online presence, weighted column percentages
Question: D8
Source: SIBIS DMS 2002

Respondents in the SIBIS survey were questioned on how factors like cost, time, training & staff co-operation may be viewed as barriers for better information security. Both lack of staff training and lack of staff time are mentioned as very important barriers by one third of all EU7 establishments (with web presence). But for the other barriers as well, a large share of organisations considers them as important factors across all countries, although in Southern Europe (Greece, Italy and Spain) employee co-operation seems to be most difficult to achieve. It is very likely that, in the future, harms deriving from IT security breaches will significantly affect business performance if barriers can not be much reduced.

Barriers to information security (very important; % of establishments with online presence)



No. 19 eCommerce users

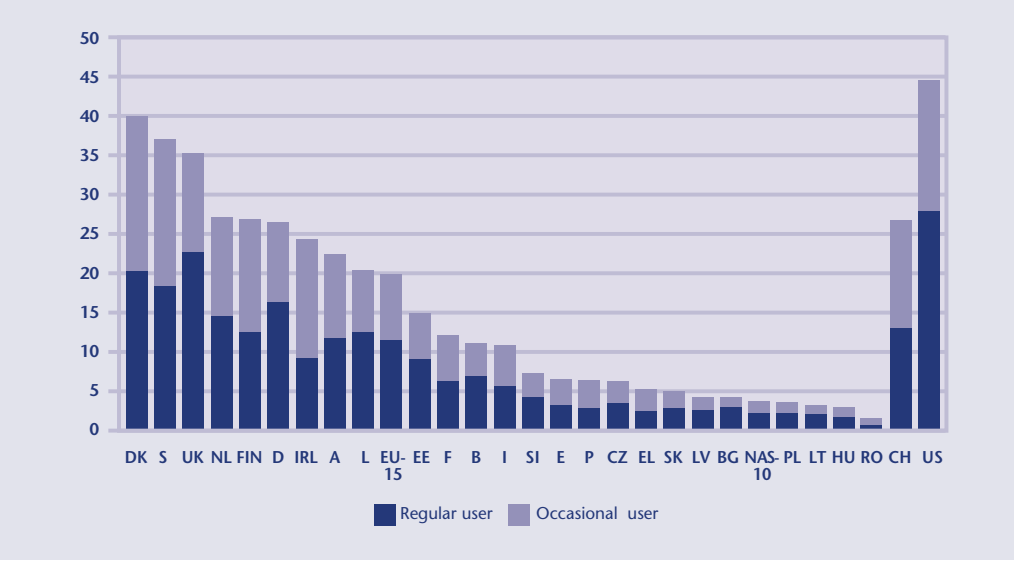
Regular and occasional purchases over the Internet

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Regular user	7	20	16	2	3	6	9	6	13	14	12	3	12	18	23	11	3	3	9	2	2	2	2	1	4	3	2	13	28
Occasional user	4	20	10	3	3	6	15	5	8	13	11	4	14	19	13	8	1	3	6	1	1	2	2	1	3	2	2	14	16
Non user, but Internet user	42	37	34	29	37	30	41	34	37	46	37	27	43	37	35	35	22	33	44	19	32	33	21	18	38	26	23	39	33
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Questions: B1, B2
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

On average, 20% of the EU's population purchase products online. Among the candidate countries, only Estonia comes close to this figure. The other candidate countries are more or less on a comparable level with Spain, Greece and Portugal. Buyers tend to display a more interactive use on the PC, suggesting more sophisticated and pioneer Internet users purchase online. Even so, occasional users are representing an increasing proportion of eCommerce users, especially in those countries with increasing online tenure and experience.

eCommerce users (% of population)



No. 20 eCommerce across age groups

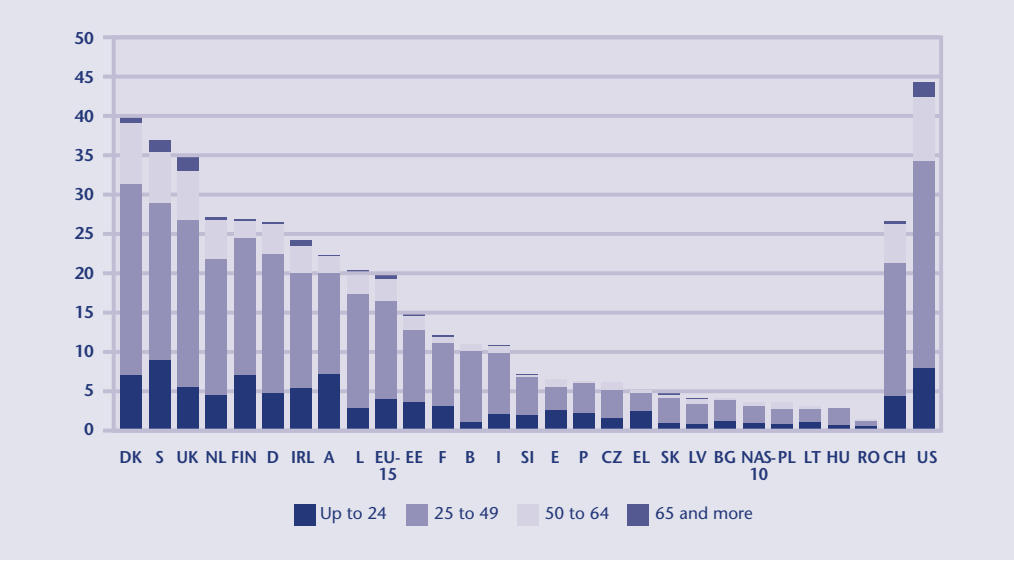
eCommerce users differentiated by age groups

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
eCommerce user																													
Up to 24	1	7	5	2	3	3	5	2	3	5	7	2	7	9	6	4	1	2	4	1	1	1	1	0	2	1	1	4	8
25 to 49	9	24	18	2	3	8	15	8	14	17	13	4	17	20	21	13	3	3	9	2	2	3	2	1	5	3	2	17	26
50 to 64	1	8	4	0	1	1	3	1	2	5	2	0	2	6	6	3	0	1	2	0	0	1	1	0	0	0	1	5	8
65 and more	-	1	0	-	-	0	1	0	1	0	0	-	0	2	2	0	-	-	0	-	-	0	-	-	0	0	0	1	2
Don't know	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	-	-	-	-	-	-	-	-	-	-	-	-
Non user *																													
Up to 24	15	7	8	18	19	16	18	12	13	10	9	17	10	6	9	12	13	17	15	13	19	17	14	19	15	21	16	16	11
25 to 49	35	22	28	39	41	36	30	37	34	30	33	38	29	21	23	32	42	40	32	45	44	39	41	44	41	43	42	28	21
50 to 64	20	14	21	22	19	18	17	20	20	18	19	21	19	17	15	19	21	21	23	21	20	21	22	20	20	17	21	14	12
65 and more	19	17	17	15	15	18	12	20	13	15	17	17	15	19	17	17	19	17	15	18	14	18	19	16	17	14	17	16	12
Don't know	-	-	-	-	-	-	-	-	-	-	-	-	-	-	1	0	-	-	-	-	-	-	-	-	-	-	-	-	-

Base: All respondents, weighted column percentages
Questions: IN1, B1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003
*incl. non eCommerce but Internet user, non Internet user and “don’t know” on eCommerce/ Internet usage

The eCommerce consumer market consists of an increasingly diverse spectrum of users, and provide interesting reading if classified by gender, age, income and education. Within these taxonomies one of the most dynamic group of eCommerce users is the 25-49 age class. They represent a driving force of eCommerce users across the EU. In the EU, this age group (28% of it are eCommerce users) is by now as or more likely to be eCommerce users than the Internet pioneering younger age group (25%). Only about 5% in the majority of the NAS countries are e-commerce users at all. Here as well, the most important market segment is the 25-49 age group. With eCommerce participants, differences also exist across gender (although this is closing) and employment status. There is actually surprisingly limited differential between employed and those in education (27% and 28% of either are eCommerce users). The unemployed (17%) are about 60% as likely to be users as those in employment, and even more significant differences do exist between these groups and those who are retired (6%).

eCommerce usage by age (% of population)



No. 21 Online eCommerce usage and experience

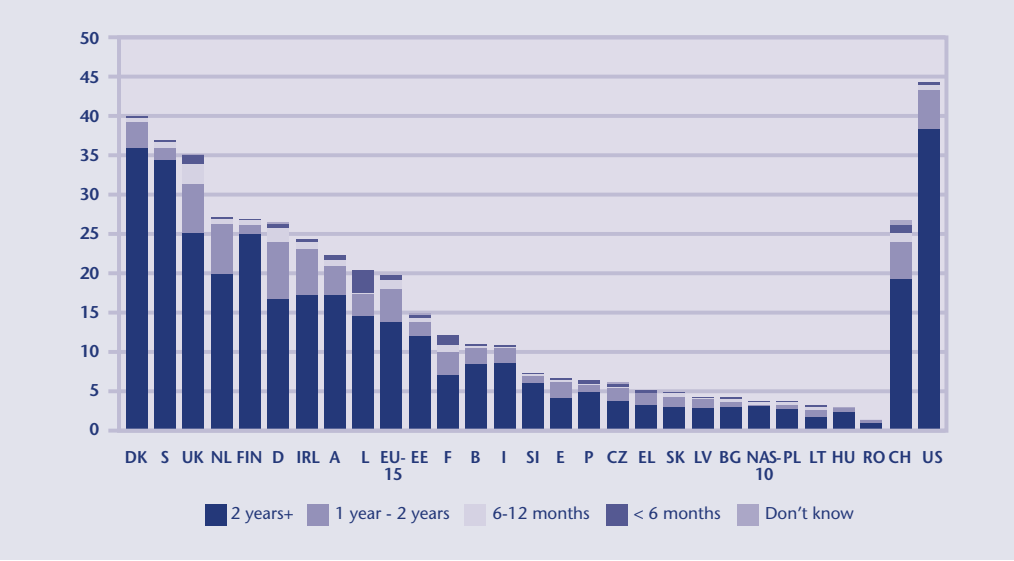
Online experience of eCommerce users

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
More than 2 years	8	36	17	3	4	7	17	8	14	20	17	5	25	34	25	14	3	4	12	2	2	3	3	1	6	3	3	19	38
1 year - 2 years	2	3	7	1	2	3	6	2	3	6	4	1	1	1	6	4	1	2	2	1	1	1	0	0	1	1	1	5	5
6-12 months	0	1	2	0	0	1	1	0	0	1	1	0	1	1	3	1	0	0	1	0	1	0	0	0	0	1	0	1	1
Less than 6 months	0	0	1	1	0	1	0	0	3	0	1	1	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	1	0
Don't know	-	-	0	-	-	-	-	-	-	-	-	-	-	-	0	0	-	0	0	0	-	-	0	-	-	-	0	1	-

Base: All respondents, weighted column percentages
Questions: B1, A10
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The length of online usage and experience, or online tenure, is a critical aspect for the development of eCommerce. The SIBIS survey shows that at least two years experience is required to be a more adept eCommerce participant. SIBIS revealed that almost one sixth of the EU-15 could be classified as having significant online tenure, although this is someway behind the US's leading position. Conversely, many NAS have limited online tenure, although Estonia and Slovenia have encouraging profiles. Online tenure also has implications for the goal of increased broadband, as SIBIS analysis showed more experienced users tend to migrate to faster Internet connections.

Online eCommerce usage and experience (% of population)



No. 22 Establishments selling online

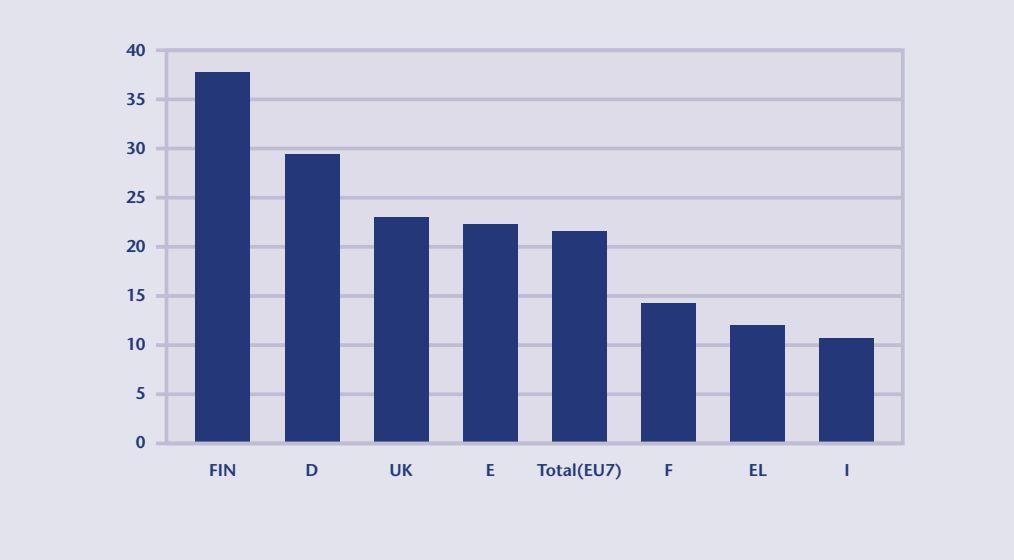
Online sales

	D	EL	E	F	I	FIN	UK	EU-7
Online-sales, sales via eMarketplaces or auctions	29	12	22	14	11	38	23	22
No online sales	47	36	39	41	39	41	48	44
No website and no eMarketplaces activity	24	52	38	45	50	21	29	35

Base: All establishments, weighted column percentages
Questions: C1, C2, C20
Source: SIBIS DMS 2002

Almost a quarter of Europe's businesses sell on line, whether that is through a website or an eMarketplace: Finland, but also Germany have a particularly high share of businesses that do so. However, sales from this activity tend to form a small portion of total sales turnover. On average, Business-to-Business sales equate to 12% of the total sales, with Business-to-Consumer representing some 10% of total sales, but this varies significantly across economic activity and size class.

Establishments selling online (both via website and eMarketplaces; % of establishments)



No. 23 Establishments selling online to different market groups

Share of establishments that sell online to businesses, consumers and public sector

	D	EL	E	F	I	FIN	UK	EU-7
Some online sales to businesses	16	5	11	6	6	26	14	11
No online sales to businesses	11	5	5	6	3	8	7	7
Don't know	1	0	-	1	-	2	1	1
No online sales	49	37	44	42	40	42	49	45
No online presence	24	53	41	45	50	22	29	35

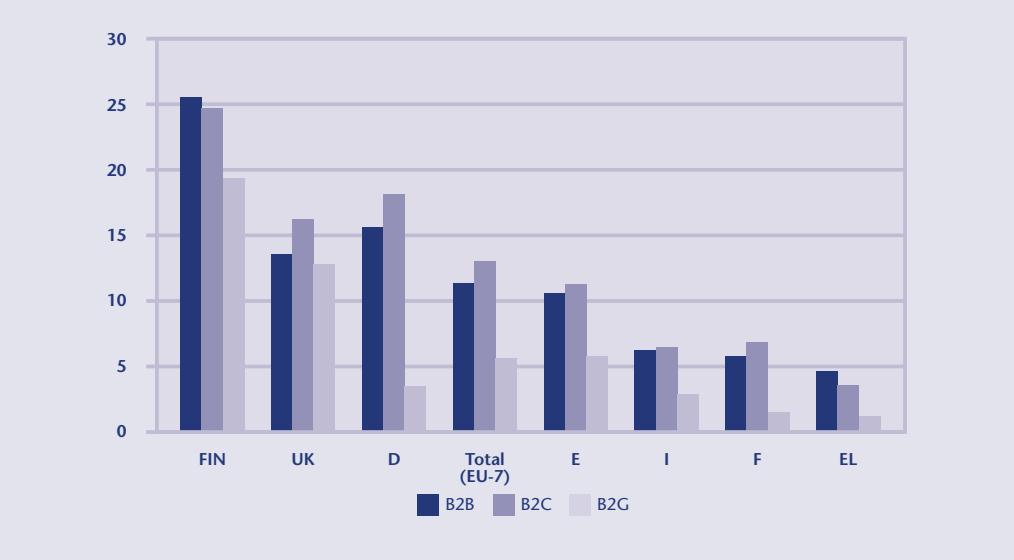
	D	EL	E	F	I	FIN	UK	EU-7
Some online sales to public sector	3	1	6	1	3	19	13	5
No online sales to public sector	22	8	9	10	6	13	9	13
Don't know	2	1	-	1	1	3	-	1
No online sales	49	37	44	42	40	42	49	45
No online presence	24	53	41	45	50	22	29	35

	D	EL	E	F	I	FIN	UK	EU-7
Some online sales to consumers	18	3	11	7	6	25	16	13
No online sales to consumers	9	6	3	6	3	9	6	6
Don't know	0	0	0	0	-	2	0	0
No online sales	49	37	44	42	40	42	49	45
No online presence	24	53	41	45	50	22	29	35

Base: All establishments, weighted column percentages
Question: C1, C2, C4
Source: SIBIS DMS 2002

Online selling activity appears to vary across the three market domains and across the countries analysed. On the whole Business-to-Business (B2B) and Business-to-Consumer (B2C) correlate closely in terms of online sales, whereas Business-to-Government (B2G) follows on average some 50% behind, except in the UK and Germany; where in the former B2G closes in on B2B, and in the latter B2G has someway to go. SIBIS analysis showed that if these activities are broken down into four economic sectors (manufacturing, distribution, financial & business services, and public & social services) interesting patterns emerge. Distribution fairs well with sales to the public and businesses. The manufacturing sector sells more to businesses, while distribution and financial sell more to consumers. The public sector obviously interacts with the public and other public sector organisations, but much less than the other sectors. This illustrates that the public sector still has someway to go, and is still playing catch up to other sectors.

Establishments selling online by different target groups: Businesses, Consumers, Public Sector (% of establishments)



No. 24 Share of total online sales for B2B

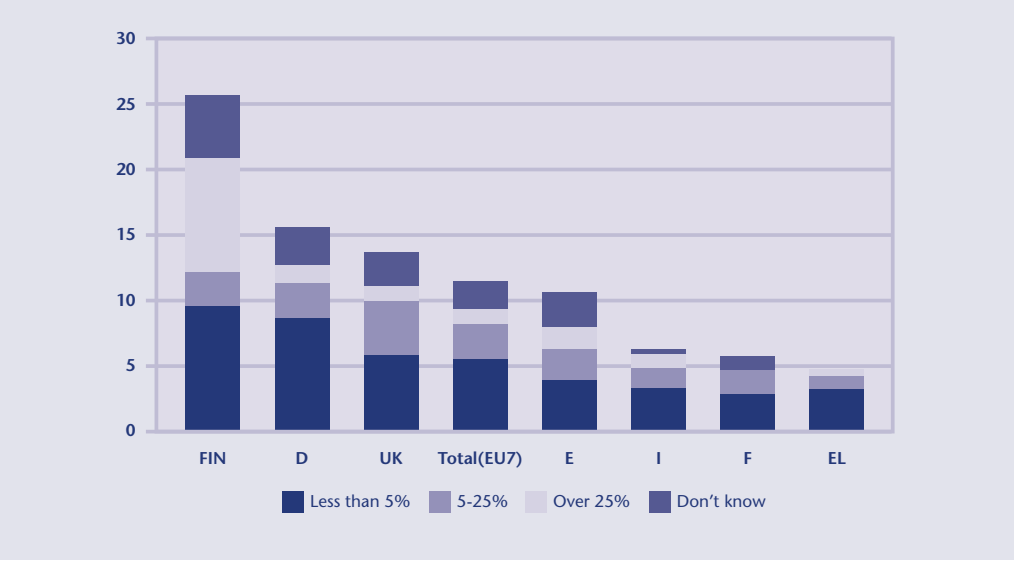
How large a share of total sales to businesses are conducted online?

	D	EL	E	F	I	FIN	UK	EU-7
Less than 5%	9	3	4	3	3	9	6	5
5-25%	3	1	2	2	2	3	4	3
Over 25%	1	0	2	-	1	9	1	1
Don't know	3	0	3	1	0	5	3	2
No online sales to businesses	12	5	5	7	3	10	9	8
No online sales	49	37	44	42	40	42	49	45
No online presence	24	53	41	45	50	22	29	35

Base: All establishments, weighted column percentages
Question: C1, C2, C5a
Source: SIBIS DMS 2002

The volume of Business-to-Business (B2B) sales generated by eCommerce continues to be on average, quite small, but considerable for some businesses: for half of the establishments involved in it, online sales represented less than 5% of their total sales revenues. Whereas 20% of establishments have online sales varying between 5-25% of their total sales, with even 10% of enterprises selling more than a quarter of their sales online. The latter figure is much higher in Finland, which seems to have the most advanced B2B online market among the countries surveyed.

Share of total B2B sales conducted online in European organisations (% of establishments)



No. 25 Share of total online sales for B2C

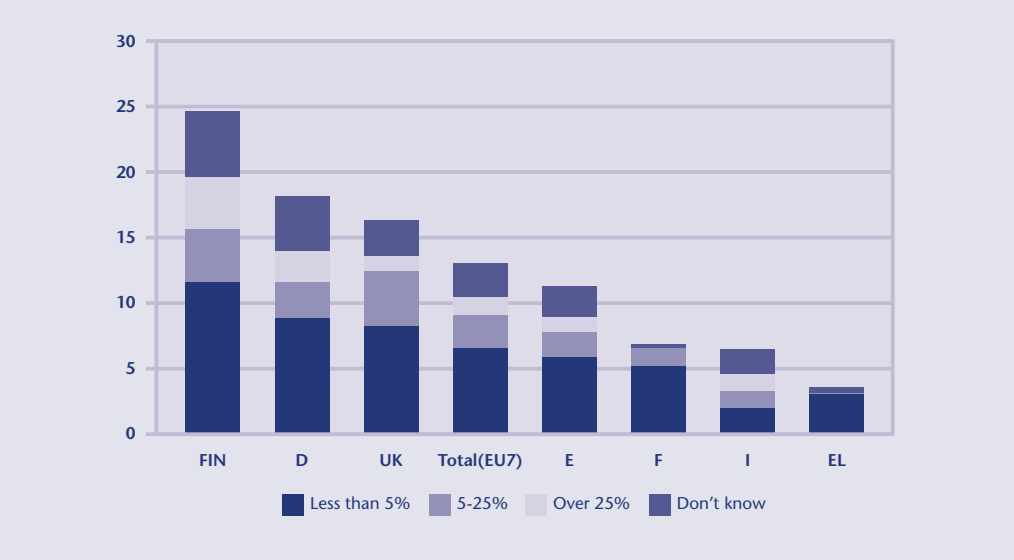
How large a share of total sales to consumers are conducted online?

	D	EL	E	F	I	FIN	UK	EU-7
Less than 5%	9	3	6	5	2	12	8	7
5-25%	3	0	2	1	1	4	4	2
Over 25%	2	-	1	-	1	4	1	1
Don't know	4	0	2	0	2	5	3	3
No online sales to consumers	9	6	4	6	3	11	6	6
No online sales	49	37	44	42	40	42	49	45
No online presence	24	53	41	45	50	22	29	35

Base: All establishments, weighted column percentages
Question: C1, C2, C5b
Source: SIBIS DMS 2002

The profile of online sales for Business-to-Consumer (B2C) is very similar to the Business-to-Business (B2B) profile, although on average it is slightly less developed. Also, the number of businesses selling less than 5% of total sales is more pronounced.

Share of total B2C sales conducted online in European organisations (% of establishments)



No. 26 eCommerce typology for establishments

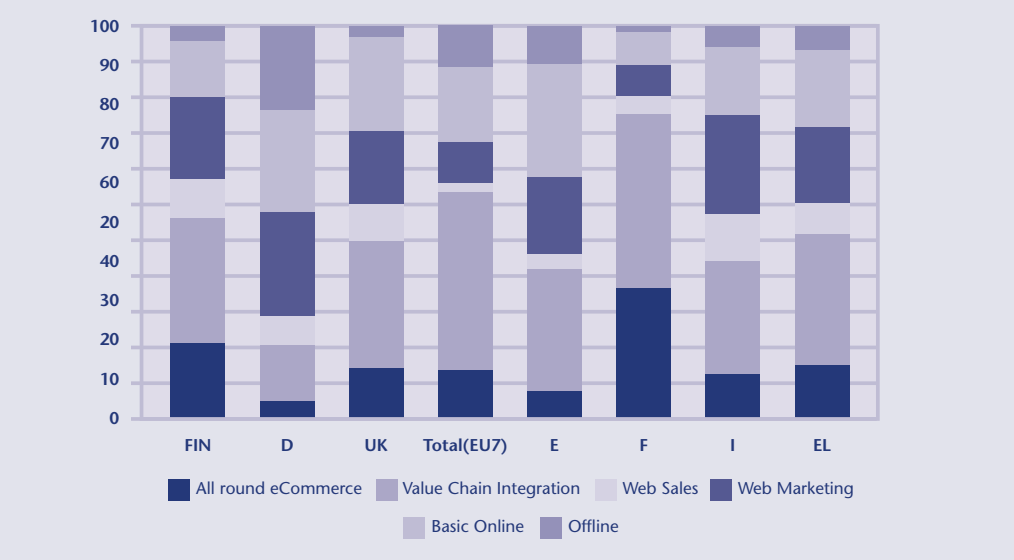
Share of establishments according to eCommerce typology

	D	EL	E	F	I	FIN	UK	EU-7
All round eCommerce	19	4	13	12	7	33	11	14
Value Chain Integration	32	14	32	45	31	44	29	33
Web Sales	10	7	9	2	4	5	12	8
Web Marketing	20	26	18	10	19	8	25	19
Basic Online	15	26	25	19	29	8	18	20
Offline	4	21	3	11	10	2	5	6

Base: All establishments, weighted column percentages
Questions: B1, B2, B5, B6, C1, C2, C9, C20
Source: SIBIS DMS 2002

SIBIS developed a classification for enterprises, based on the type of transactions they carry out over the Internet and the type of ICT services they employ (eCommerce typology[3]). The typology starts from the most elementary use of ICT (Basic online, i.e. the use of e-mail) and defines all stages of development culminating in the most sophisticated type, that of all round eCommerce. An all rounder is an organisation that carries out web marketing, online sales and Closed Network Business Integration (based on the use of extranets and/ or EDI). This classification is useful to map the stage of development of Business-to-Business by country or by sector.

Share of establishments according to eCommerce typology (% of establishments)



No. 27 Online interactive user

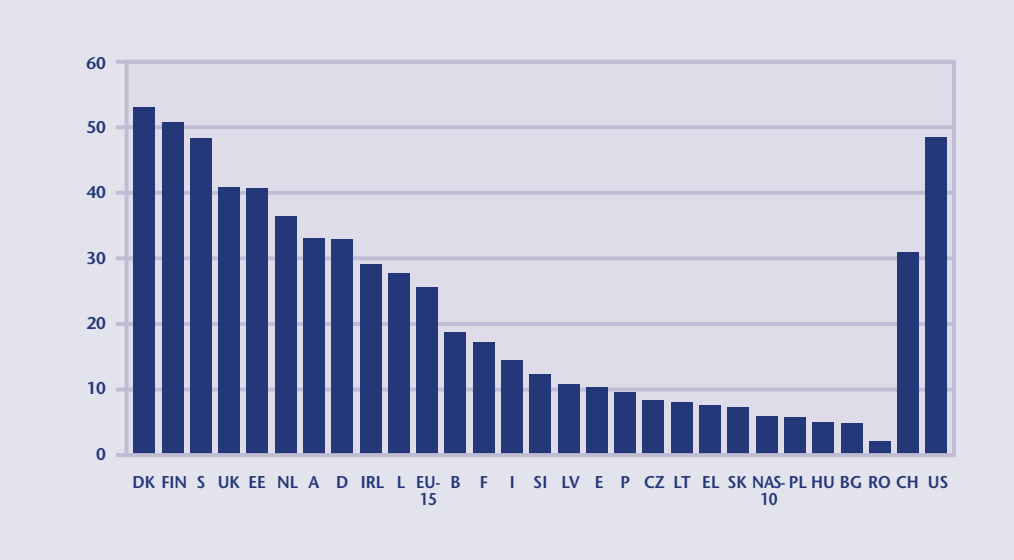
Which kinds of online activities do you use?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Order products or eBanking	18	53	33	7	10	17	29	14	27	36	33	9	50	48	41	25	5	8	40	5	8	10	5	2	12	7	6	31	48
Search for product-info only	25	16	17	15	22	15	27	23	21	28	18	15	14	20	20	19	13	21	8	10	14	15	8	11	24	16	12	24	19
Health and job-search only	3	3	3	1	3	3	3	1	3	1	2	2	1	1	3	3	1	3	3	2	3	4	3	2	2	3	3	3	4
None or don't know	7	4	8	10	9	7	7	6	6	8	7	7	4	5	6	7	7	7	7	6	11	9	8	5	7	5	7	8	6
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Question: B1
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Usage of the Internet to order products or services (including financial services such as online banking) is growing in Europe, with Nordic countries surpassing the US benchmark, and the candidate countries somewhat behind. With 25% of the EU's population being an interactive user (5% in the NAS), it is making headway to becoming a mass market service, but not quite. This is because socio-demographic features between Internet users exists, displaying considerable divides; especially across age, income, and education.

Online Interactive buyer by country: People who have ordered a product or a service, or have conducted online banking or bought financial products (% of population)



No. 28 Development of B2C eCommerce (DBC)

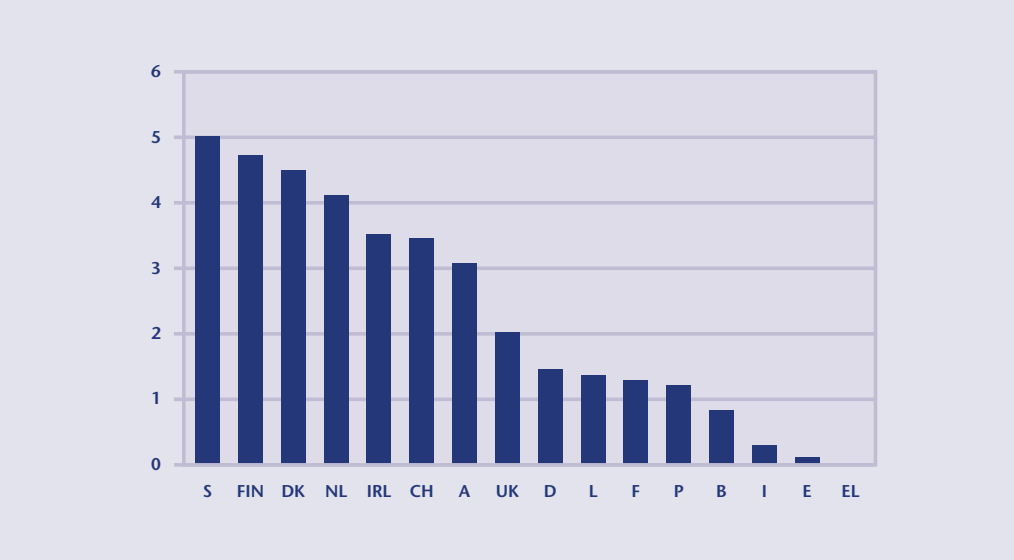
DBC Synthetic indicator

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	CH
Value	0.8	4.5	1.4	0.0	0.1	1.2	3.6	0.3	1.3	4.1	3.1	1.2	4.7	5.0	2.0	3.5

Bases: Different, depending on sub-indices
Sources: Databank Consulting 2002

Using statistical tools within principal component analysis makes it possible to identify the variables that help explain the degree of electronic commerce diffusion in different countries, removing the need to make subjective estimations in understanding the extent of eCommerce across the EU. The calculated synthetic indicator DBC[4] (Development of B2C eCommerce) has produced some interesting results. Nordic countries take the clear lead, with the UK's position being favourable. Good Business-to-Consumer (B2C) performers are Luxembourg and the Netherlands, with Austria marking the mid-ranking position. France, Italy and Spain's position within the third quarter of the ranking illustrates the compounding effects of limited infrastructure supporting consumer eCommerce activities, and cultural preferences of purchasing through sales channels other than the online route. Portugal and Greece's show a considerable gap between their positions and the leading European countries in terms of B2C preparedness.

Development of B2C eCommerce by EU country - SIBIS DBC Synthetic Indicator



No. 29 Access to ICTs at the workplace

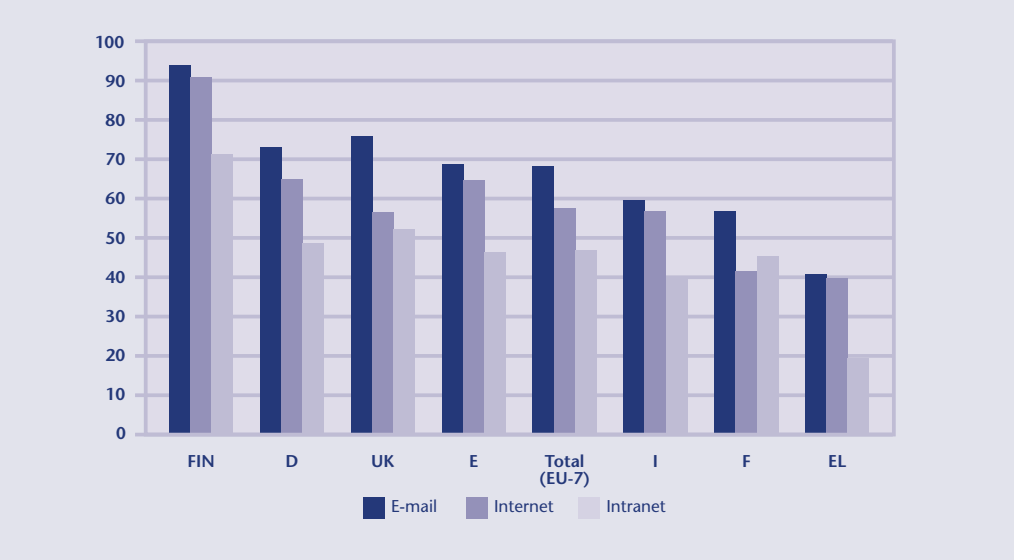
Share of establishments giving the majority of their office staff access to selected ICTs

	D	EL	E	F	I	FIN	UK	EU-7
E-mail								
Majority has access	73	40	69	57	60	94	76	68
Majority has no access	27	60	31	43	39	6	24	32
Don't know	-	-	-	0	1	-	-	0
Internet								
Majority has access	65	40	65	41	57	91	56	58
Majority has no access	34	59	35	59	43	8	44	42
Don't know	1	1	-	0	0	1	-	0
Intranet								
Majority has access	48	19	46	45	40	71	52	47
Majority has no access	50	79	53	54	60	28	46	52
Don't know	2	2	1	0	1	1	2	1

Base: All establishments, weighted column percentages
Questions: B11, B12, B13
Source: SIBIS DMS 2002

EU companies are important providers of ICT skills. Workers acquire know-how by using ICT applications as working tools. An indicator capturing this is the share of businesses which give their staff access to ICTs at the working place. SIBIS data shows that between 40% (Greece) and 91% (Finland) of EU employment is in companies which grant their staff free access to the Internet. The commitment with which Finnish companies let their employees use e-mail and surf the net can be assumed to be one reason for the success of the country in the European information economy. Other EU countries are catching up, though: In Germany, the figure for businesses providing workplaces with Internet access has almost tripled in the last 3 years, from 24% in 1999 to 65% in 2002.

Establishments giving their staff access to ICTs (% of establishments)



No. 30 Employee participation in decision making

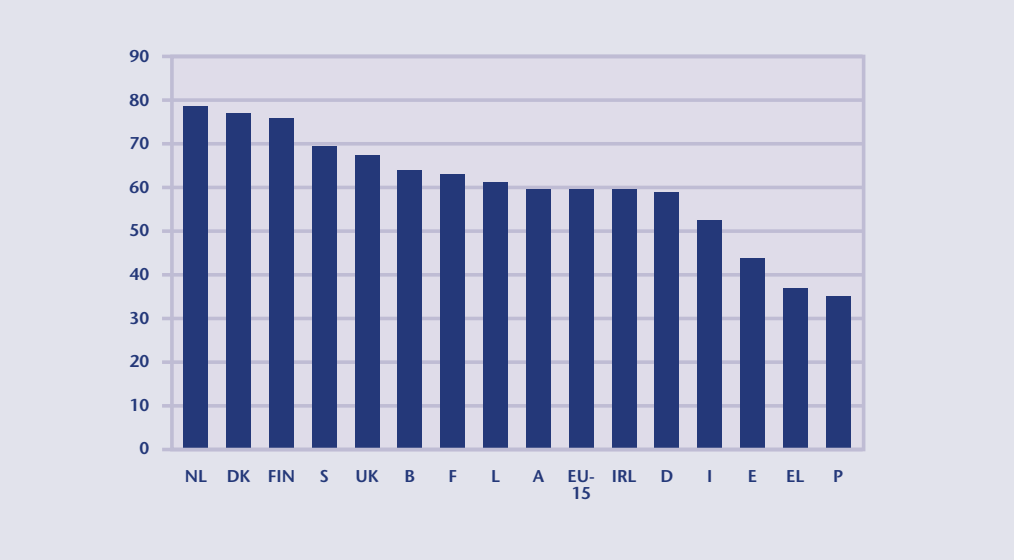
Share of employed population who participate in decisions relating to changes in work organisation

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15
Participating in decision making	64	78	59	37	44	63	60	53	62	79	60	35	76	70	68	60
Not participating in decision making	23	16	31	35	38	28	26	31	22	13	32	54	15	22	25	29
Don't know	12	7	10	27	18	9	14	16	16	8	8	10	9	8	7	11

Base: Employed population
Source: ESWCs 2000

Worker participation in decision-making in the EU can be analysed using data from the European Survey on Working Conditions (ESWCs) which was last carried out in 2000. Participation is here defined as being able to discuss changes in work organisation with the superior. This practice is quite common already in most of the EU, with more than three quarters of Dutch, Finnish and Danish workers claiming they can discuss changes to the organisation of their work with their superiors, against less than 40% in Greece and Portugal. The countries with a high degree of worker participation appear to be those which have a long tradition in attempts to involve workers in company decisions (which has often been an explicit policy goal of these countries' governments), and those which have a higher than average share of the labour force in the services sector.

Participation in decision making (% of employed population)



No. 31 Management by objectives

Share of employed population being "managed by objectives"

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15
"Managed by objectives"	42	56	36	33	38	41	38	38	30	57	39	39	38	45	43	40
Not "managed by objectives"	58	44	65	67	62	59	62	62	69	43	61	62	62	54	57	60
Don't know	-	0	-	0	0	-	0	-	1	-	0	-	0	0	0	0

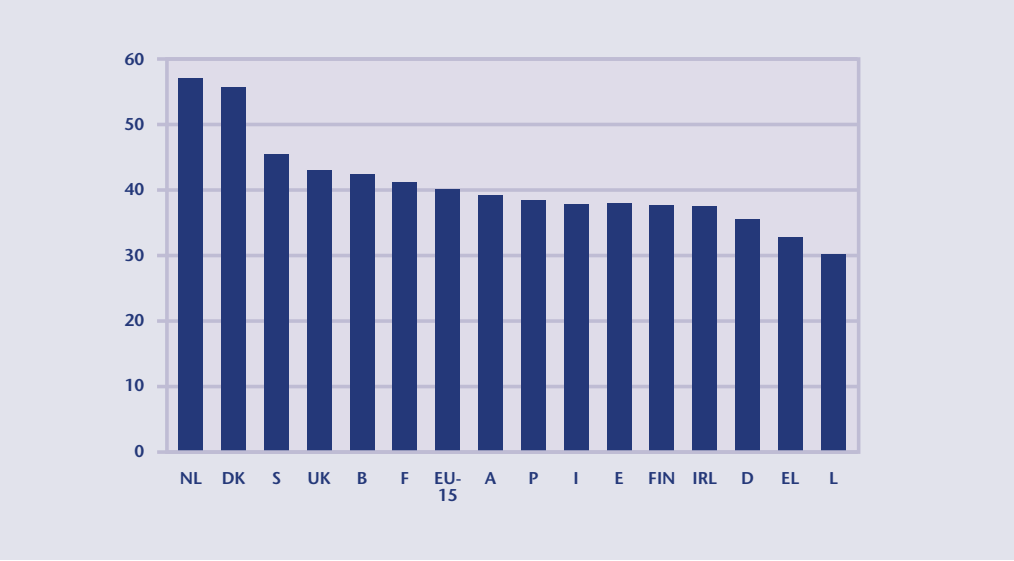
Base: Employed population
Source: ESWCs 2000

"Management by objectives" refers to the need to refrain from the traditional "management by eyeball", meaning that workers are made responsible for reaching certain targets, without being given detailed instructions how to reach them (and without being exposed to direct control of behaviour by their superiors). SIBIS defines "management by objectives" as those cases where workers state that they generally

- have to assess themselves the quality of their work, and
- have to solve unforeseen problems on their own, and
- are able to choose or change their order of tasks, methods of work and speed or rate of work.

According to these criteria, and using data from the ESWCs (European Survey on Working Conditions), between one third (Luxembourg, Greece, Germany) and more than half (the Netherlands and Denmark) of all persons employed are being managed by objectives.

"Managed by objectives" (% of employed population)



No. 32 Discretion over starting and finishing times at work

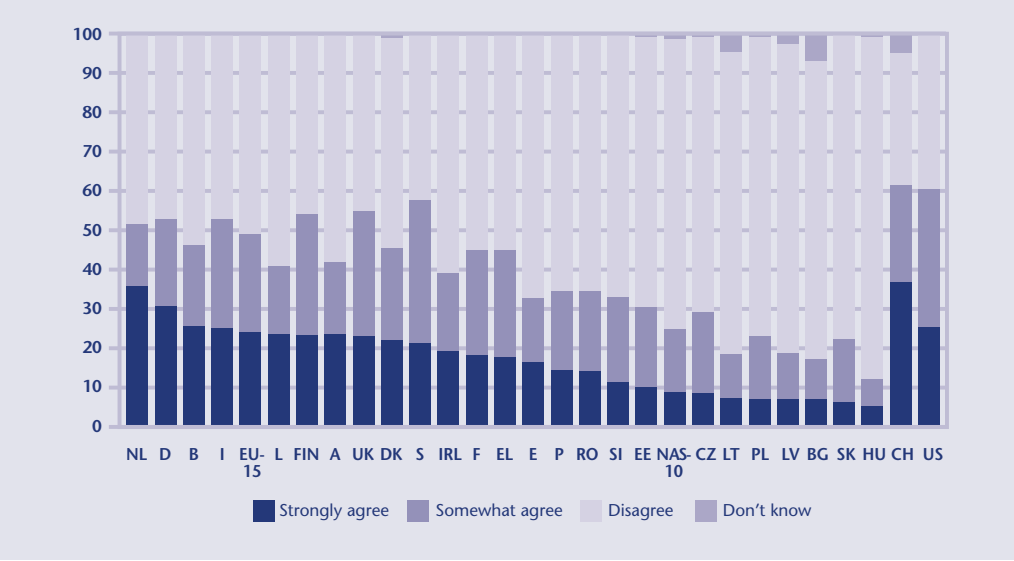
"I can adapt my starting and finishing times (at work) according to my personal preferences"

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Strongly agree	25	22	31	18	16	18	19	25	24	36	23	14	23	21	23	24	7	9	10	5	7	7	7	14	11	6	9	37	25
Somewhat agree	21	23	22	27	16	27	20	28	17	16	19	20	31	37	32	25	10	20	20	7	11	12	16	20	22	16	16	25	35
Disagree	54	54	47	55	68	55	61	47	59	49	58	66	46	42	45	51	76	70	69	87	77	78	76	66	67	78	74	34	39
Don't know	-	1	0	-	-	0	-	1	-	-	0	-	-	0	0	0	7	1	1	1	5	3	1	-	-	0	1	5	0

Base: All persons employed excluding self-employed, weighted column percentages
Questions: H2
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Here, workers were asked whether they can, in their current work arrangement, adapt their daily starting and finishing times to their personal preferences. For answers a three-point-scale "strongly agree", "somewhat agree" and "disagree" was used. Near to 50% of all persons employed in the EU state they have this kind of flexibility, half of which agree "somewhat", the other half "strongly". Even in Portugal and Spain, the countries with the lowest overall figures, more than one third benefit from this freedom. Workers in the Newly Associated States seem to have much less of this type of flexibility: here, three out of four workers state that they cannot choose starting and finishing times themselves.

Work situation: can adapt starting & finishing times to personal preferences (% of employed population excl. self-employed)



No. 33 Home-based teleworking

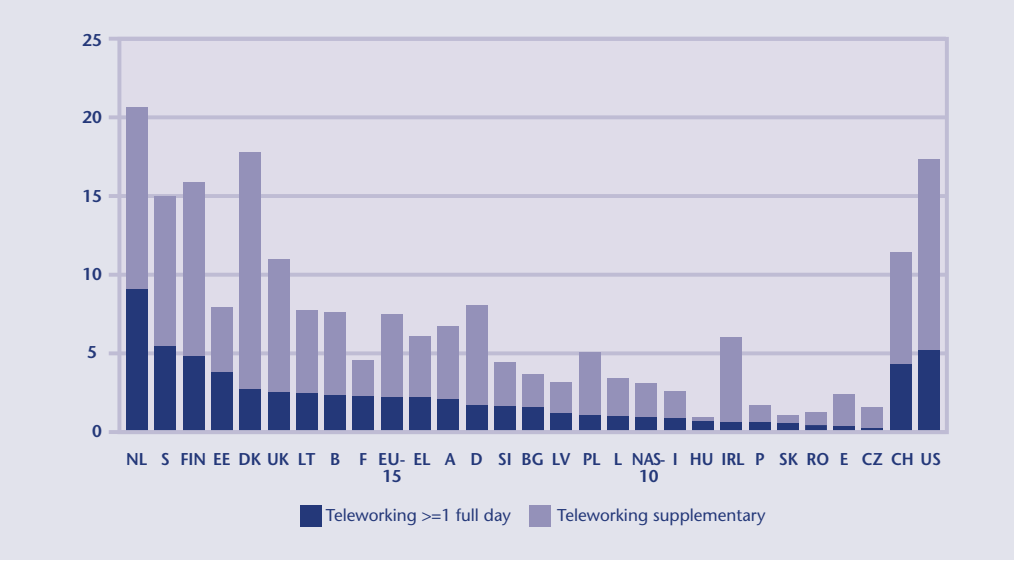
Share of employed population who spend at least one full working day per week/ who spend less time teleworking from home

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Teleworking >= 1 full day	2.2	2.6	1.6	2.1	0.3	2.2	0.5	0.8	0.9	9.0	2.0	0.5	4.7	5.3	2.4	2.1	1.5	0.1	3.7	0.6	2.3	1.1	1.0	0.3	1.6	0.5	0.8	4.2	5.1
Teleworking supplementary	5.3	15.1	6.3	3.9	2.0	2.3	5.5	1.7	2.4	11.6	4.7	1.1	11.0	9.5	8.5	5.3	2.1	1.3	4.1	0.2	5.3	2.0	4.0	0.9	2.8	0.5	2.2	7.1	12.2
Not teleworking (home-based)	91	82	92	93	98	95	94	97	94	79	93	98	84	85	89	92	92	98	88	99	87	93	92	99	93	98	95	88	82
Don't know	1	-	-	1	-	0	-	0	3	0	-	-	-	-	0	0	4	1	4	0	6	4	3	0	3	1	2	0	0

Base: All persons employed, weighted column percentages
Questions: E1, E3, E4
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Seven percent of the EU-15 working population are teleworking from home presently, at least part of their working time. This average masks big differences between Member States, with the Netherlands and the Scandinavian countries well ahead of the rest of the EU, and about on par with the US. This indicator includes all types of home-based telework with the exception of self-employed freelancers in SOHOs. Numbers for permanent or alternating home-based teleworking (spending all or at least one working day per week at home, respectively) are much smaller, because most teleworkers still spend the majority of their working hours at a central office. Among the candidate countries from Central and Eastern Europe, Estonia and Lithuania have a share of home-based teleworkers which is above the EU average.

Home-based teleworking (% of employed population)



No. 34 Total teleworkers

Share of employed population who are teleworking (as home-based, mobile or SOHO-based self-employed teleworkers)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT*	LV	PL	RO	SI	SK	NAS-9**	CH	US
Total teleworkers	10.6	21.5	16.6	11.1	4.9	6.3	10.9	9.5	5.6	26.4	13.8	3.4	21.8	18.7	17.3	13.0	5.5	4.7	12.2	3.6	9.2	6.5	8.4	2.0	8.6	3.7	5.4	16.8	24.6
Not teleworking	89	78	83	89	95	94	89	90	94	74	86	97	78	81	83	87	95	95	88	96	91	93	92	98	91	96	95	83	75

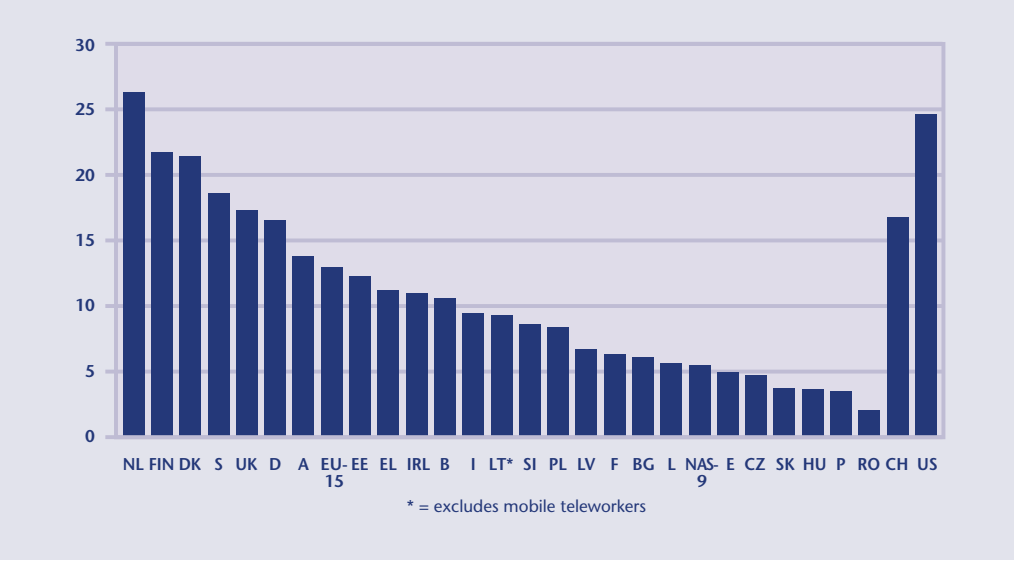
Base: All persons employed, weighted column percentages
Questions: E1, E3, E4, F2, F3, G1
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003
* LT does not include mobile teleworking ** NAS average excluding LT

Taking all types of telework together (home-based and mobile telework as well as self-employed teleworkers in SOHOs), 13% of the working population in the EU can be classified as teleworkers. This means that the share of teleworkers in Europe is considerable lower than in the US: in the country where the telework idea was born, every fourth worker has some type of teleworkplace (25%).

The countries from Central and Eastern Europe lag somewhat behind in telework penetration (average: 5.5%). However, there are comparatively high numbers in Estonia (12%) as well as in Lithuania (9%), Slovenia (9%) and Poland (8%).

This pattern is of course partly determined by the economic wealth of each country, as measured in GDP per head. Additionally, considerable differences in the availability of appropriate technological infrastructure can be expected to play an important role, together with organisational practices in companies, political and legal frameworks, housing conditions (spare room for home-based telework), as well as cultural factors such as common attitudes of management and workforce towards techno-social change.

Total teleworkers (% of employed population)



No. 35 Interest in telework

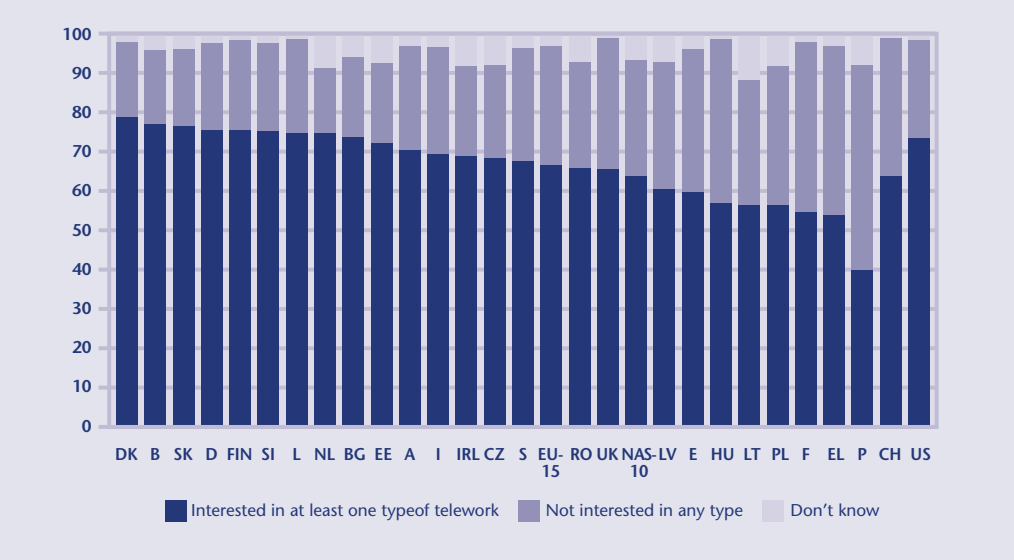
Share of employed population who are interested ("very" or "somewhat") in at least one type of telework

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Interested in at least one type of telework	77	79	75	54	60	54	69	69	75	75	70	40	75	67	65	66	74	68	72	57	56	60	56	66	75	77	64	64	73
Not interested in any type	19	19	22	43	36	43	23	28	24	17	26	52	23	29	33	30	20	24	21	41	32	32	35	27	22	19	30	35	25
Don't know	4	2	3	3	4	2	8	3	2	9	3	8	2	4	2	3	6	8	8	2	12	7	8	7	2	4	7	1	2

Base: All persons employed, weighted column percentages
Questions: E8
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The degree of interest in telework remains considerable: 40 percent of the EU workforce express interest in permanent telework (where practically all working time in spent at home), 52 percent in alternating telework (with at least one working day spent at home per week) and even 55 percent in centre-based telework (meaning workplaces provided by the employer in an office facility close to the employee's residence). Two in three are interested in at least one of these forms of telework. While interest in alternating telework is somewhat higher, the number of workers interested in permanent telework is still remarkable given the low actual spread of this method of work. The share of persons interested varies comparatively little between countries. This also applies to the Newly Associated States.

Interest in telework - including current teleworkers (% of employed population)



No. 36 Feasibility of teleworking

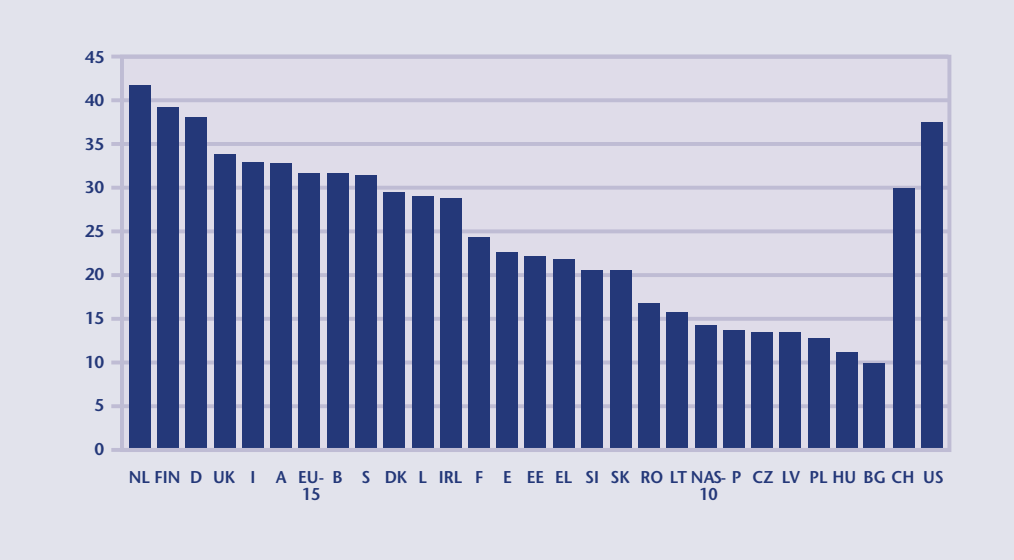
Share of employed population whose job is feasible for alternating home-based telework

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Job is feasible	31	29	38	21	22	24	28	33	29	41	32	13	39	31	33	31	10	13	22	11	15	13	12	16	20	20	14	29	37
Job is not feasible	61	69	61	77	76	74	69	59	70	58	65	82	60	67	66	66	84	79	74	88	68	80	72	76	77	75	77	69	62
Don't know	8	1	1	2	2	2	2	9	1	1	3	4	1	2	1	3	6	8	5	1	16	7	15	7	3	5	9	1	1

Base: All persons employed, weighted column percentages
Questions: E9a
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Under the assumption that they would have to spend at least one full working day per week teleworking from home, 32% of all EU workers regard their job as feasible for this type of alternating telework, 15 times the number of workers who already telework for at least one day per week. This indicates that the principal interest expressed in telework is to a considerable extent not being translated into actual telework practice yet although jobs are regarded as being feasible for telework. Reasons quoted for jobs not being feasible for telework include the need for face-to-face contacts with others, access to machines or other things which cannot be accessed from home, and companies or superiors not approving of telework.

Feasibility of teleworking (% of employed population)



No. 37 Outcomes of home-based telework in the EU

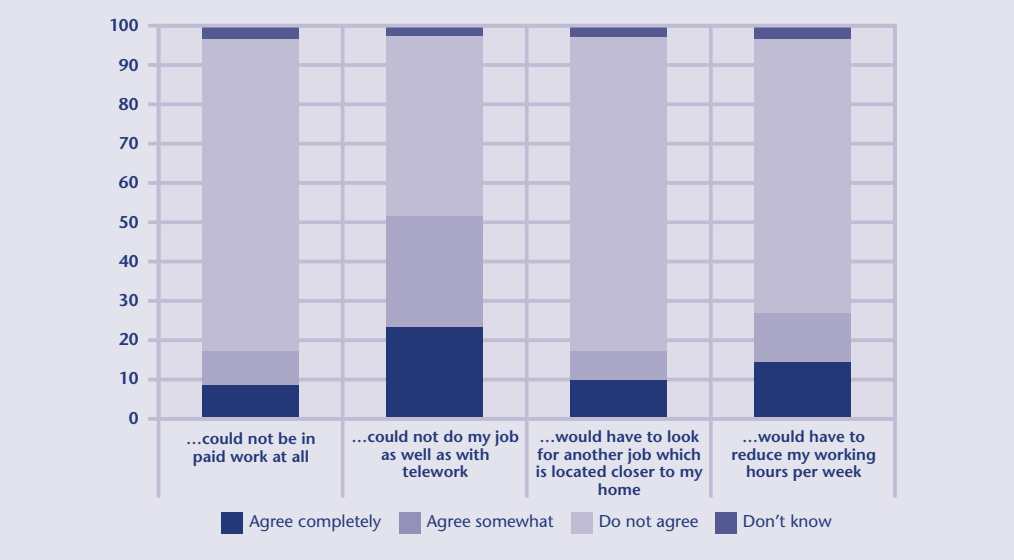
Without the possibility to do teleworking from home, teleworkers think they

	...could not be in paid work at all	...could not do their job as well as with telework	...would have to look for another job which is located closer to the home	...would have to reduce their working hours per week
Agree completely	9	23	10	15
Agree somewhat	9	28	7	12
Do not agree	79	45	79	70
Don't know	4	3	3	4

Base: Home-based teleworkers, weighted column percentages
Questions: E11
Source: SIBIS GPS 2002

Home-based teleworkers were asked what would happen if they could not work from home anymore. The results show clearly that telework is perceived to have a beneficial effect on work performance, labour market participation, and geographical mobility. 23% state they could not do their job as well without the possibility to telework from home; 9% could not be in paid work at all; 15% would have to work less hours; and at least 10% of all teleworkers would have, according to their own assessment, to look for another job which is located closer to their home.

EU-15 teleworkers: without telework I ... (% of home-based teleworkers)



No. 38 Mobile teleworking

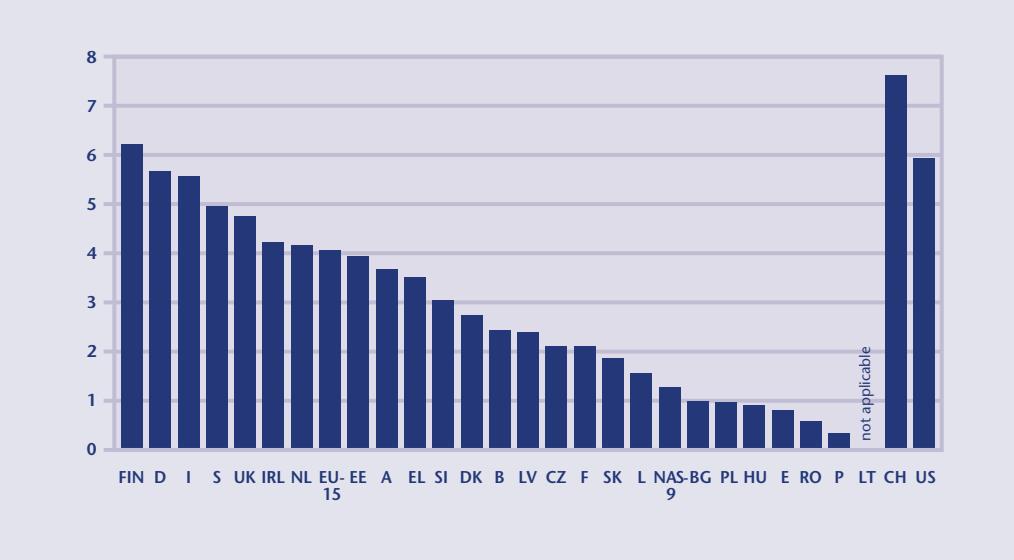
Share of employed population who practise mobile teleworking

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-9	CH	US
Mobile teleworker	2.4	2.7	5.7	3.5	0.8	2.1	4.2	5.5	1.5	4.1	3.7	0.3	6.2	4.9	4.7	4.0	1.0	2.1	3.9	0.9	*)	2.4	1.0	0.6	3.0	1.8	1.2	7.6	5.9
Mobile worker (>=10 h)	10.1	11.2	10.6	11.7	8.3	13.4	15.5	8.6	5.3	15.5	10.0	4.0	13.5	14.4	14.2	11.4	10.8	12.4	9.8	15.9	*)	12.5	7.5	4.7	17.9	14.5	9.8	9.2	13.0
Non mobile worker	79	85	80	84	89	82	79	82	90	79	83	93	79	81	78	82	83	83	82	83	*)	77	89	94	76	82	87	83	79
Don't know if mobile (tele)worker	8	1	3	0	2	2	1	4	4	1	3	2	2		3	3	5	2	4	1	*)	8	3	1	4	2	2	0	3

Base: All persons employed, weighted column percentages
Questions: F1, F2
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003
*) data not applicable

SIBIS defines mobile teleworkers as those who spend 10 hours per week or more away from their home and their main place of work, e.g. on business trips, travelling or on customer's premises, and make use of online connections while doing so. 15% of the EU workforce can be described as “mobile workers” (spending more than 10 working hours per week away from home and their main place of work) and 4% as mobile teleworkers. Shares are on average much lower in the Newly Associated States. The main purposes of mobile teleworkers to use online connections appears to be sending and reading e-mail, but three quarters each also browse the Internet and connect to their company’s internal computer system.

Mobile teleworking (% of employed population)



No. 39 Tele-cooperation

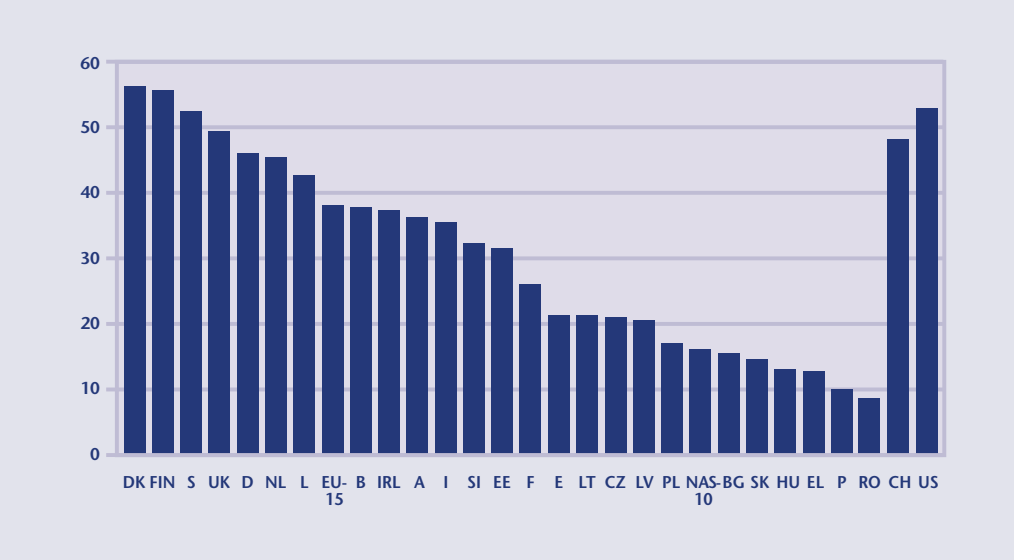
Share of employed population who use selected ICTs for cooperating with external work contacts

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Tele-cooperates	38	56	46	13	21	26	37	35	42	45	36	10	55	52	49	38	15	21	31	13	21	20	17	8	32	14	16	48	53
Does not tele-cooperate	62	42	54	87	78	74	63	65	58	55	62	90	45	47	51	62	82	78	69	87	77	77	83	91	68	84	83	48	47
Don't know if tele-cooperates	0	1	-	-	1	0	-	-	-	0	2	0	-	1	-	0	2	1	-	0	2	2	0	0	-	1	1	4	0

Base: All persons employed, weighted column percentages
Questions: A1, G1
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Evidence suggests that tele-cooperation, i.e. the use of information and communication technologies for collaboration across establishment borders, boosts worker productivity and innovative performance throughout the EU economy, since it allows flexible configurations of human capital without actually moving people from one place to the other. Tele-cooperation was operationalised for the SIBIS GPS as communicating with external business contacts via e-mail, video-conferencing or electronic data transfer. It is already widely in use in Europe with an average of almost 38% of EU and 16% of NAS workers practising it. For each of the three ICTs mentioned, the intensity of usage was assessed. E-mail and electronic data transfer are used at least once a day by more than three quarters and more than half of all people tele-cooperating, respectively.

Tele-cooperation (% of employed population)



No. 40 Self-employed teleworkers in SOHOs

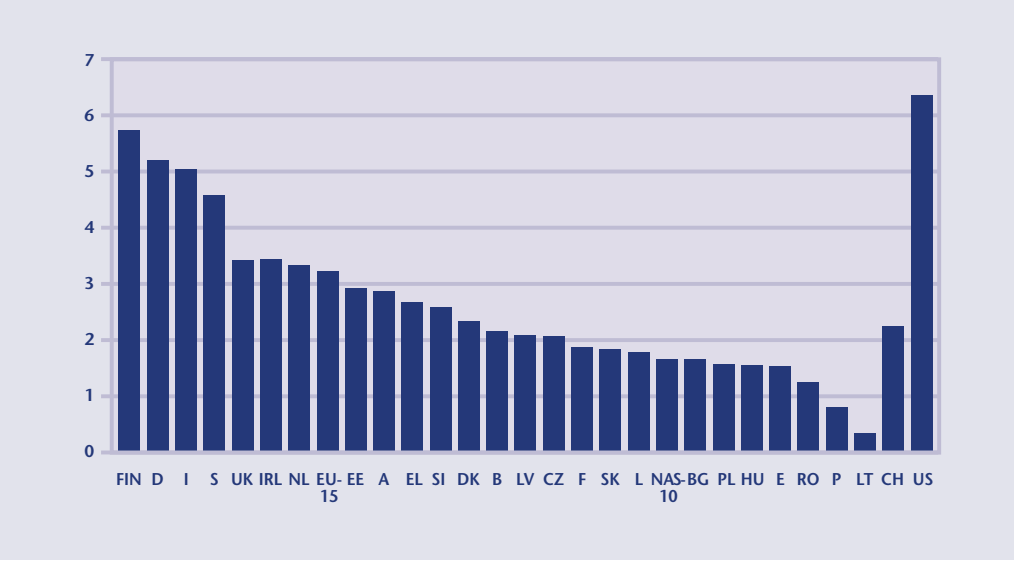
Share of employed population who are self-employed, work from a home office, and use ICTs to cooperate with work contacts

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Teleworker in SOHO	2.5	2.9	5.2	3.4	2.0	0.8	3.3	2.6	1.8	5.0	5.7	1.5	3.2	2.0	4.5	3.4	1.2	1.6	1.8	2.1	1.5	1.5	2.8	0.3	2.3	1.6	1.7	2.2	6.3
No teleworker in SOHO	7	8	10	38	20	9	18	20	7	7	11	23	13	13	9	13	15	11	7	14	8	9	20	16	9	11	15	10	11
Don't know if teleworker in SOHO	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	0	-	0	0	0	-	0	0	-	-
Not self-employed	89	89	85	59	77	91	78	77	92	85	83	75	84	85	87	83	82	87	91	83	91	90	77	84	88	87	83	88	82
Don't know if self-employed	1	0	0	-	1	-	1	0	-	3	0	1	0	0	0	0	1	-	-	-	-	-	0	-	-	-	0	-	0

Base: All persons employed, weighted column percentages
Questions: IN2, IN4, IN21, A1, E1, G1
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The self-employed, especially freelancers and other "own account self-employed", often work from a home base. By using ICTs for tele-cooperation with clients, collaborators and suppliers, many of such home workplaces have been turned into what are called SOHOs (small office - home office), i.e. ICT-enhanced workplaces for self-employed teleworkers. 3.4% of EU and 1.7% of NAS employment is by self-employed teleworkers in SOHOs. This equals 21% off all self-employed in the EU. Figures in the US are almost twice as high.

Self-employed teleworkers in SOHOs (% of employed population)



No. 41 Types of eLancing in the EU

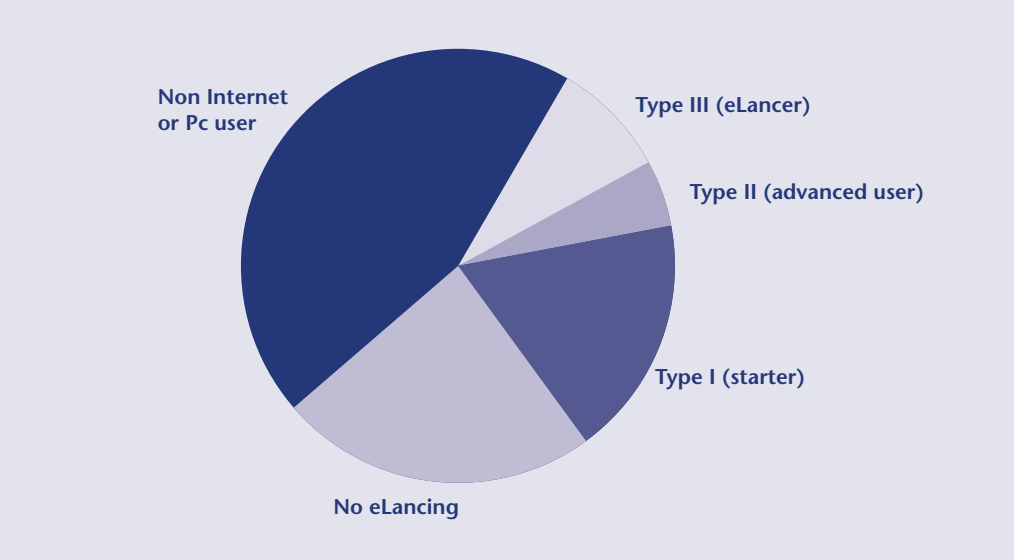
Share of the self-employed who use different intensities of eLancing

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
Type III (eLancer)	14	20	12	5	1	0	4	10	3	21	4	0	2	4	18	9	4	14
Type II (advanced user)	4	11	8	3	1	5	2	6	19	6	5	-	12	3	4	5	7	4
Type I (starter)	21	21	26	4	9	1	10	19	9	18	31	7	20	41	24	18	27	24
No eLancing	25	17	35	17	15	23	14	16	26	37	12	13	30	29	30	24	22	32
Don't know	-	-	0	-	-	-	-	-	-	-	2	-	-	-	-	0	-	-
Non Internet or PC user	36	31	19	72	74	70	69	50	44	18	46	80	36	23	24	45	40	26

Base: All persons self-employed, weighted column percentages
Questions: IN6, A1, A7, G4, G5, G6
Source: SIBIS GPS 2002

eLancing means freelancers using ICTs to substitute for face-to-face contacts with business contacts. SIBIS distinguishes between three degrees of eLancing activity: eLancing starters are self-employed workers who attract new business through ICTs or deliver work results to clients/ customers through the Internet; advanced eLancing users are self-employed workers who attract new business through ICTs and deliver work results to clients/ customers through the Internet. (Occasional) eLancers are self-employed workers who communicate with clients/ customers exclusively by electronic means, but without meeting face-to-face at all. The share of the self-employed who use eLancing is still modest on average, with 9% who can be described as (occasional) eLancers, an additional 5% of advanced users of eLancing and 18% of eLancing beginners.

eLancing Types in EU-15 (% of self-employed population)



No. 42 AWAI - Adaptability of work arrangements index

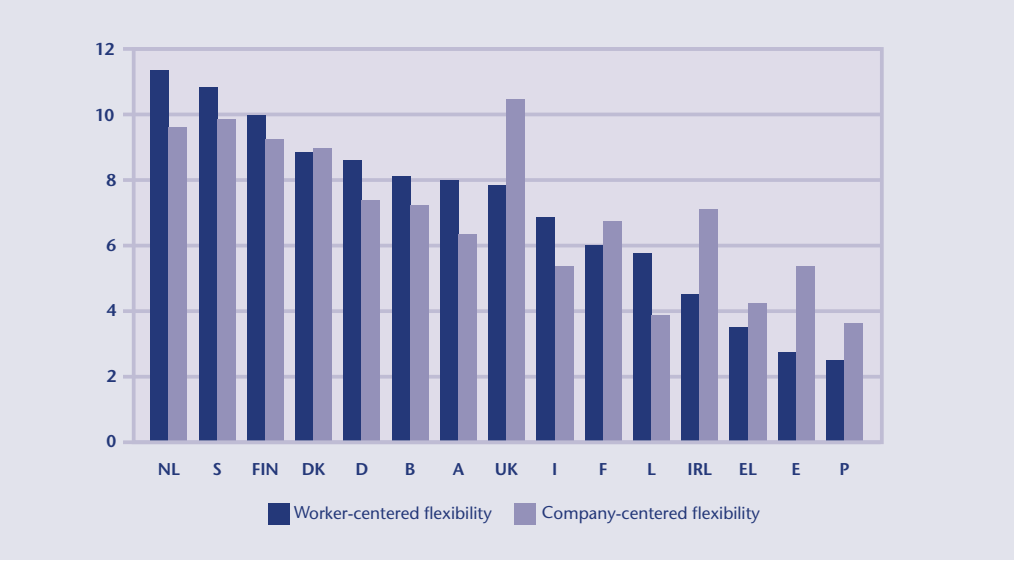
AWAI subindex values and country rankings

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK
Worker-centred flexibility															
Score	8.1	8.9	8.6	3.5	2.8	6.0	4.5	6.9	5.8	11.4	8.0	2.5	10.0	10.9	7.9
Rank	6	4	5	13	14	10	12	9	11	1	7	15	3	2	8
Company-centred flexibility															
Score	7.3	9.0	7.4	4.3	5.4	6.8	7.1	5.4	3.9	9.6	6.4	3.6	9.3	9.9	10.5
Rank	7	5	6	13	11	9	8	11	14	3	10	15	4	2	1

Base: All persons employed
Questions: 2002: IN6, A1, A7, G4, G5, G6
Sources: SIBIS GPS 2002, Community Labour Force Survey, European Survey on Working conditions, European Continuing Vocational Training Survey, OECD

Some countries, such as the UK and Ireland, get a higher score on the company-centred index than on the worker-centred index[5]. This might imply that in these EU Member States, flexibility on labour markets seems to benefit mainly employers. On the other hand there are countries like Austria, Italy and Luxembourg, where flexibility on labour markets seems to be distributed in favour of workers, while companies may be in need of a more flexible regulatory environment (or make better use of the potential for flexibility that is already existing). The Nordic countries and the Netherlands stand out as scoring high on both indices. These Member States seem to come closest to reaching the aims of the European Employment Policy, in which the need for both worker- and company-centred adaptability is very much emphasised.

Adaptability of work arrangements index - AWAI (2002) (Index values; maximum=15)



No. 43 Preferences, availability and usage of online services for tax declaration

Would you prefer to use the Internet to fill the income tax return/ tax declaration and is it possible to use it in the area you live and have you ever tried using it?

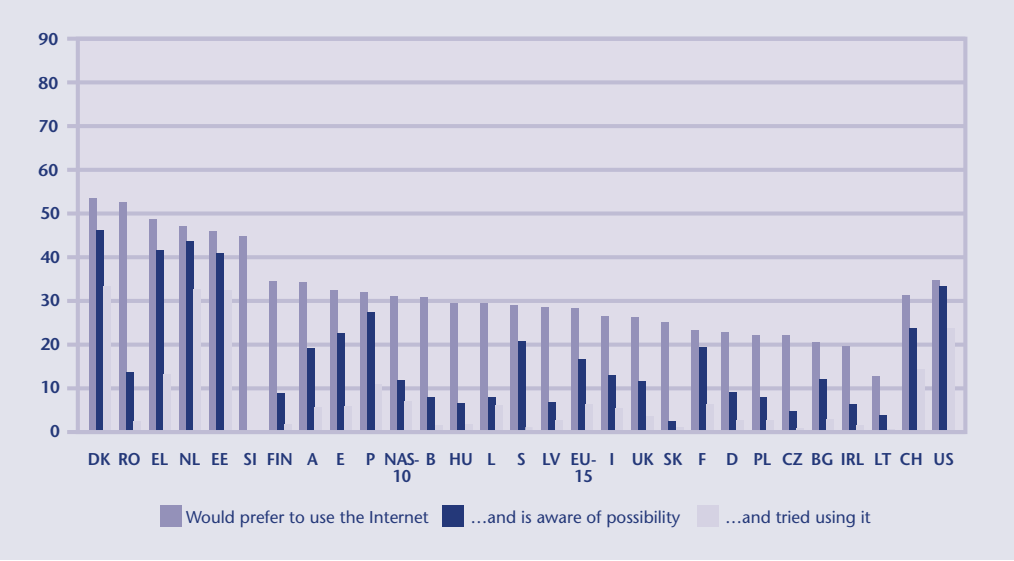
	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	31	53	23	49	33	23	20	26	30	47	34	32	34	29	26	28	20	22	46	30	13	29	22	53	45	25	31	31	35
Thereof:																													
Is aware of possibility	8	46	9	42	23	19	6	13	8	44	19	27	9	21	12	16	12	5	41	7	4	7	8	13	-	2	12	24	33
Tried using it	2	33	3	13	6	6	1	5	6	32	6	11	2	1	4	6	3	0	32	2	0	3	2	2	0	1	7	14	24
Would not prefer to use the Internet	67	47	77	49	67	76	80	73	76	53	66	68	65	71	74	72	80	78	54	70	87	71	78	47	55	75	69	69	65
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The online filing of taxes is one of the eGovernment functions targeted by the eEurope 2002 directive. Preference for online tax filing varies by country. Except for Greece, among the EU Member States, preference tends to correlate with reported usage. By contrast, in the NAS countries this does not hold. The relatively high preferences for using this online service in the NAS countries (and in Greece) can be explained by the fact that only early adopters of Internet are surveyed and they may have a more positive attitude towards Internet issues. However, (awareness of) availability and reported usage are very limited in these countries.

Although reported usage obtained from the survey may be indicative of trends across the countries surveyed, it should not be confused with actual usage. This is because only respondents who indicated a preference for online tax filing and reported availability of this service were asked whether they had used it. It is expected that reported usage may differ significantly from actual usage. This is the case, for example, in the US, where reported usage in the survey is 24% and actual usage is in excess of 30%.

Tax declaration/ filling the income tax return (% of regular Internet users)



No. 44 Preferences, availability and usage of Internet job search services

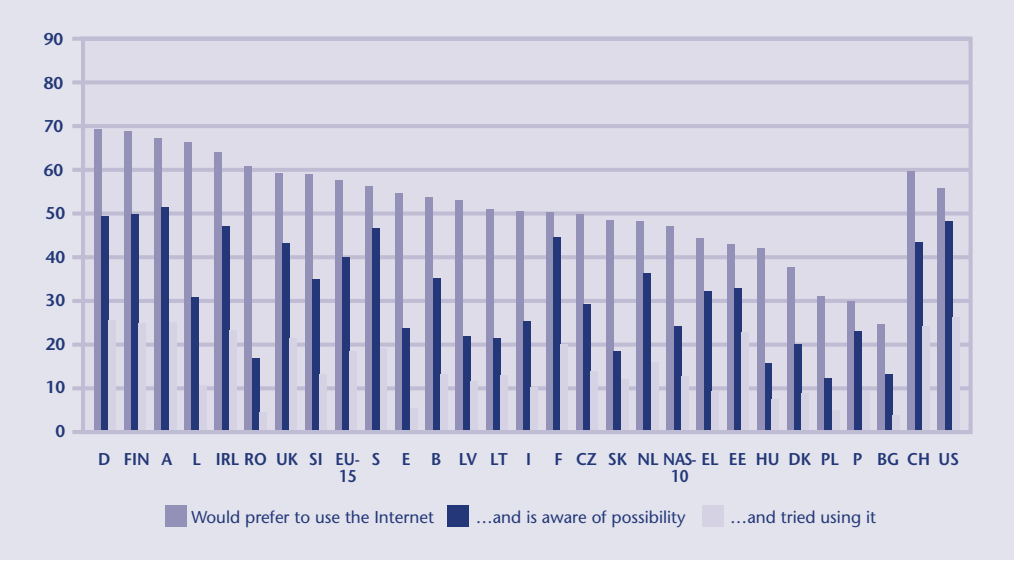
Would you prefer to use the Internet to search for jobs and is it possible to use it in the area you live and have you ever tried using it?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	54	37	69	44	54	50	64	50	66	48	67	29	69	56	59	57	24	50	43	42	51	53	31	61	59	48	47	59	56
Thereof:																													
Is aware of possibility	35	19	49	32	23	44	47	25	30	36	51	23	50	46	43	40	13	29	33	15	21	22	12	16	34	18	24	43	48
Tried using it	13	8	25	9	5	20	23	10	10	15	25	9	24	19	21	18	3	13	22	7	12	11	4	4	13	11	12	24	26
Would not prefer to use the Internet	44	63	31	54	46	49	36	49	34	52	33	70	31	44	41	42	76	50	57	58	49	47	69	39	41	52	53	41	44
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Public Employment Services over the Internet may improve the matching of supply of and demand for jobs by creating a common forum for all to use. Online job searching appears to be a well-accepted service. This is reflected in the high share of Internet users who would prefer to use the Internet for this purpose. However, there are some countries with notably weak preference for the Internet in this respect, in particular among the candidate countries, but also including Denmark and Portugal. This may be due to country differences in the way Public Employment Services organise their interface to the public, which implies a greater or lesser importance of online exchanges compared to face-to-face consultation and other traditional means of job-hunting.

Job search services (% of regular Internet users)



No. 45 Preferences, availability and usage of the Internet for personal document issues

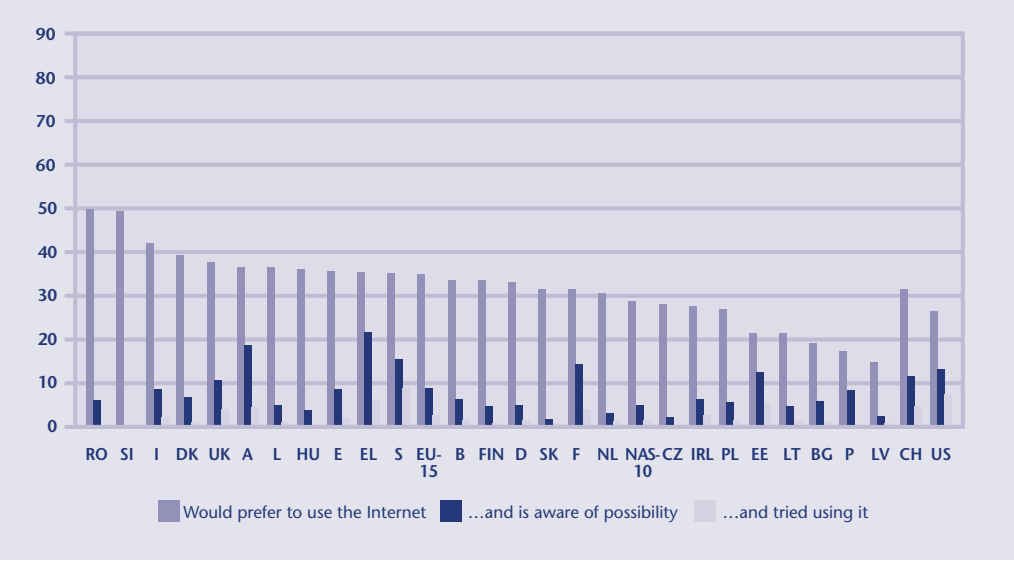
Would you prefer to use the Internet for requests for passport, driving license or other personal documents and is it possible to use it in the area you live and have you ever tried using it?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	34	39	33	35	35	31	27	42	36	30	36	17	33	35	37	35	19	28	21	36	21	15	27	50	49	31	29	31	26
Thereof:																													
Is aware of possibility	6	7	5	21	8	14	6	8	5	3	19	8	5	15	10	9	6	2	12	4	4	2	5	6	-	2	5	11	13
Tried using it	1	1	1	6	2	4	2	2	1	1	4	0	1	9	4	3	1	0	5	-	1	1	1	-	-	1	1	5	7
Would not prefer to use the Internet	65	61	67	63	65	68	73	58	64	70	64	83	67	65	63	65	81	72	79	64	79	85	73	50	51	69	71	69	73
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Requesting and obtaining personal documents such as passports and certificates has up to now usually required citizens to contact public authorities by mail or in person. At this time, citizens do not report a high preference for using this service online, as shown by the 50% or lower preference. Even when preference for this service is relatively high, this may not correlate with high usage. As (awareness of) availability of this online service is very low, very few people have ever tried using this online service.

Request for passport, drivers license, birth certificates or other documents (% of regular Internet users)



No. 46 Preferences, availability and usage of the Internet for car registration

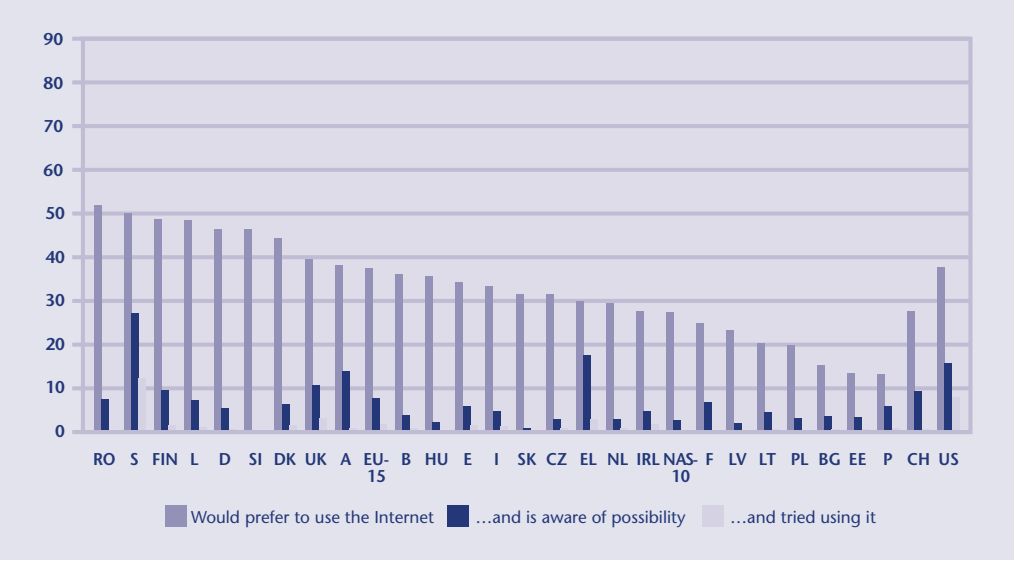
Would you prefer to use the Internet for requests for car registration services and is it possible to use it in the area you live and have you ever tried using it?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	36	44	46	30	34	25	28	33	48	29	38	13	49	50	39	38	15	31	13	36	20	23	20	52	46	31	27	27	38
Thereof:																													
Is aware of possibility	4	6	5	17	6	7	5	5	7	3	14	6	9	27	11	7	3	3	3	2	4	2	3	7	-	1	3	9	16
Tried using it	1	1	0	3	1	0	2	1	1	0	1	1	1	12	3	2	0	1	0	-	0	-	0	-	-	0	0	0	8
Would not prefer to use the Internet	62	56	54	68	66	74	72	66	52	71	62	87	51	50	61	62	85	69	87	64	80	77	80	48	54	69	73	73	62
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The SIBIS survey asked citizens whether they prefer to use the Internet for their car registration and those who prefer to use the Internet for this service were asked whether this service was available online in the region where they live (as far as they know). If they thought that the service was available online, they were asked if they had ever tried to use this online car registration service. In general people are willing to use this service online. The low (awareness of) availability of this online service can mean two things: either this service is not available online or people are not aware of its availability, as car registration is not a service that citizens need to use very often. Very few citizens tried to use this online service.

Car registration (% of regular Internet users)



No. 47 Preferences, availability and usage of online declaration to the police

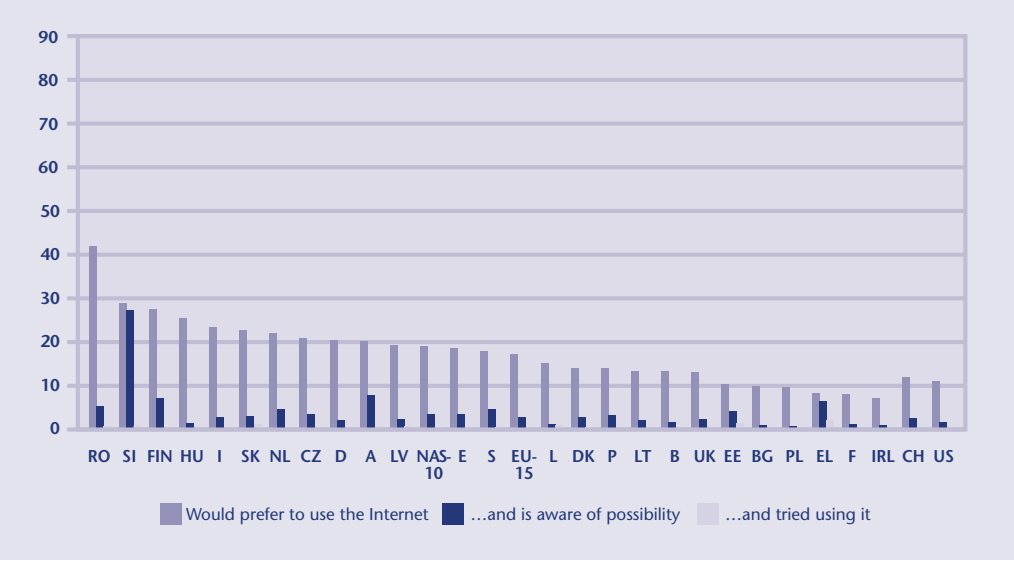
Would you prefer to use the Internet for requests for declaration to the police and is it possible to use it in the area you live and have you ever tried using it?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	13	14	20	8	19	8	7	23	15	22	20	14	28	18	13	17	10	21	10	25	13	19	10	42	29	23	19	12	11
Thereof:																													
Is aware of possibility	2	3	2	6	3	1	1	3	1	4	8	3	7	5	2	3	1	3	4	1	2	2	1	5	8	3	3	3	2
Tried using it	0	1	0	2	1	0	0	0	1	0	1	0	0	1	0	0	-	0	1	-	-	1	-	1	1	1	1	0	0
Would not prefer to use the Internet	85	86	80	90	81	91	93	76	85	78	80	86	72	82	87	83	90	79	90	75	87	81	90	58	71	77	81	88	89
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Citizens were asked whether they prefer to use the Internet for declaration to the police. It seems that citizens are rather unwilling to use this online service, and those who prefer to use the Internet are rather aware of the availability of this online service in their region. This can either mean that people prefer to have direct contact with the police for this type of personal issue or that people do not prefer the online services because they are not familiar with this type of online service.

Declaration to the police (% of regular Internet users)



No. 48 Preferences, availability and usage of online search for books at public libraries

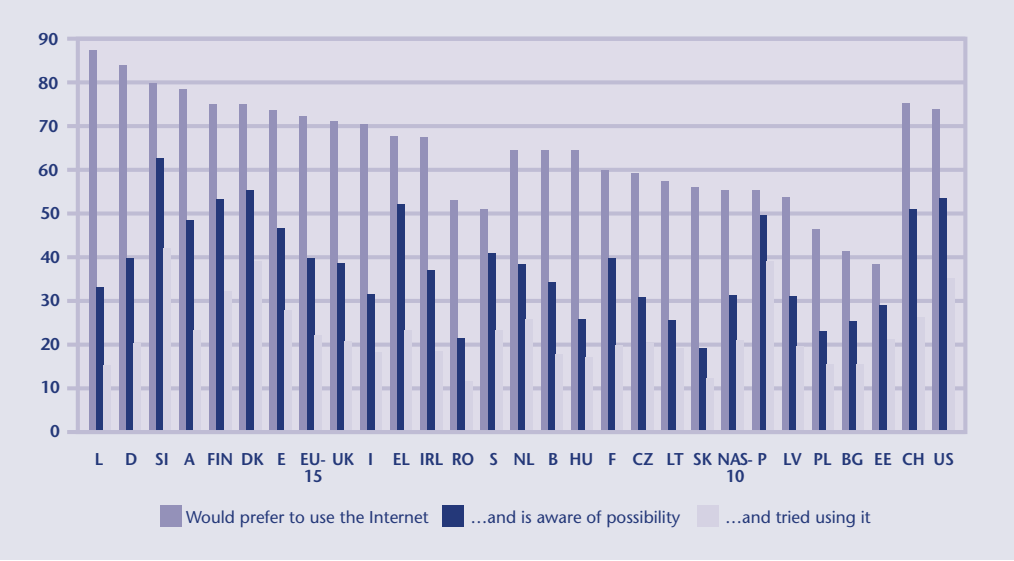
Would you prefer to use the Internet to search for books in public libraries and is it possible to use it in the area you live and have you ever tried using it?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	65	75	84	68	74	60	68	71	88	65	79	56	75	66	71	73	42	59	38	65	57	54	46	67	80	56	56	75	74
Thereof:																													
Is aware of possibility	34	55	40	52	47	40	37	32	33	39	49	50	53	41	39	40	25	31	29	26	26	31	23	21	63	19	31	51	54
Tried using it	18	39	20	23	28	20	18	18	15	26	23	39	32	23	21	22	16	20	21	17	19	20	15	12	42	12	21	26	35
Would not prefer to use the Internet	33	25	16	30	26	39	32	29	12	35	21	44	25	34	29	27	58	41	62	35	43	46	54	33	20	44	44	25	26
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The search for books at public libraries is a relatively simple process to implement and many libraries already provide this service. Citizens who look for a book to borrow can benefit from being able to locate library books over the Internet, regardless of opening hours and the distance to the library building. Three out of four Internet users in the EU prefer online book-searching against the traditional way. More than 20 percent have already used it. In addition, respondents from the NAS countries showed a high preference for this online service. Awareness of the availability of this service and its usage numbers are also relatively large.

Searches for books in public libraries (% of regular Internet users)



No. 49 Preference, availability and usage of the Internet to announce a change of address

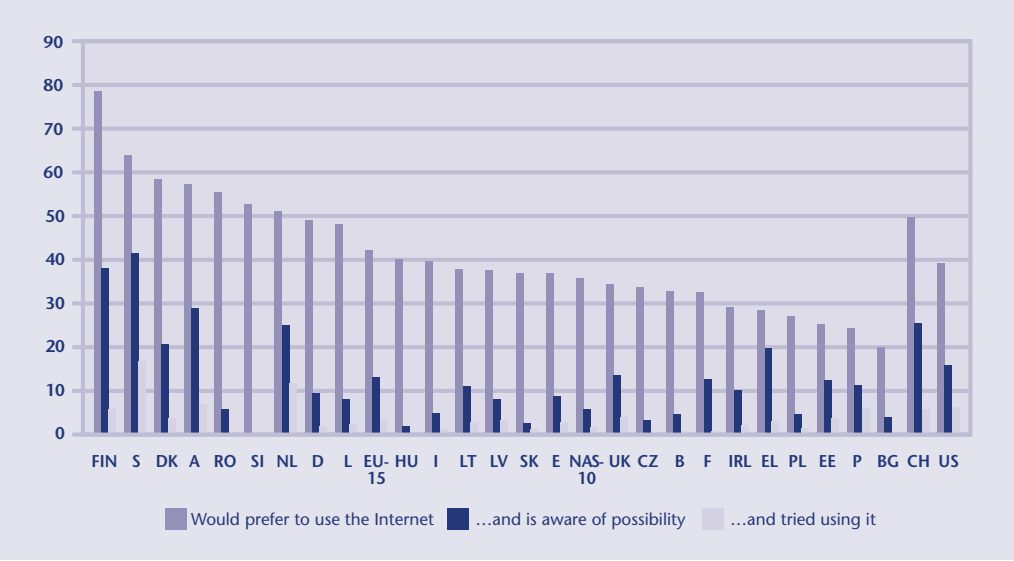
Would you prefer to use the Internet to announce a change of address and is it possible to use it in the area you live and have you ever tried using it?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Would prefer to use the Internet	33	59	49	29	37	33	29	40	48	51	57	24	79	64	35	42	20	34	25	40	38	38	27	55	53	37	36	50	39
Thereof:																													
Is aware of possibility	5	21	10	20	9	13	10	5	8	25	29	11	38	42	14	13	4	3	12	2	11	8	5	6	-	3	6	26	16
Tried using it	1	4	2	3	3	1	2	1	2	12	7	6	6	17	4	4	-	-	4	-	3	3	2	1	-	1	2	6	6
Would not prefer to use the Internet	65	41	51	69	63	67	71	59	52	49	43	75	21	36	65	57	80	66	75	60	62	62	73	45	47	63	64	50	61
Don't know	2	-	-	2	-	1	-	1	-	-	-	0	0	-	-	0	-	-	-	-	-	-	-	-	-	-	-	-	0

Base: Regular Internet users, weighted column percentages
Questions: K1, K2, K3
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Although citizens show a rather promising attitude towards this type of online service, with over 40% of the EU citizens showing a preference for using this online service, (awareness of) availability and reported usage are very low in most of the countries. The Scandinavian countries are an exception on this. This type of service is not a service that is very popular for online use in the NAS countries, as shown by the relative low preference percentages for most of those countries.

Announcement of change of address (% of regular Internet users)



No. 50 Disadvantages of public online services

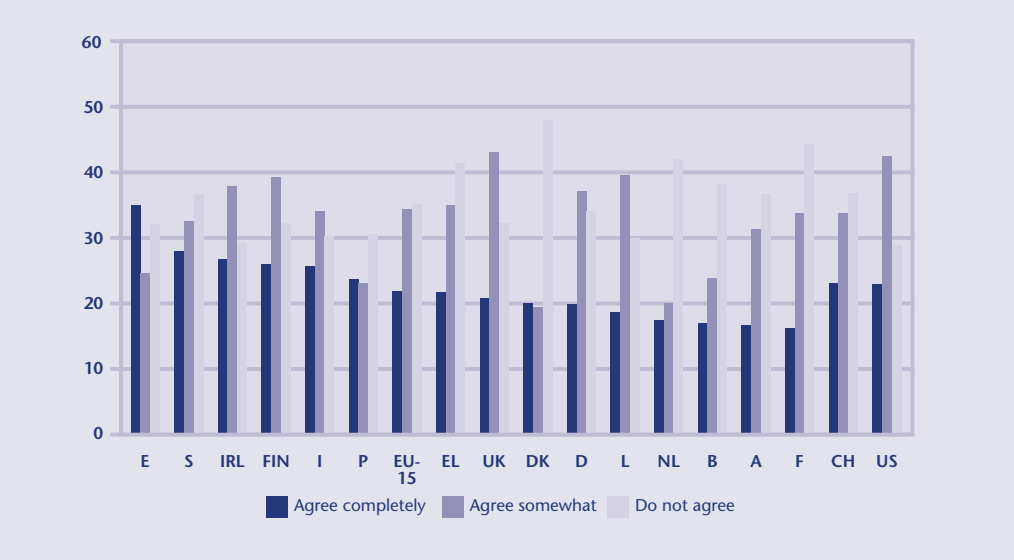
Are public services on the Internet as safe as the traditional way?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
Agree completely	17	20	20	22	35	16	27	26	18	17	16	23	26	28	21	22	23	23
Agree somewhat	24	19	37	35	24	34	38	34	39	20	31	23	39	32	43	34	34	42
Do not agree	38	48	34	41	32	44	29	30	30	42	36	30	32	36	32	35	37	29
Don't know	22	13	10	2	9	6	7	10	12	21	16	24	3	3	4	9	7	6

Base: Regular Internet users, weighted column percentages
Questions: K4e
Source: SIBIS GPS 2002

One of the disadvantages of online public services could be that citizens believe online services to be less safe than the traditional way of carrying out these transactions with government. Indeed, concerns about safety do exist: More than half of all EU citizens are (at least somewhat) concerned about the safety of online services compared to the traditional way for doing the same. Such concerns are particularly prevalent in Spain and Sweden – a correlation with the actual penetration of eGovernment does not seem to exist.

Disadvantages of public online services: do not seem as safe as using the traditional way (% of regular Internet users)



No. 51 Preference for online or traditional access to government services

Would you prefer to use the Internet or the traditional way for governmental services?

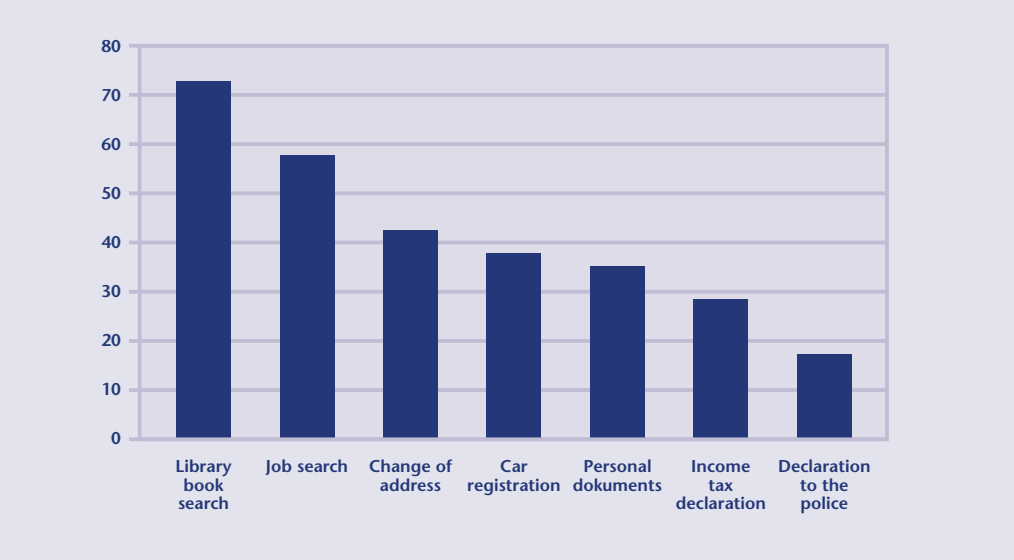
	Library search	Job search	Change of address	Car registration	Personal documents	Income tax declaration	Declaration to police
EU-15							
Internet	73	58	42	38	35	28	17
Traditional way	24	29	53	55	61	66	79
Do not use this service	3	11	3	5	2	4	3
Don't know	1	3	1	2	1	2	1
NAS-10							
Internet	55	42	35	28	30	28	19
Traditional way	28	24	46	45	52	43	57
Do not use this service	14	31	16	24	15	25	20
Don't know	3	3	3	2	2	3	5

Base: Regular Internet users, weighted column percentages
Question: K1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

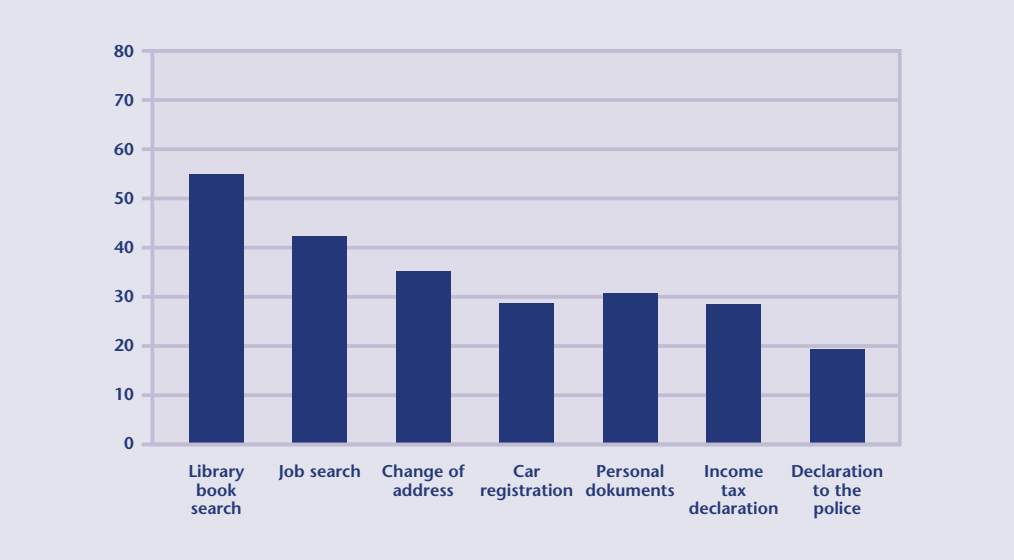
Demand for online as an alternative to traditional access to government services varies across services. EU citizens show a significant preference for some eGovernment services, while for others they still prefer the traditional way of doing things. Online searching for books in public libraries, which requires minimal information about the user, is preferred by the large majority. Least demand exists for online declarations to the police, which requires that a great deal of private information be divulged.

The amount of personal information required is only one explaining factor for the preferences of citizens; for instance, familiarity with the online service and experience using the Internet are also likely to play a role.

Online preference of interacting with government in EU-15 (% of regular Internet users)



Online preference of interacting with government in NAS-10 (% of regular Internet users)



No. 52 Online or traditional access to government services in European countries, CH and US

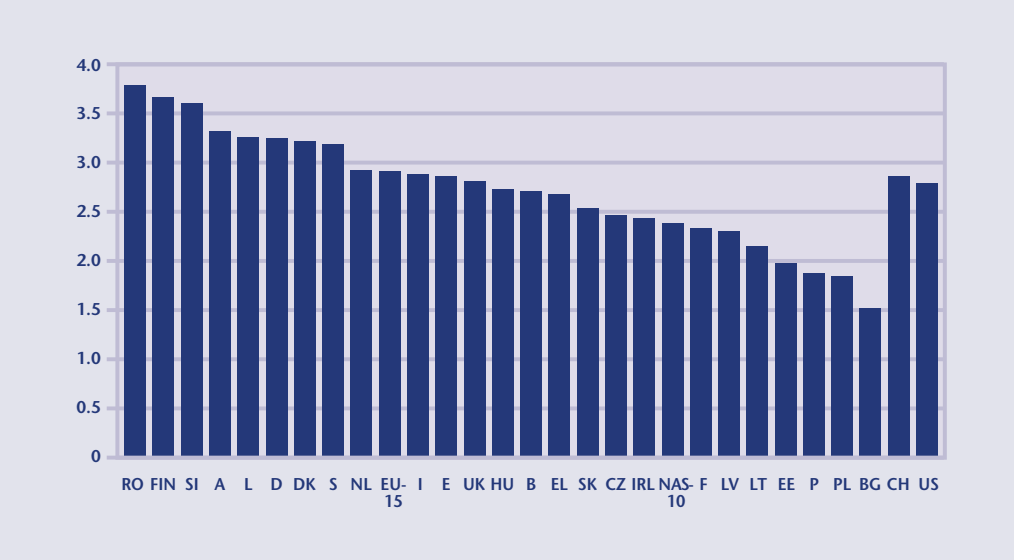
Preference for public services: average numbers out of seven services

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Internet	2.7	3.2	3.3	2.7	2.9	2.3	2.4	2.9	3.3	2.9	3.3	1.9	3.7	3.2	2.8	2.9	1.5	2.4	2.0	2.7	2.1	2.3	1.8	3.8	3.6	2.5	2.4	2.9	2.8
Traditional way	3.7	3.3	3.6	3.5	3.5	4.1	4.3	3.5	3.4	3.4	3.4	3.0	3.1	3.6	4.0	3.7	3.1	3.0	2.6	2.3	3.1	3.5	3.3	2.3	3.0	2.6	3.0	3.8	4.0
Do not use this service	0.3	0.3	0.1	0.6	0.4	0.5	0.2	0.4	0.2	0.5	0.3	1.8	0.2	0.2	0.1	0.3	2.2	1.4	2.3	1.5	1.4	0.8	1.6	0.9	0.3	1.6	1.4	0.2	0.1
Don't know	0.4	0.2	0.1	0.2	0.2	0.1	0.1	0.2	0.1	0.2	0.1	0.4	0.1	0.1	0.1	0.1	0.2	0.2	0.1	0.5	0.4	0.4	0.2	0.0	0.0	0.3	0.2	0.1	0.1

Base: Regular Internet users, weighted average numbers of services
Question: K1
Source: SIBIS GPS 2002

Externalities that vary from one EU Member State to the next may influence the demand of respondents for eGovernment, which means that differences in the preferred way of interacting with government that can be observed across the EU should not be overstated. Generally, respondents from the northern countries of Europe show above-average preference for interacting with government using the Internet. Finland has the highest figure. Overall, respondents from EU countries prefer to use the Internet for an average of almost three of the seven services listed. Romania shows a very high ranking and scores well above the average of the NAS countries, availability and usage of those services is however low. It shows that the regular Internet users in Romania are very willing and enthusiastic about the possibilities the Internet can create for them in the future.

Online preference of interacting with government services (Average number out of 7 services)



No. 53 Online search for health-related information (Internet users)

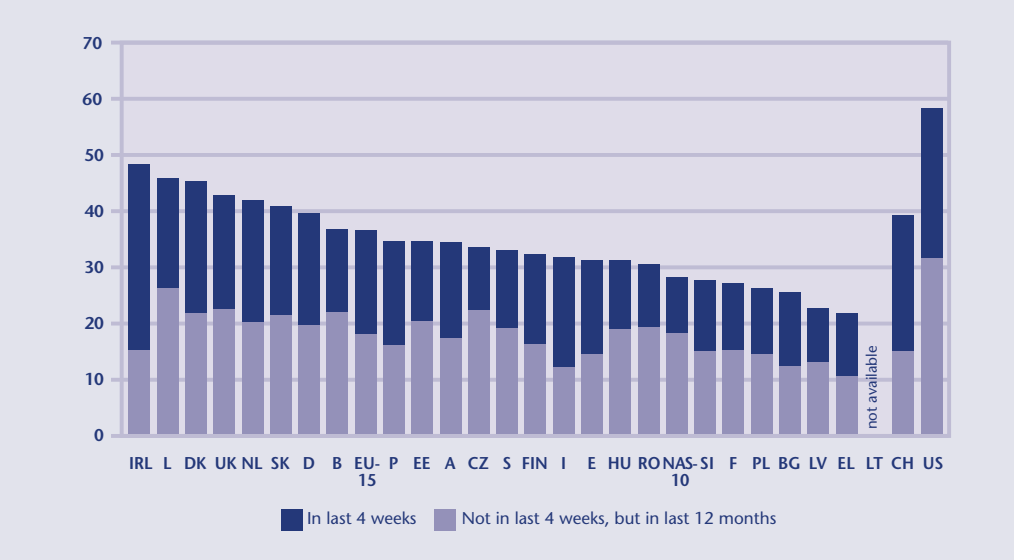
Online searching for health-related information amongst Internet users

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
In last 4 weeks	22	22	19	11	14	15	15	12	26	20	17	16	16	19	23	18	12	22	20	19	-	13	14	19	15	21	16	15	31
Not in last 4 weeks, but in last 12 months	15	24	20	11	17	12	33	20	20	22	17	19	16	14	20	18	13	11	14	13	-	9	12	11	13	19	12	24	27
Did not search	63	55	60	78	69	73	52	68	54	58	66	65	68	67	57	64	74	66	65	69	100	78	74	70	72	59	72	61	42

Base: All Internet users, weighted column percentages
Questions: B1d, B2d
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

A little over one third of Internet users in the EU (36.4%) and nearly 30% in the NAS countries reported online searching for health-related information during the 12 months reference period. Although this is a substantial figure, it is a lot lower than the more than almost three in five (58.3%) of the US sample who reported this form of eHealth activity. Within Europe, the prevalence of reported online health information seeking amongst Internet users varied considerably across the countries, with highest rates in Ireland (48.1%) and lowest rates in Greece (21.6%).

Searching for health-related information online (% of all Internet users)



No. 54 Online search for health-related information (population)

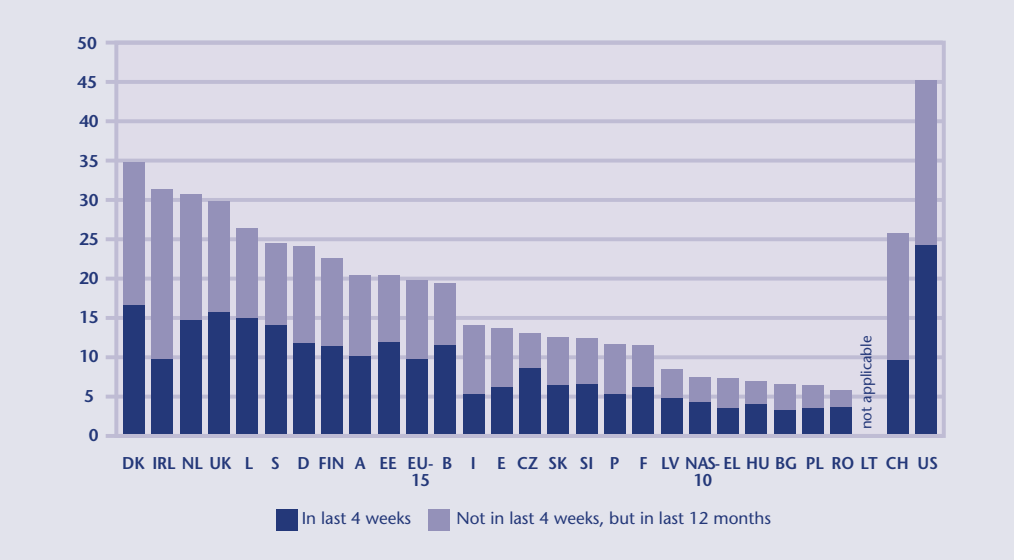
Online searching for health-related information amongst the population overall

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
In last 4 weeks	12	17	12	4	6	6	10	5	15	15	10	5	11	14	16	10	3	9	12	4	-	5	4	4	7	7	4	10	24
Not in last 4 weeks, but in last 12 months	8	18	12	4	7	5	22	9	11	16	10	6	11	10	14	10	3	5	8	3	-	4	3	2	6	6	3	16	21
Did not search	33	42	37	27	30	31	34	30	31	43	39	22	47	50	40	35	20	26	39	15	35	29	18	14	33	18	19	40	32
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Questions: B1d, B2d
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Almost one in five (19.8%) of the EU-15 population aged 15 years and over reported searching online for health-related information in the 12 months before the survey. Although this is a substantial figure, it is a lot lower than the more than two in five (44.9%) of the US sample who reported this form of eHealth activity. There were also considerable variations across European countries, ranging from more than one in three of the adult population in Denmark (34.7%) to about one in seventeen in Romania (5.9%). Although its importance varies across countries, online searching for health information is clearly becoming a significant element of the health-related activities of the population and needs to be given due attention in public health policy.

Searching for health-related information online (% of population)



No. 55 Success in finding suitable health-related information

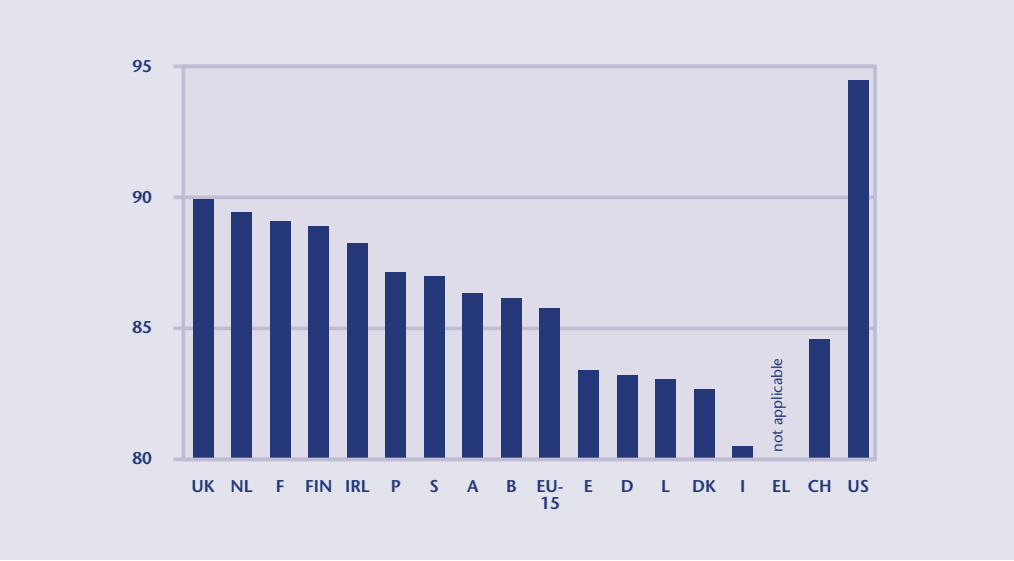
Was the information which you found online suitable for your needs?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
Was suitable	86	83	83	*)	83	89	88	80	83	89	86	87	89	87	90	86	85	94
Was not suitable	11	13	8	*)	10	6	8	13	12	8	8	8	8	6	5	8	7	3
Was not able to find health-related information	3	4	9	*)	7	5	3	6	5	3	6	5	3	7	5	6	8	3

Base: Internet users, who have searched online for health-related information, weighted column percentages
Questions: L1, L2
Source: SIBIS GPS 2002
*) data suppressed due to too small N

The majority of those who searched online for health-related information reported that they had been successful in finding information that was suitable for their needs. In all countries, more than 80% of users reported successful searching. Greatest levels of success were reported by US users (94.4%) and lowest levels of success were reported by Italian users (80.5%)

Success in finding suitable health-related information on the Internet
(% of Internet users who have searched online for health-related info in the last 12 months)



No. 56 Sufficiency of mother-tongue websites for finding suitable health-related information

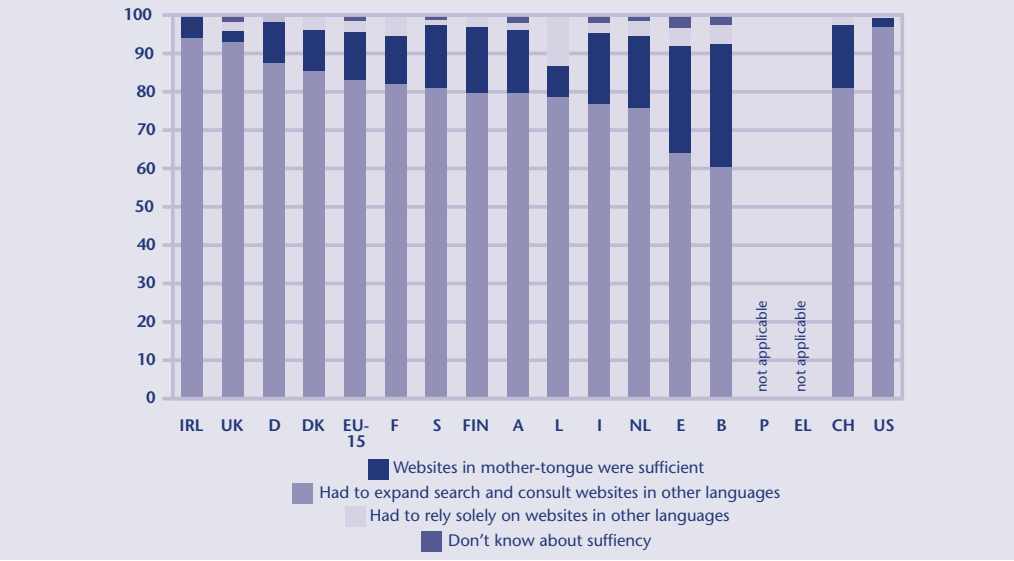
Did you find websites in your mother tongue sufficient or did you have to expand your search or did you have to rely solely on sites in other languages?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
Websites in mother-tongue were sufficient	61	86	87	*)	64	82	94	77	79	76	79	*)	80	81	93	83	81	97
Had to expand search and consult websites in other languages	31	11	11	*)	27	12	5	18	8	19	17	*)	17	16	3	13	16	2
Had to rely solely on websites in other languages	5	4	1	*)	5	5	-	2	13	3	1	*)	3	2	2	3	3	0
Don't know about sufficiency	3	-	1	*)	4	-	1	2	-	2	2	*)	1	1	2	2	-	1

Base: Internet users, who have searched and found health-related information online, weighted column percentages
Question: L3
Source: SIBIS GPS 2002
*) data suppressed due to too small N

Overall, about one in six (15.5%) of those in the EU who searched online for health information had to extend their search to sites in languages other than their mother-tongue in order to find information suitable for their needs. This was a lot higher than the corresponding US figure (2.4%). Usage of non mother-tongue websites was particularly likely in Belgium (36.3%) and Spain (32.0%).

Sufficiency of mother-tongue websites for finding health-related information suitable for needs (% of people who have searched and found health-related information on the Internet)



No. 57 Reasons for online searching for health-related information (users)

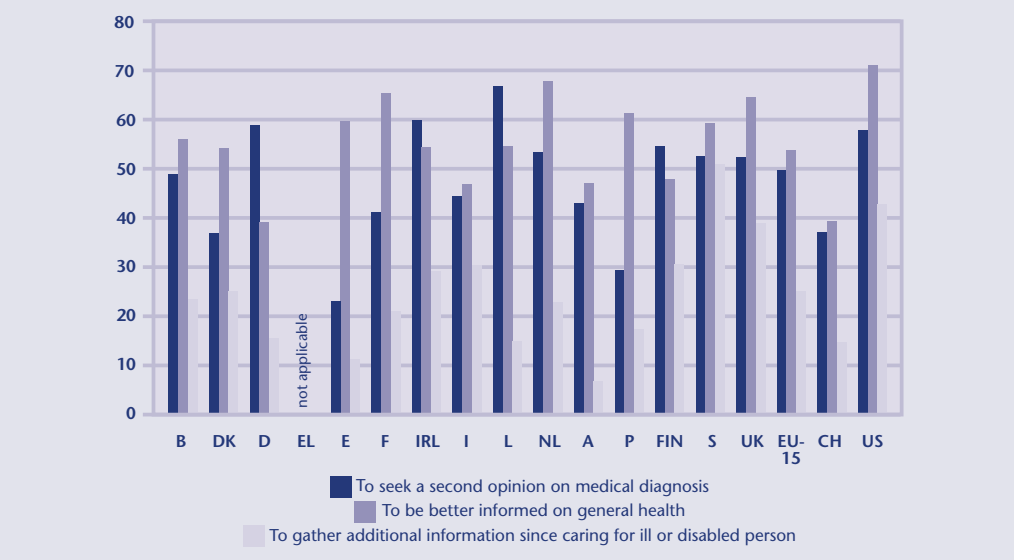
Reasons for searching health-related information on the Internet (amongst those who searched)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
To seek a second opinion on medical diagnosis																		
Yes	49	37	59	*)	23	41	60	44	67	53	43	29	54	52	52	49	37	58
No	50	63	41	*)	76	58	38	53	32	45	56	67	45	47	47	50	63	41
Don't know	1	1	-	*)	1	0	2	3	1	2	1	4	0	1	1	1	-	1
To be better informed on general health																		
Yes	56	54	39	')	60	65	54	47	55	68	47	61	48	59	64	54	39	71
No	44	46	61	*)	40	35	44	52	45	31	53	37	51	40	35	46	60	28
Don't know	1	-	-	*)	-	-	1	1	-	1	-	2	1	1	1	1	1	1
To gather additional information since caring for ill or disabled person																		
Yes	23	25	15	*)	11	21	29	30	15	23	6	17	30	51	39	25	14	43
No	76	75	85	*)	89	79	70	68	85	76	93	80	69	48	60	75	86	56
Don't know	1	-	-	*)	-	-	1	1	-	1	1	3	1	1	1	1	-	1

Base: Internet users, who have searched online for health-related information, weighted column percentages
Question: L4
Source: SIBIS GPS 2002
*) data suppressed due to too small N

Amongst Internet users who reported searching for online health-related information, getting better informed on one's general health was the most commonly cited reason (53.6% in Europe and 71.0% in the US). This was followed by seeking a second opinion on a medical diagnosis (49.3% in Europe and 57.7% in the US). Considerably fewer cited supporting their role as carer of an ill or disabled person as a reason (24.8% in Europe and 42.6% in the US). Seeking a second opinion online has particular significance for doctor-patient relationships and its prevalence varied widely across the EU Member States.

Reasons for seeking health-related information on the Internet
(% of Internet users who have searched online for health-related information in the last 12 months)



No. 58 Reasons for searching for health-related information (population)

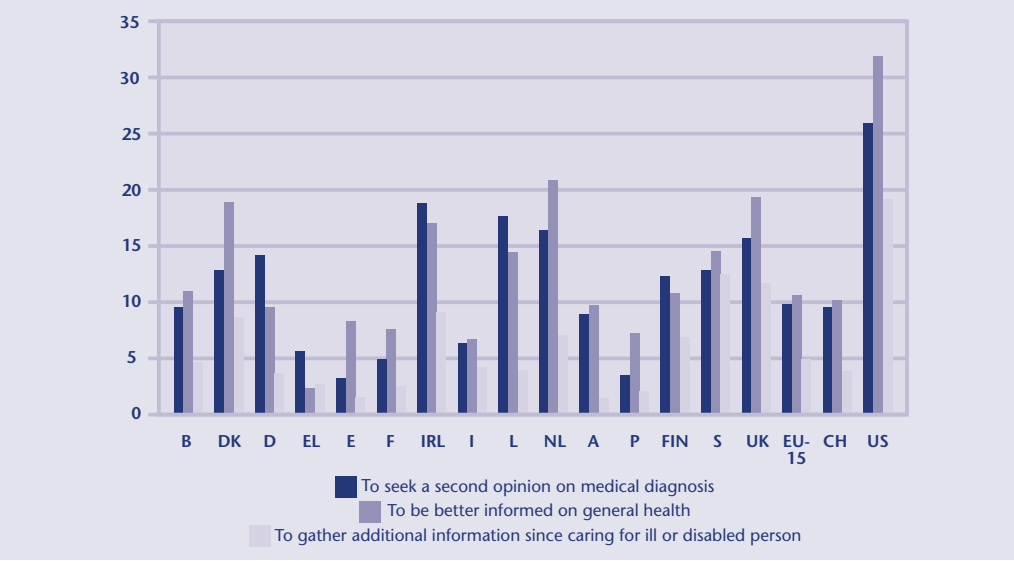
Reasons for searching health-related information on the Internet (amongst the population)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
To seek a second opinion on medical diagnosis																		
Yes	9	13	14	5	3	5	19	6	18	16	9	3	12	13	16	10	9	26
No	10	22	10	2	10	7	12	7	8	14	11	8	10	11	14	10	16	19
Don't know	0	0	-	-	0	0	1	0	0	1	0	1	0	0	0	0	-	0
Did not search for eHealth	33	42	37	27	30	31	34	30	31	43	39	22	47	50	40	35	40	32
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	34	23
To be better informed on general health																		
Yes	11	19	9	2	8	7	17	7	14	21	10	7	11	14	19	11	10	32
No	8	16	15	5	6	4	14	7	12	10	11	4	12	10	10	9	15	13
Don't know	0	-	-	-	-	-	0	0	-	0	-	0	0	0	0	0	0	0
Did not search for eHealth	33	42	37	27	30	31	34	30	31	43	39	22	47	50	40	35	40	32
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	34	23
To gather additional information since caring for ill or disabled person																		
Yes	4	9	4	3	1	2	9	4	4	7	1	2	7	12	12	5	4	19
No	15	26	20	5	12	9	22	10	22	23	19	9	16	12	18	15	22	25
Don't know	0	-	-	-	-	-	0	0	-	0	0	0	0	0	0	0	-	0
Did not search for eHealth	33	42	37	27	30	31	34	30	31	43	39	22	47	50	40	35	40	32
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	34	23

Base: All respondents, weighted column percentages
Question: L4
Source: SIBIS GPS 2002

At the population level, when prevalence of Internet usage is taken into account, about one in ten of the EU population aged 15 years and older (10.6%) and one in three in the US (31.9%) searched the Internet to be better informed about their health, just under one in ten in the EU (9.8%) and just over one in four in the US (25.9%) searched the Internet for a second opinion on a medical diagnosis, and just under one in twenty in the EU (4.9%) and almost one in five in the US (19.1%) searched for information to support their role as a carer of an ill or disabled person.

Reasons for seeking health-related information on the Internet (% of population)



No. 59 Perceived trustworthiness of providers of health-related information

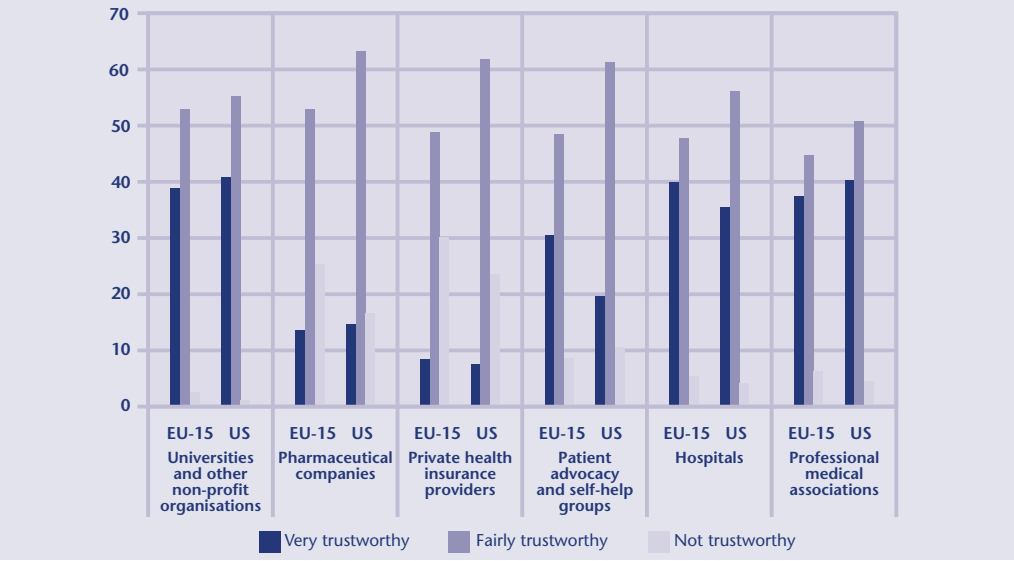
How trustworthy would you consider each of the following providers of online health-related information?

	Universities and other non-profit organisations	Pharmaceutical companies	Private health insurance providers	Patient advocacy and self-help groups	Hospitals	Professional medical associations
EU-15						
Very trustworthy	39	13	8	31	40	37
Fairly trustworthy	53	53	49	49	48	45
Not trustworthy	2	25	30	9	5	6
Don't know	6	8	13	12	7	11
US						
Very trustworthy	41	14	7	19	35	41
Fairly trustworthy	55	63	62	61	56	51
Not trustworthy	1	17	24	10	4	4
Don't know	3	6	7	9	4	4

Base: Internet users, who have searched online for health-related information, weighted column percentages
Question: L5
Source: SIBIS GPS 2002

In both the EU and US, private health insurance companies and pharmaceutical companies were a lot more likely than other organisations to be rated as untrustworthy sources of information by those who searched online for health-related information. Just under one in three in the EU (30.2%) and one in four in the US (23.7%) rated private health insurance companies as not trustworthy and one in four in the EU (25.3%) and one in six in the US (16.5%) rated pharmaceutical companies as not trustworthy. Of the other types of organisation, patient advocacy and self-help groups were somewhat more likely to be rated as not trustworthy, being so rated by just over one in twelve in the EU (8.6%) and by one in ten in the US (10.4%). Universities and other similar institutions were least likely to be rated as not trustworthy, being so rated by only one in forty in the EU (2.4%) and by just one in one hundred (1.0%) in the US.

Perceived trustworthiness of providers of health-related information
(% of users who have searched online for health-related info in the last 12 months)



No. 60 Digital literacy in Europe

Digital Literacy: Index value in the total population

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Index value	0.7	1.4	0.9	0.5	0.7	0.5	1.0	0.7	0.9	1.1	1.0	0.4	1.1	1.0	1.2	0.8	0.3	0.6	0.7	0.3	0.4	0.5	0.3	0.3	0.7	0.4	0.3	1.0	1.5

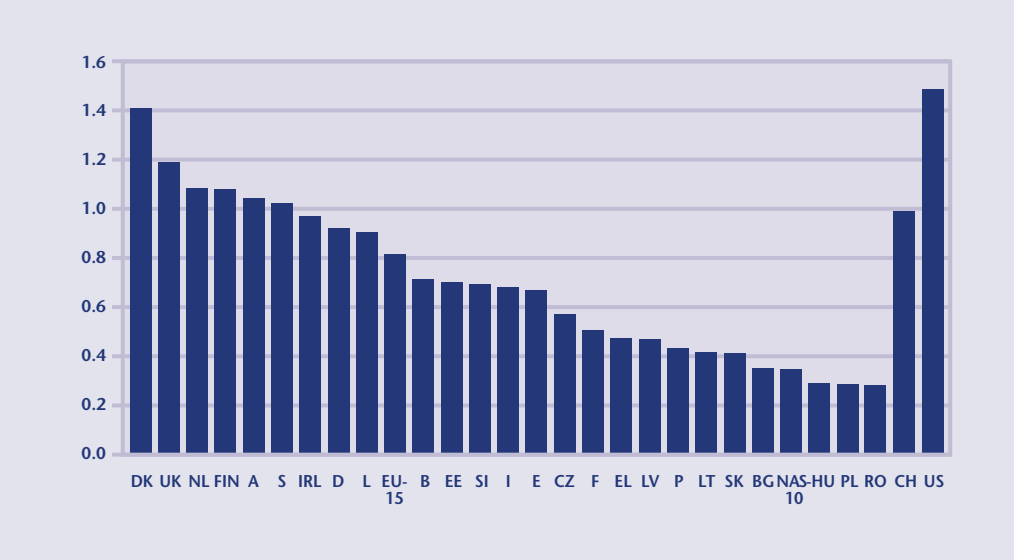
Base: All respondents, weighted
Question: D1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The **COQS**[6] index is a measure that combines four types of skills in using the Internet into an overall "digital literacy" score. The skills included are:

- **C**ommunicating with others (by e-mail and other online methods),
- **O**btaining (or downloading) and installing software on a computer,
- **Q**uestioning the source of information on the Internet and
- **S**earching for the required information using search engines.

The "COQS" index combines these items (based on self-assessment) into a single scale with a range from 0 to 3, with "0" representing the lowest possible digital literacy score and "3" representing the highest. The overall average score on the COQS scale is 0.8 in the EU-15 countries and 0,35 in the NAS-10 countries compared with the US score of 1.5. The level of digital literacy varies strongly within the EU, with the NAS-10 countries in general as the ones showing the lowest level of Digital Literacy among the total population. Estonia and Slovenia show a slightly higher level of Digital Literacy than the EU-15 countries Italy, Spain, France, Greece and Portugal.

Digital literacy - average national index value total population



No. 61 Digital literacy among European youth

Digital Literacy: Index value in age groups

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Index value youth (up to 24)	1.2	1.9	1.8	1.0	1.5	1.0	1.5	1.5	1.7	1.8	2.0	1.2	1.7	1.8	1.8	1.5	0.9	1.2	1.4	0.9	1.0	1.2	0.8	0.6	1.4	0.8	0.9	1.7	2.1
Index value total population	0.7	1.4	0.9	0.5	0.7	0.5	1.0	0.7	0.9	1.1	1.0	0.4	1.1	1.0	1.2	0.8	0.3	0.6	0.7	0.3	0.4	0.5	0.3	0.3	0.7	0.4	0.3	1.0	1.5

Base: All respondents, weighted
Question: D1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Among the European youth, the level of Digital Literacy is double as high as in the total population (measured using the COQS index: EU-15: 1.5 among youth, 0.8 in the whole population, the NAS-10 countries: 0,85 among youth and 0,35 in the whole population). Within the EU-15, states such as Austria, Denmark, the UK and the Netherlands score highest, while Belgium, Spain, France, Greece and Portugal are below the EU-15 average of Digital Literacy among the youth. Estonia and Slovenia are scoring best among the NAS-10 countries, though still below the EU-15 average. Compared to the US, the EU-15 have a score, which is about one third lower and the NAS-10 countries less than half the US level. Only Austria is very close to reach the level of the US.

Digital Literacy - average national index value in age groups

No. 62 Gender gap in digital literacy

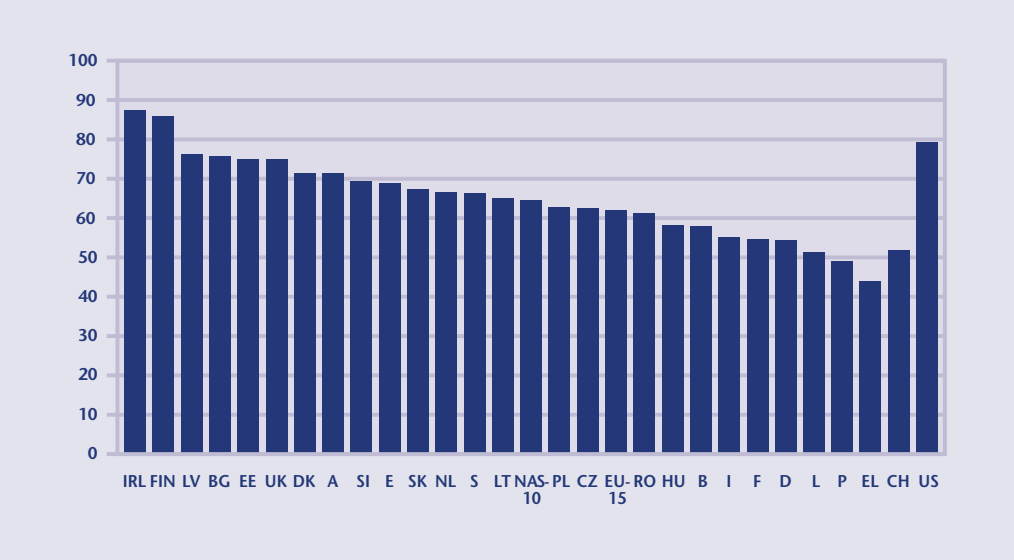
Digital Literacy: Gender gap

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Index value men	0.9	1.7	1.2	0.6	0.8	0.7	1.0	0.9	1.2	1.3	1.2	0.6	1.2	1.2	1.4	1.0	0.4	0.7	0.8	0.4	0.5	0.5	0.3	0.3	0.8	0.5	0.4	1.3	1.7
Index value women	0.5	1.2	0.6	0.3	0.5	0.4	0.9	0.5	0.6	0.9	0.9	0.3	1.0	0.8	1.0	0.6	0.3	0.4	0.6	0.2	0.3	0.4	0.2	0.2	0.6	0.3	0.3	0.7	1.3
% women to men	**57**	**71**	**54**	**43**	**68**	**54**	**87**	**54**	**51**	**66**	**71**	**48**	**85**	**66**	**74**	**61**	**75**	**62**	**74**	**58**	**64**	**76**	**62**	**61**	**69**	**67**	**64**	**51**	**78**

Base: All respondents, weighted
Question: D1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The skills of Digital Literacy seem to be uneven distributed between men and women - in the EU-15 countries, NAS countries, Switzerland and in the US. It is remarkable that within EU-15 there is a tendency of larger gender gap in Digital Literacy in countries with a low level of Digital Literacy in the total population. This is not the case for the NAS countries where the gender gap is much smaller than expected and only based on the general level of Digital Literacy. Ireland and Finland stick out as the countries with the smallest difference in Digital Literacy between men and women.

Digital Literacy: Gender gap (% of women's digital literacy value to men's)



No. 63 Digital literacy, differences between age groups

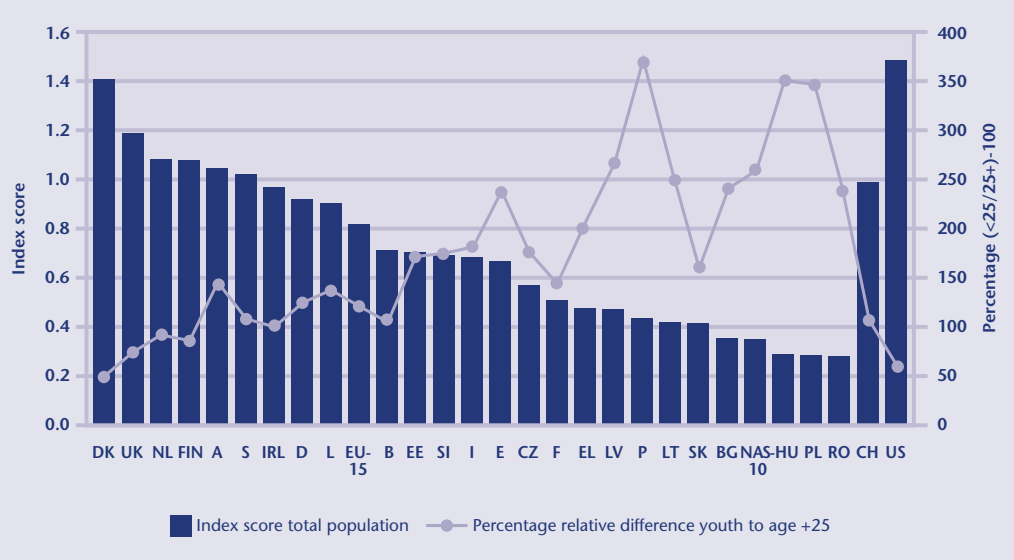
Digital literacy: index value of total population and relative difference between youth (up to 24) and rest of population (age 25+)

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Index value youth (up to 24)	1.2	1.9	1.8	1.0	1.5	1.0	1.5	1.5	1.7	1.8	2.0	1.2	1.7	1.8	1.8	1.5	0.9	1.2	1.4	0.9	1.0	1.2	0.8	0.6	1.4	0.8	0.9	1.7	2.1
Index value population 25+	0.6	1.3	0.8	0.3	0.4	0.4	0.8	0.5	0.7	1.0	0.8	0.2	0.9	0.9	1.1	0.7	0.3	0.4	0.5	0.2	0.3	0.3	0.2	0.2	0.5	0.3	0.2	0.8	1.3
Index value total population	0.7	1.4	0.9	0.5	0.7	0.5	1.0	0.7	0.9	1.1	1.0	0.4	1.1	1.0	1.2	0.8	0.3	0.6	0.7	0.3	0.4	0.5	0.3	0.3	0.7	0.4	0.3	1.0	1.5
Relative difference youth to age 25+	**101**	**47**	**122**	**206**	**236**	**142**	**97**	**180**	**134**	**88**	**142**	**371**	**83**	**104**	**71**	**118**	**240**	**173**	**169**	**350**	**259**	**264**	**346**	**242**	**172**	**157**	**257**	**103**	**54**

Base: All respondents, weighted
Question: D1
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The general pattern of digital literacy with high figures in the North and lower figures in southern parts of EU-15, and higher figures in EU-15 than in NAS-10 countries can be observed among the young as well as in the total population. However, there is reason to believe that differences in digital literacy will diminish in the future. This is because the relative differences between the COQS index scores among the youth and the rest of the population tend to be much higher in countries with a low general level of digital literacy, than among those with a high level. This indicates that digital literacy levels tend to equalise as a country's use of the Internet develops.

Digital literacy index - national average level and relative difference between youth (up to age 25) and rest of population (age +25)



No. 64 Skills at communicating digitally

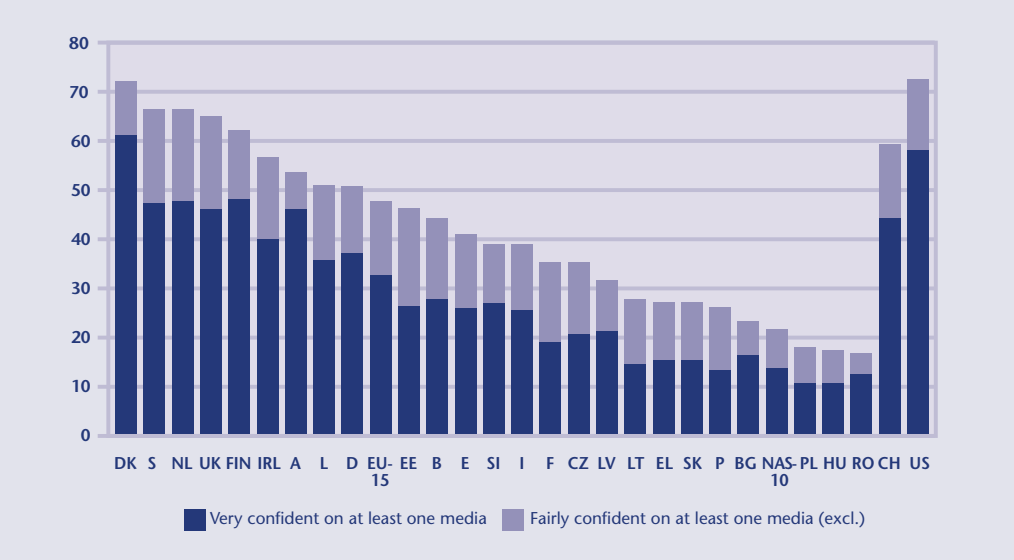
Confidence in communicating via the Internet

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Very confident on at least one media	27	61	37	15	26	19	40	25	35	47	46	13	48	47	46	32	16	20	26	10	14	21	10	12	27	15	13	44	58
Fairly confident on at least one media (excl.)	17	11	14	12	15	17	17	13	15	19	8	13	14	19	19	15	7	15	20	7	13	10	7	4	12	12	8	15	15
Not confident or "don't know" on at least one media (excl.)	9	5	10	7	3	7	9	6	7	8	6	8	8	8	5	7	3	4	13	5	8	6	7	3	6	4	5	7	5
Non Internet user	47	23	39	66	56	58	35	56	43	26	41	66	30	26	30	46	74	61	41	78	65	63	75	81	55	69	73	34	23

Base: All respondents, weighted column percentages
Questions: D1c, D1d, D1f
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The Internet is built to enable communication. The ability to communicate with others via the Internet is becoming a basic skill in Europe as we enter the Information Society. 47% of the EU population regard themselves as very or fairly confident in communicating with others via the Internet (i.e. feeling confident in using e-mail, chat rooms or personal web pages). This is considerably below the US level of 72%. Among EU countries, only Denmark is above the US level. A general North-South divide within the EU can be found with regard to confidence in Internet communication, while most of the candidate countries are lagging further behind. An exception is Estonia which almost reaches the EU average.

Skills at communicating via the Internet (E-mail, Internet chats, personal web page; % of population)



No. 65 Skills at obtaining and installing digital tools

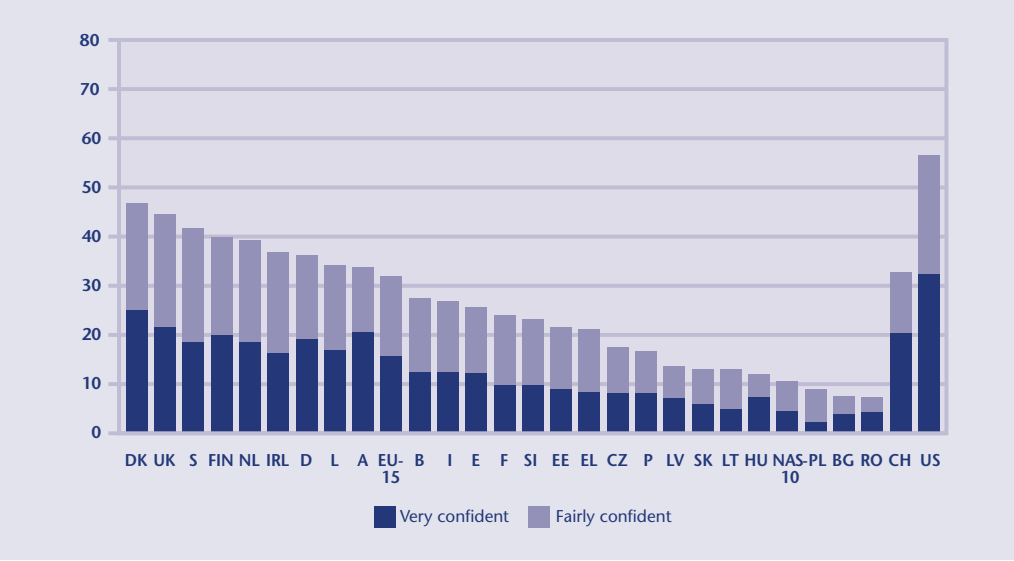
Confidence in obtaining and installing digital tools

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Very confident	12	25	19	8	12	10	16	12	17	18	20	8	19	18	21	15	3	8	9	7	5	7	2	4	10	6	4	20	32
Fairly confident	16	22	17	13	13	14	21	15	17	21	13	9	20	23	23	17	4	9	13	5	8	7	7	3	13	7	6	12	24
Not confident (incl. non Internet users)	73	53	64	79	75	76	63	74	66	61	66	84	60	58	55	68	93	83	79	88	87	87	91	93	77	87	90	67	43

Base: All respondents, weighted column percentages
Questions: D1g
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The ability to update software on a computer can be regarded as an indicator for technical capabilities related to the use and maintenance of a computer. The ability to find, download and install digital tools and programs allow users to develop a digital toolbox for their own purposes. In the EU an average of 32% of the population feel very or fairly confident in downloading and installing software on a computer (17% in Portugal, 47% in Denmark). The southern EU Member States and the candidate countries in general show the lowest proficiency. The level in the US is remarkably higher: 57% of US Americans are very or fairly confident in downloading and installing software, according to their own assessment.

Confidence in obtaining and installing digital tools (% of population)



No. 66 Skills at Identifying the source of information

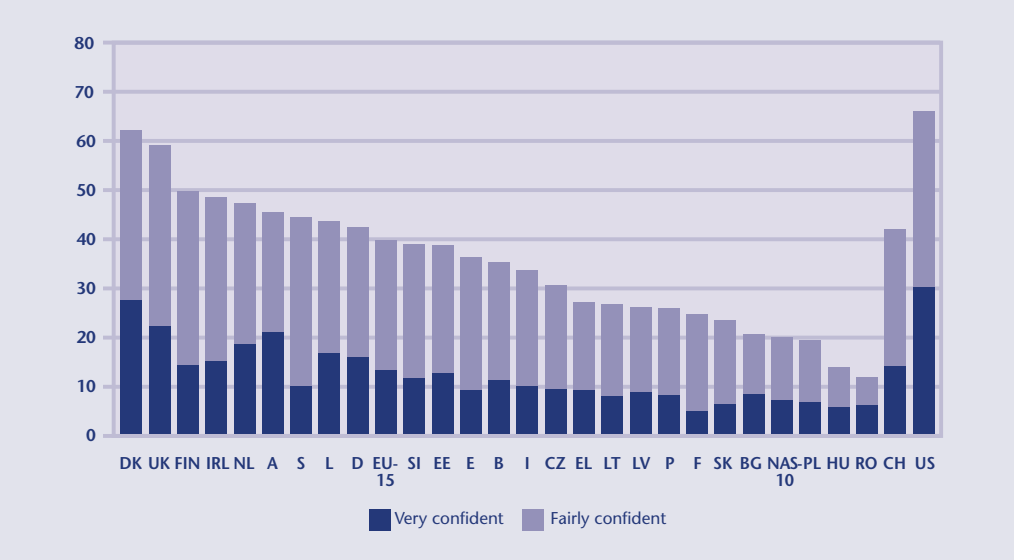
Confidence in identifying the source of information on the Internet

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Very confident	11	27	16	9	9	5	15	10	17	18	21	8	14	10	22	13	8	9	13	6	8	9	7	6	12	6	7	14	30
Fairly confident	24	35	27	18	27	19	33	24	27	29	24	18	36	34	37	27	12	21	26	8	19	17	13	6	27	17	13	28	36
Not confident (incl. non Internet users)	65	38	58	73	64	76	52	67	57	53	55	74	50	56	41	60	80	69	62	86	74	74	81	88	61	77	80	58	34

Base: All respondents, weighted column percentages
Questions: D1b
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The skill to use content from the Internet critically, and to select from the huge amount of information on the Internet the bits which are adequate for one's needs, is important from an individual as well as a societal perspective. Critical assessment includes, as the first step, the ability to identify the source of a piece of information presented on the Internet. This skill was measured as the confidence in identifying the source of information on the Internet. In the EU 40% of the population regard themselves as very or fairly confident in identifying the source of information on the Internet (Denmark 62% and France 24%). Among the candidate countries, Slovenia and Estonia come close to the EU average, while Poland, Hungary and Romania lag behind.

Confidence in identifying the source of information on the Internet (% of population)



No. 67 Skills at using a search engine for provision of information

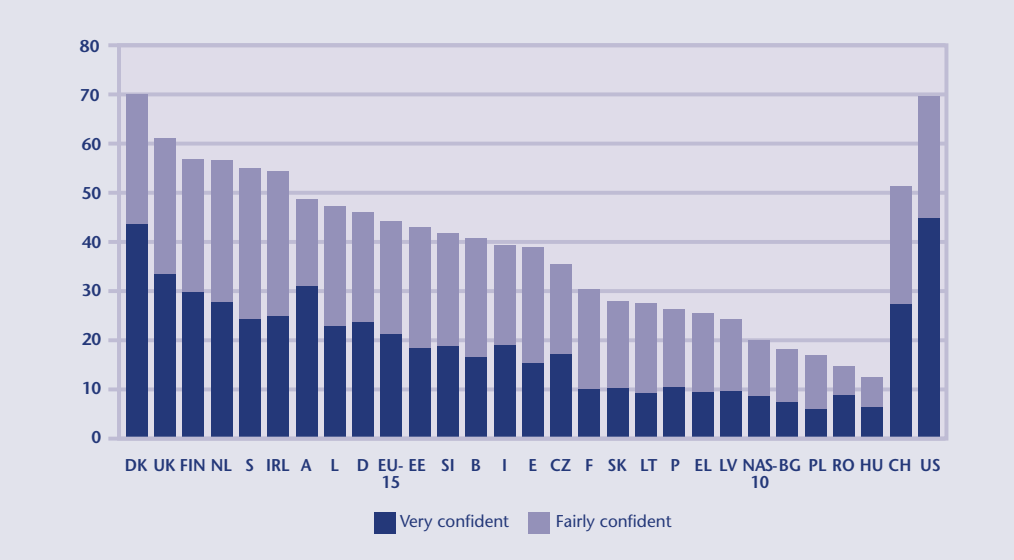
Confidence in searching information through Internet search engines

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Very confident	16	43	23	9	15	10	24	19	22	27	31	10	29	24	33	21	7	17	18	6	9	9	5	8	18	10	8	27	44
Fairly confident	24	27	23	16	24	20	30	20	24	29	18	16	27	31	28	23	11	18	24	6	18	15	11	6	23	18	11	24	25
Not confident (incl. non Internet users)	60	30	54	75	61	70	46	61	53	44	52	74	44	45	39	56	82	65	58	88	73	76	84	86	59	73	80	49	31

Base: All respondents, weighted column percentages
Questions: D1a
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

To use the Internet effectively, users need to be able to search and locate the information they want or require. Proficiency in the use of search engines is a necessary precondition for this. Within the EU the number of very or fairly confident persons in this respect varies between 25% and 70%, with an EU average at 44%. In the US the figure is about 70% - a level that in the EU is only reached by Denmark.

Confidence in searching information through Internet search engines (% of population)



No. 68 Skills at using digital media in the EU and the NAS

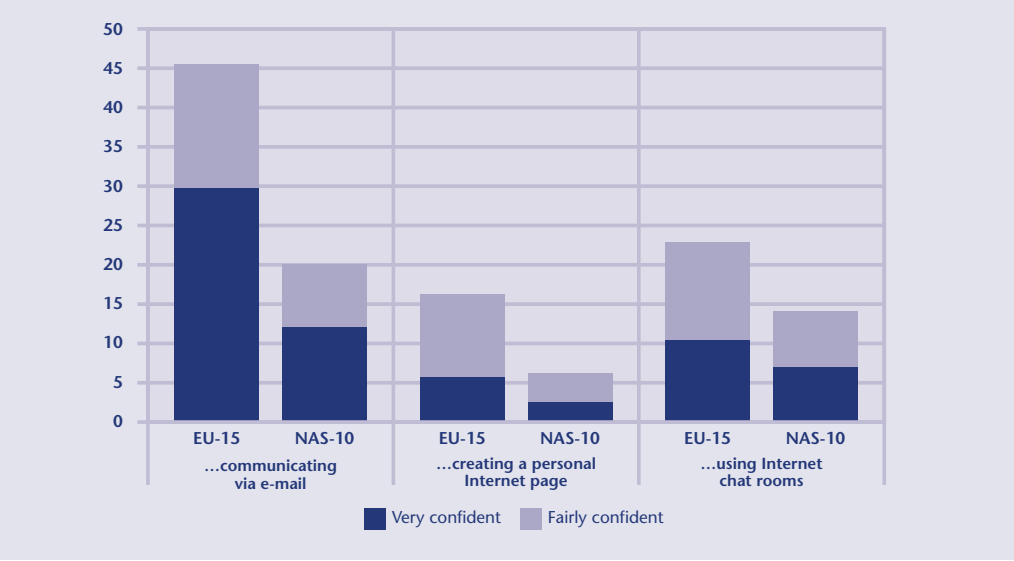
Confidence in using digital media in EU-15 and NAS-10

	EU-15			NAS-10		
	Communicating via e-mail	Creating a personal Internet page	Using Internet chat rooms	Communicating via e-mail	Creating a personal Internet page	Using Internet chat rooms
Very confident	30	6	10	12	2	7
Fairly confident	16	10	13	8	4	7
Not confident (incl. non Internet users)	54	84	77	80	94	86

Base: All respondents, weighted column percentages
Questions: D1c, D1d, D1f
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The general level of skills using digital media differs considerable between the EU-15 and the NAS-10 countries. Skills are here measured as skills in using the three media: e-mail, creating a personal Internet page and using chat rooms. The share of population which is very or fairly confident in using digital media is between three and four times as high in EU-15 countries as in the NAS-10 countries.

Confidence in ... (% of population)



No. 69 Participation of labour force in lifelong learning

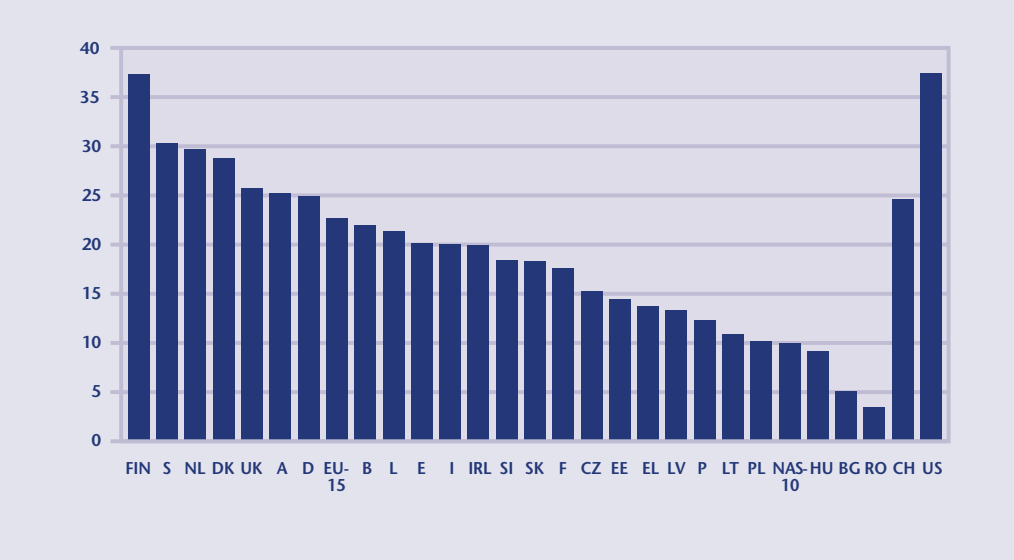
Share of employed population who participate in work-related training provided by employer or other organisations

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Participated in last 4 weeks	22	29	25	14	20	17	20	20	21	30	25	12	37	30	26	23	5	15	14	9	11	13	10	4	18	18	10	24	37
Did not participate in last 4 weeks	77	71	75	86	80	83	80	80	78	70	73	87	63	70	74	77	90	78	86	91	78	77	89	96	79	75	87	71	63
Don't know	1	1	0	-	-	-	0	-	0	-	2	1	-	0	-	0	5	7	-	-	11	10	1	-	3	7	3	5	-

Base: Labour force, weighted column percentages
Questions: C2, C9b
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

This data is based on a questionnaire module which asks respondents whether they have participated in training in the preceding four weeks. The module focuses on work-related training only, and was put to workers with a contract of employment as well as to the self-employed and the unemployed. Results show marked differences between countries, with the US, Finland, and Sweden as the only countries where more than 30% of the labour force where involved in work-related training provided either by their company or by some other organisation. The Netherlands and Denmark follow next, while in Portugal and Greece less than 15% of the labour force participate in this type of lifelong learning. In the Newly Associated States the average is 10%, with rates in Bulgaria and Romania as low as 4% to 5%.

Participation in lifelong learning (% of labour force)



No. 70 Self-directed learning of labour force

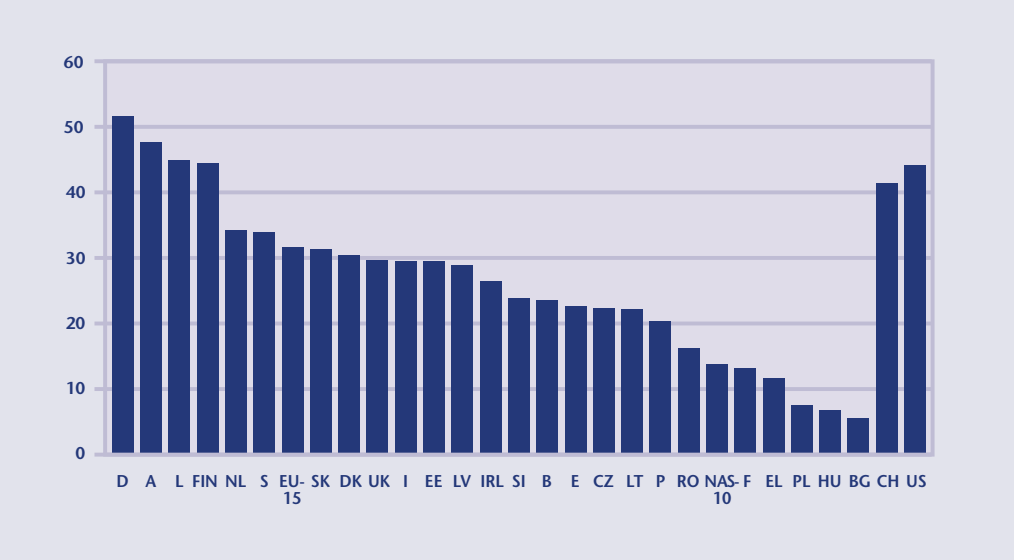
Share of employed population who participate in work-related self-learning

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Participated in last 4 weeks	23	30	52	12	23	13	26	29	45	34	48	20	44	34	30	32	6	22	29	7	22	29	7	16	24	31	14	41	44
Did not participate in last 4 weeks	75	69	48	88	77	87	73	70	55	66	51	79	55	66	70	68	90	70	71	93	66	60	91	83	72	61	83	53	56
Don't know	2	1	1	-	0	-	0	0	-	-	2	1	0	1	-	0	5	7	-	1	12	11	1	0	4	7	3	6	0

Base: Labour force, weighted column percentages
Questions: C14a, C14b
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Self-directed learning is an important means to acquire work-related skills, as it can be better adapted to individual skill requirements and time schedules than formal training courses. In most countries, a significantly higher share engage themselves in work-related self-directed learning than in training provided by outside organisations (such as further training courses). Learning that is not work-related is excluded since it cannot be distinguished satisfyingly from other leisure activities. Additional data would be needed to give information about the intensity of such learning activities. Self-learning defined as such is most popular in Germany (52% of the labour force), Austria (48%), Luxembourg (45%), the US and Finland (both 44%). Among the candidate countries from Central and Eastern Europe, Slovakia, Estonia and Latvia show the highest rates with roughly 30%of the labour force engaged in work-related self-learning.

Self-directed learning (% of labour force)



No. 71 Recent participation in any learning

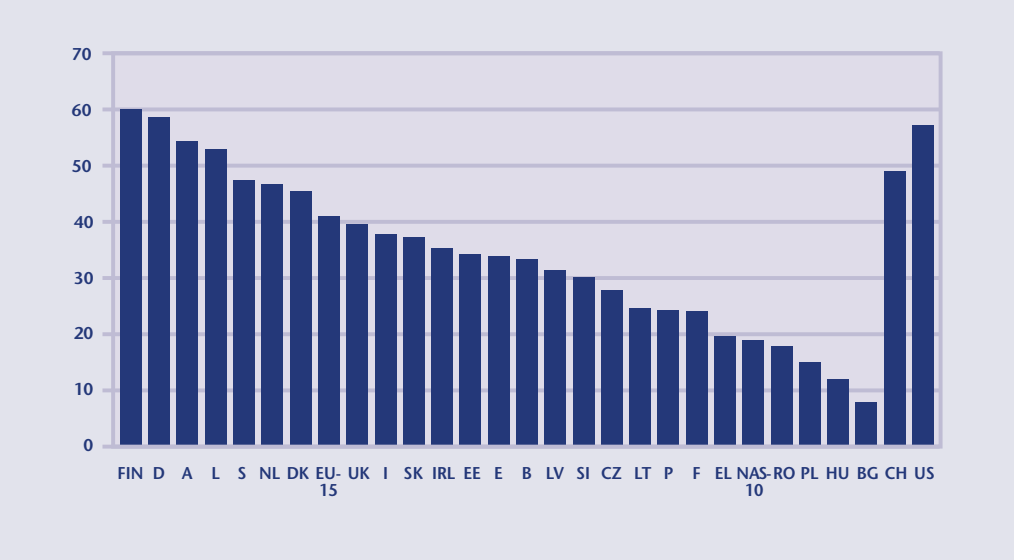
Share of employed population who participate in any work-related training or self-learning

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Has learned last 4 weeks	33	45	58	19	33	24	35	38	53	46	54	24	60	47	39	41	8	28	34	12	24	31	15	18	30	37	19	49	57
Has not learned last 4 weeks	65	53	41	81	67	76	65	62	47	54	44	75	40	53	61	59	87	65	66	88	64	58	84	82	67	56	78	47	43
Don't know	2	1	1	-	-	-	0	0	0	-	2	1	-	0	-	0	5	7	-	0	12	11	1	0	4	7	3	5	-

Base: Labour force, weighted column percentages
Questions: C2, C9b, C14a, C14b
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

A significant share of the labour force are participating in work-related lifelong learning, which includes both self-directed learning and training provided by third parties such as employers, unions and pubic employment services. While not giving any information on the type, intensity and field of these activities, the data show that a high percentage of workers is in the process of preparing for the adaptation of skills to the fast-changing requirements which are a key feature of the Information Society. More than half of the labour force in Finland, Germany, the US, Austria and Luxembourg have updated or extended their work-related skills in the four weeks preceding the survey. Even in the EU countries with the lowest spread of work-related learning activities, between one fifth and a quarter have done so. It seems that the Newly Associated States need to catch up on this indicator since their average is below the EU country with the lowest share (Greece).

Participation in any learning last 4 weeks (% of labour force)



No. 72 Usage of eLearning

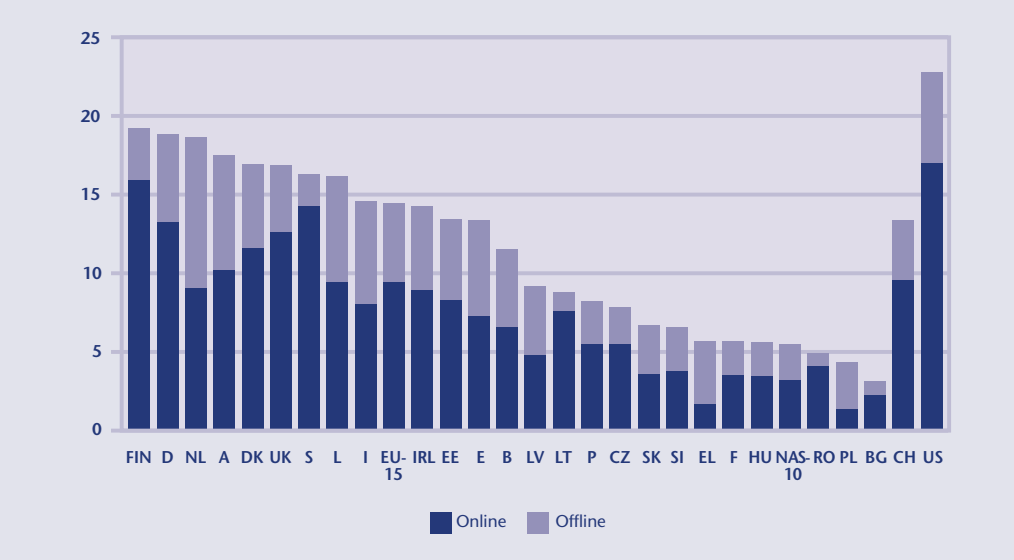
Share of employed population who used electronic learning material for work-related learning

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Online	7	12	13	2	7	3	9	8	9	9	10	5	16	14	13	9	2	6	8	3	8	5	1	4	4	4	3	10	17
Offline	5	5	6	4	6	2	5	7	7	10	7	3	3	2	4	5	1	2	5	2	1	4	3	1	3	3	2	4	6
No eLearning	87	83	81	94	87	94	86	85	83	81	82	92	81	84	83	85	96	91	87	94	90	88	93	95	93	92	93	87	77
Don't know if eLearning	1	-	-	-	-	-	-	0	1	-	-	-	-	-	0	0	1	1	-	-	1	3	2	-	-	1	1	-	-

Base: Labour force, weighted column percentages
Questions: C18a, C18b, C19a, C19b
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

eLearning can play a decisive role in delivering learning systems which meet the demands of today's workers - and the unemployed. SIBIS distinguishes between two broad groups of eLearning technologies: offline eLearning (comprising multi-media learning material such as computer programmes on diskettes, video tapes and CD-ROMs) and online eLearning (learning content being provided online through the Internet or the computer network of the employing organisation or school/ university). The share of the labour force that uses eLearning is 15% on average in the EU and 5% in the NAS, both of which is much lower than the 23% reached in the US.

Usage of eLearning (% of labour force)



No. 73 Digital divide indices

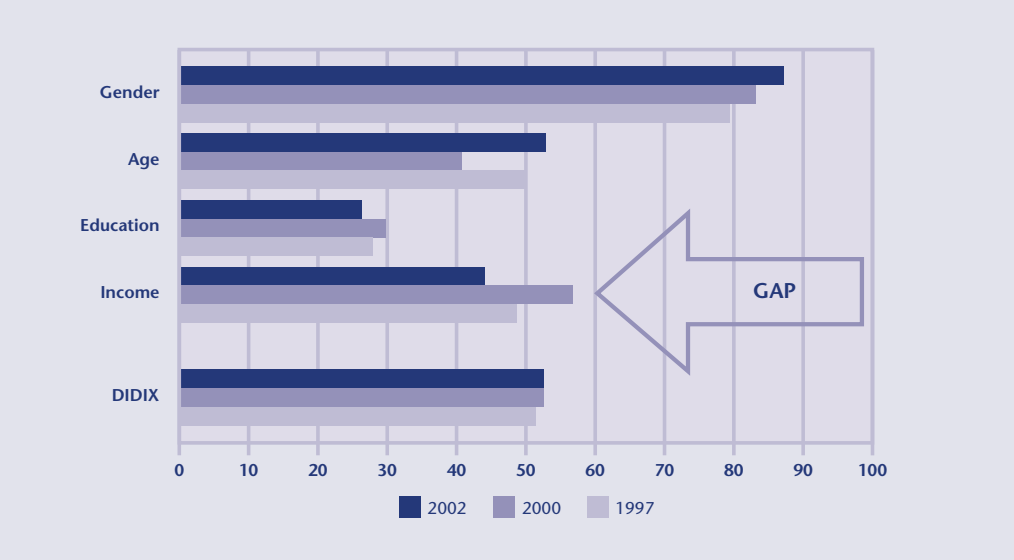
Digital divide indices for gender, age, education and income

	EU-15			NAS-10
	1997	2000	2002	2003
Gender	80	84	87	92
Age	50	41	53	37
Education	28	30	27	7
Income	49	57	44	32
DIDIX	52	53	53	42

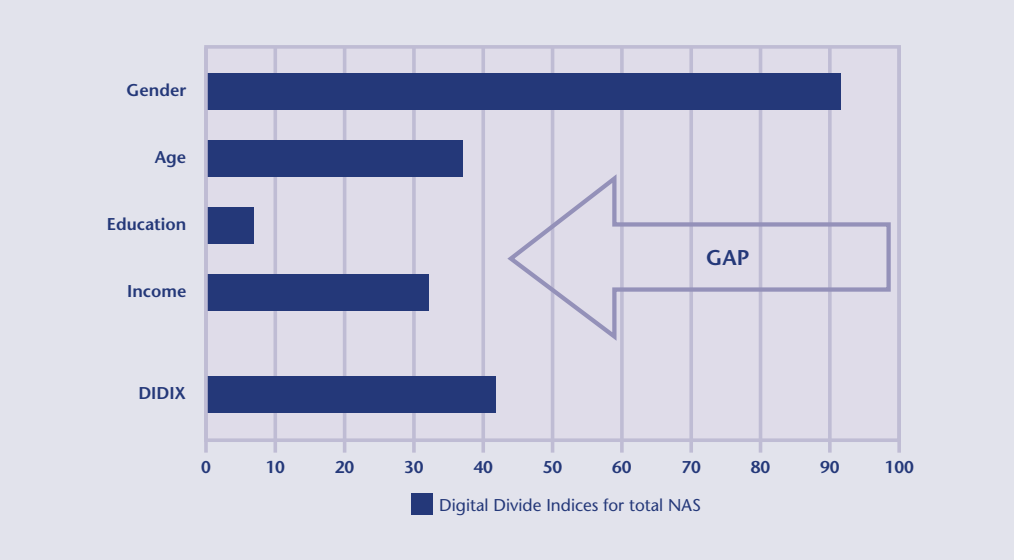
Bases: 1997, 2000: N=15,900, weighted by standard Eurobarometer country and EU-15 weights; 2002, 2003: all respondents, weighted percentages
Questions: 2002, 2003: IN1, IN3, Z19, Z21
Sources: 1997: Eurobarometer 47.0, Jan-Feb 1997; 2000: Eurobarometer 54, Oct-Nov 2000; 2002: SIBIS GPS 2002; 2003: SIBIS GPS-NAS 2003

The Digital Divide Index (DIDIX; for further information see Annex 1), a compound index comprised of four indices, measures diffusion of computer and Internet access and use amongst the four identified 'at risk' groups in relation to the population average. It provides a valuable insight regarding the picture at the EU level over time. The lower the Index value the more severe is the divide, with parity resulting in a value of 100. The picture differs for each of the at risk groups, illustrated by the values of corresponding indices. The gender divide has been steadily decreasing, with women improving their position in relation to men. The decrease in the age divide appears to be a more recent phenomenon, thus apparently reversing the initial trend exhibited for the 1997-2000 period. However, there has been no improvement regarding the education divide. Persistently, low levels of formal education appear to be the most significant reason behind low rates of participation in the Information Society. Likewise, the income divide has also been persisting, if not becoming even more relevant in this decade. Having considered the above digital divide indices, it becomes apparent that, the (relative) digital divide overall, for the four at risk groups, at the EU level has remained static, with, on aggregate, no improvement over the last five years. Comparing NAS (for which only 2003 data are available) and EU countries it is apparent that the gender gap in the NAS is narrower whereas the other socio-economic determinants of ICT use are more severe.

Digital Divide Indices for total EU-15 (1/97 until 05/02)



Digital Divide Indices for total NAS-10 2003



No. 74 Development of the Digital Divide Index within the EU and the NAS

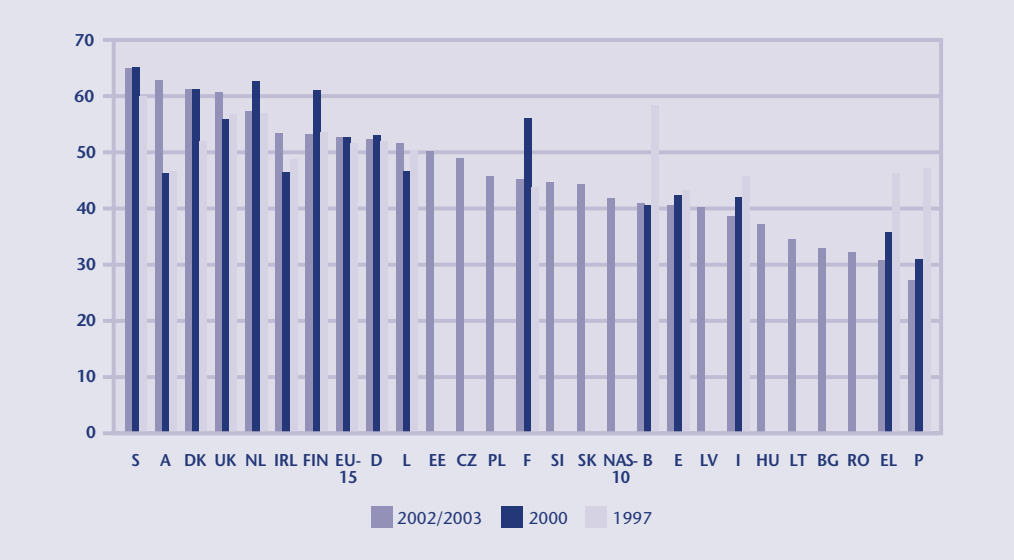
Digital divide indices for European countries

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10
1997	58	52	52	46	43	44	49	46	51	57	47	47	54	60	57	52	-	-	-	-	-	-	-	-	-	-	-
2000	41	61	53	36	43	56	47	42	47	63	46	31	61	65	56	53	-	-	-	-	-	-	-	-	-	-	-
2002	41	61	52	31	41	45	54	39	52	57	63	27	53	65	61	53	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	33	49	50	37	35	40	46	32	45	44	42

Bases: 1997, 2000: N=15,900, weighted by standard Eurobarometer country and EU-15 weights;
2002, 2003: all respondents, weighted percentages
Questions: 2002, 2003: IN1, IN3, Z19, Z21
Sources: 1997: Eurobarometer 47.0, Jan-Feb 1997; 2000: Eurobarometer 54, Oct-Nov 2000; 2002: SIBIS GPS 2002; 2003: SIBIS GPS-NAS 2003

The Digital Divide Index values for the EU Member States illustrate that a distinction can be made regarding whether, and to what extent, the digital divides for the at risk groups have improved over time. The continued persistence of relatively large digital divides in countries usually classified as late adaptors is apparent. On the other hand, the fact that some marked improvements, over a relatively short period of time, are possible has been demonstrated by the case of Austria and Ireland. Countries with an observable aggravation of divides are those ranking lower with regard to ICT uptake. The NAS countries do not lag behind very much but can be found amongst the "lower" half of EU Member States. Estonia and the Czech Republic show highest values and are not far from the EU-15 average.

Digital Divide Indices for EU and NAS



No. 75 Education Divide Index

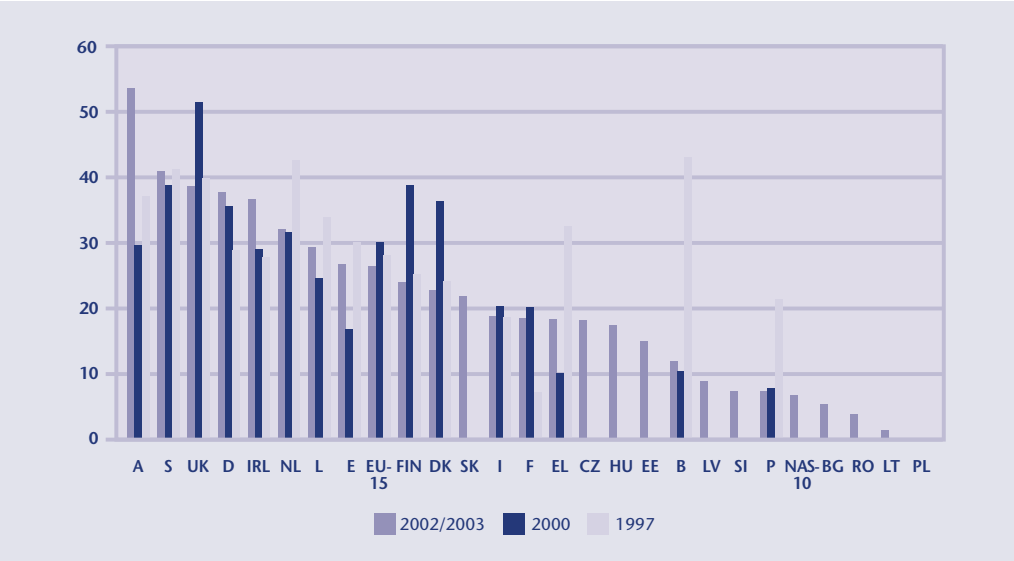
Education divide index

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10
1997	43	24	29	33	30	7	28	19	34	43	37	22	25	41	40	28	-	-	-	-	-	-	-	-	-	-	-
2000	10	37	36	10	17	20	29	21	25	32	30	8	39	39	52	30	-	-	-	-	-	-	-	-	-	-	-
2002	12	23	38	19	27	19	37	19	29	32	54	7	24	41	39	27	-	-	-	-	-	-	-	-	-	-	-
2003	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5	18	15	18	1	9	0	4	7	22	7

Bases: 1997, 2000: N=15,900, weighted by standard Eurobarometer country and EU-15 weights;
2002, 2003: all respondents, weighted percentages
Questions: 2002, 2003: IN3
Sources: 1997: Eurobarometer 47.0, Jan-Feb 1997; 2000: Eurobarometer 54, Oct-Nov 2000; 2002: SIBIS GPS 2002; 2003: SIBIS GPS-NAS 2003

The education divide, depicting the gap in the participation rate for the group with relatively lowest level of education (i.e. comprised of those who have left their formal education early) has been identified as the most sizeable at the EU level. The situation at the national level suggests that while progress can, and has been made (e.g. most notably Austria, but also Germany and Ireland) this divide is set to remain one of the most relevant policy challenges at national level. NAS countries are seriously lagging behind in this regard. On the other hand, low values even in apparently advanced information society countries (e.g. the Netherlands, Finland and Denmark) point towards societal challenges but the findings (i.e. index values) are partly attributable to the smaller size of the low education groups in these countries (the correlation between population share of low education group and Education Divide Index being low (r=-.117 for 2002/03), though).

Education Divide Index



No. 76 Digital divide in the EU in time

Digital divide in EU-15 in time (s-distance): How many months earlier was the level of selected categories in April 2002 attained by average Internet usage

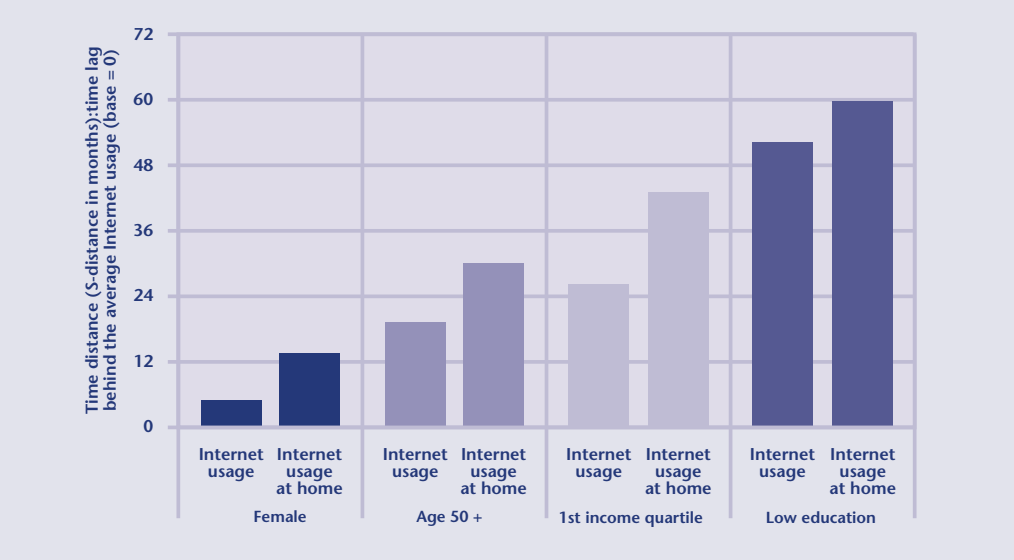
	EU-15	
	Internet usage	**Internet usage at home**
Females	5	13
People aged 50 and more	19	30
People with low income (first quartile)	26	43
People with low education	52	60

Bases: 1997, 2000: N=15,900, weighted by standard Eurobarometer country and EU-15 weights; 2002: all respondents
Questions: 2002: IN1, IN3, Z19, Z21
Sources: 1997: Eurobarometer 47.0, Jan-Feb 1997; 2000: Eurobarometer 54, Oct-Nov 2000; 2002: SIBIS GPS 2002

The magnitude of digital divides can also be expressed in terms of time lags, i.e. in terms of the time delay for particular sub-groups to achieve the same level of Internet usage as the population on average.

Such time distances (s-distances[7]; for further information see Annex 1) were calculated between the April 2002 levels of Internet usage for the selected socio-economic and demographic groups and the (earlier) time when corresponding levels had been achieved by the population overall. The smallest time lag was that for gender, followed by age (50+), income (lowest quartile) and low education (early school-leavers)[8]. The gender time lag for Internet usage overall is only about 5 months, meaning that the population overall reached the April 2002 levels of usage by women five months earlier, whilst for the low education group it was more than 4 years. Time distances can also be used to compare penetration rates for different indicators and different categories. For example, the time lag for "total Internet usage at home" behind "total Internet usage" was generally about 8 months although for some groups it was slightly longer.

Digital divide in EU-15 in time (s-distance): How many months earlier was the levelof selected categories in April 2002 attained by average Internet usage



No. 77 Digital divide by European countries in time

Digital divide in countries in time (s-distance): How many months earlier was the level of selected categories in April 2002 attained by average country Internet usage

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15
Females	6	3	6	13	6	5	1	11	13	13	3	7	4	17	3	5
People aged 50 and more	42	28	14	58	36	42	17	45	24	30	17	54	47	42	24	19
People with low income (first quartile)	41	33	17	54	47	38	35	57	46	62	16	63	48	44	31	26

Bases: 1997, 2000: N=15,900, weighted by standard Eurobarometer country and EU-15 weights;
2002: all respondents
Questions: 2002: IN1, IN3, Z19, Z21
Sources: 1997: Eurobarometer 47.0, Jan-Feb 1997; 2000: Eurobarometer 54, Oct-Nov 2000; 2002: SIBIS GPS 2002

Digital divide patterns expressed in time distances for total Internet usage in the separate EU Member States lead to similar conclusions with some variation. In all cases the gender gap is the smallest by far and the time distance is again the largest for the low education group, with the exception of Austria and Spain. Germany and Austria show the smallest average value of time distances for the four groups analysed. The difference between Internet usage for the age group 50+ and that of low income (lowest quartile) was clear for the EU-15 average, but this was not so for several countries. For Greece, France, Belgium, and Austria the time distance is slightly larger for the older age group than for the low-income group. For other countries the general tendency prevails, but the difference is small for Finland, Sweden and Germany.

Digital divide in countries in time (s-distance): How many months earlier was the level of selected categories in April 2002 attained by average country Internet usage

No. 78 Internet usage drop-outs

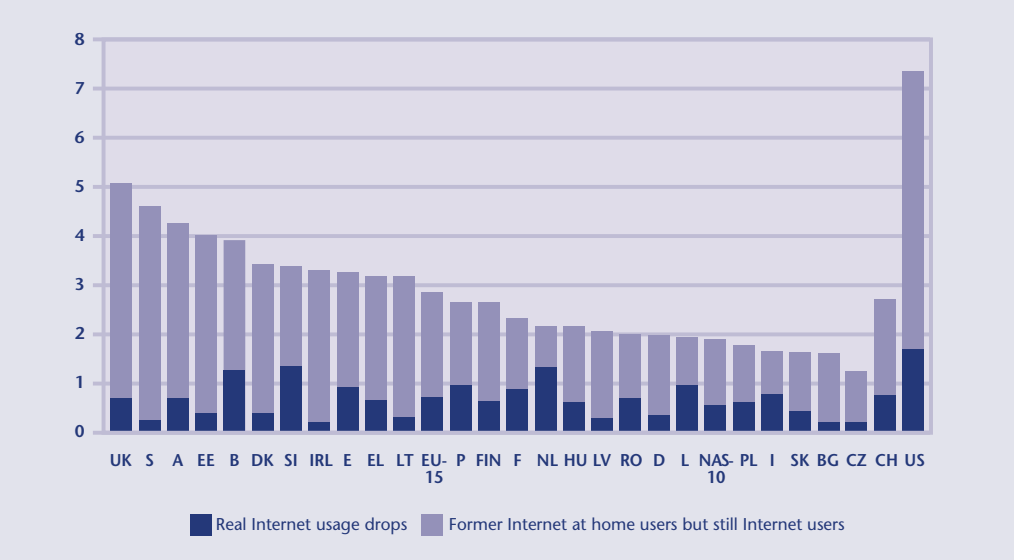
Internet usage drop-outs

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Real drop-outs	1.2	0.4	0.3	0.6	0.9	0.9	0.2	0.8	0.9	1.3	0.7	0.9	0.6	0.2	0.7	0.7	0.2	0.2	0.4	0.6	0.3	0.3	0.6	0.7	1.3	0.4	0.5	0.7	1.7
At home usage drop-outs	2.7	3.0	1.6	2.5	2.4	1.4	3.1	0.9	1.0	0.8	3.6	1.7	2.0	4.4	4.4	2.1	1.4	1.0	3.6	1.5	2.9	1.8	1.2	1.3	2.0	1.2	1.4	2.0	5.7
No access at home, but still Internet user	13	12	14	17	18	13	18	10	14	6	13	15	14	8	13	13	16	20	30	11	22	29	12	15	16	21	15	9	10
No access at home and non Internet user	43	20	35	63	49	55	26	47	34	19	35	61	25	21	24	40	45	50	34	64	45	55	59	60	42	53	56	28	19
Internet access at home	40	64	50	17	30	30	53	41	50	72	47	21	58	66	58	44	9	19	27	11	10	7	13	4	34	9	11	60	63
Never heard of the Internet	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	27	9	6	12	20	6	14	19	4	15	15	-	-
Not applicable	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	-	0	-	0	0	-	-	0	0	-	-

Base: All respondents, weighted column percentages
Questions: A5, A6, A9
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The Internet users drop-outs indicator aims to gauge sustainability of participation, at the individual level, in the Information Society. It is possible to capture this sustainability both in terms of the population of Internet users and at the level of general population (the latter is depicted). While it is encouraging to see that those who sever their online connectivity are, by and large, outnumbered by those who merely replace the home access with access from elsewhere, it is nevertheless important to bear the relevance of home access, not least given that it facilitates and encourages the participation for all at the level of a household.

Internet usage drop-outs (% of population)



No. 79 The skill gap as a barrier to Internet usage

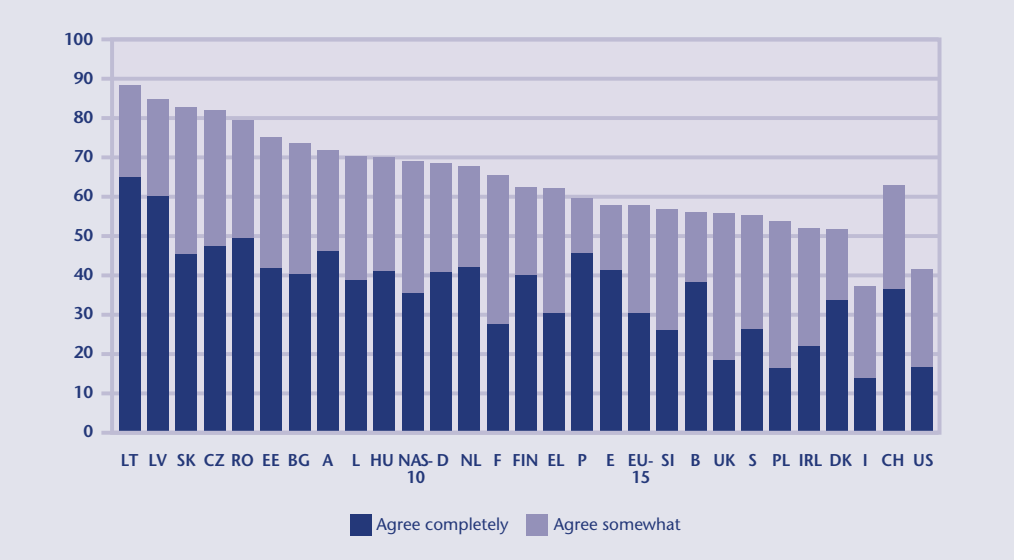
"It requires advanced computer skills" as a barrier to Internet usage

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Agree completely	38	34	41	31	41	27	22	14	39	42	46	46	40	26	18	30	40	47	42	41	65	60	16	49	26	45	35	36	17
Agree somewhat	18	18	28	32	17	38	30	23	31	26	26	14	22	29	38	28	33	35	33	29	24	25	37	30	31	37	33	27	25
Do not agree	20	25	14	17	29	21	42	35	17	18	17	11	24	38	39	25	16	12	18	20	4	10	33	13	33	14	22	22	38
Don't know	24	23	18	20	13	13	6	28	13	14	11	29	13	6	5	17	10	6	7	9	8	5	13	7	10	4	9	15	21

Bases: EU-15 countries: occasional and non Internet users; NAS-10 countries: respondents who ever have heard of the Internet (incl. don't know); weighted column percentages
Question: A18a
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The skill gap appears to be the most relevant barrier in the European context to achieving a wider participation in the Information Society. This has been reflected by the perceptions held by the majority of non regular users in Europe that advanced computing skills are required for using the Internet. This gap is considerably wider in Europe than in the US and particularly striking in the NAS.

Barriers to Internet usage: It requires advanced computer skills (% of occasional and non Internet users resp. respondents who ever have heard of the Internet)



No. 80 Psychosocial barriers to Internet usage

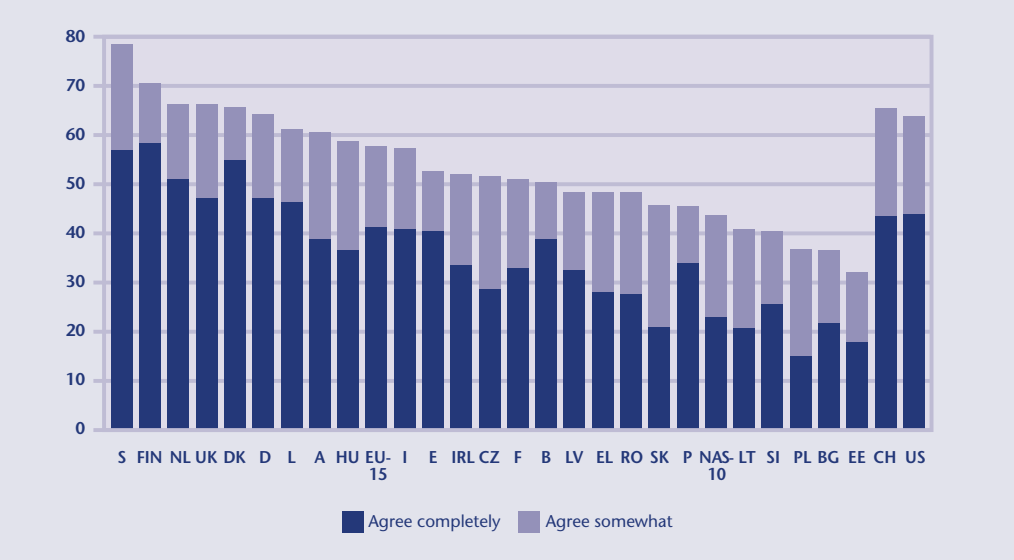
"Is not something for me" as a barrier to Internet usage

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Agree completely	39	55	47	28	40	33	33	41	46	51	39	34	58	57	47	41	22	29	18	36	21	32	15	27	25	21	23	43	44
Agree somewhat	11	11	17	20	12	18	19	17	15	15	22	12	12	22	19	17	15	23	14	22	20	16	22	21	15	25	21	22	20
Do not agree	28	26	29	37	40	38	44	26	34	23	29	25	25	21	32	32	53	44	60	37	48	47	47	44	53	49	46	26	30
Don't know	22	8	7	15	7	11	5	17	5	11	11	30	5	1	2	11	11	4	8	4	11	5	16	8	7	5	10	9	6

Bases: EU-15 countries: occasional and non Internet users; NAS-10 countries: respondents who ever have heard of the Internet (incl. don't know); weighted column percentages
Question: A18f
Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003

The perceived lack of compatibility between the Internet and the self can be seen as one of the psychosocial barriers to going online. It can be taken as an indication of some likely limitations to the current growth in the Internet penetration levels. This is consistent with higher rates being generally observed in more mature information societies.

Barriers to Internet usage: Is not something for me (% of occasional and non Internet users resp. respondents who ever have heard of the Internet)



No. 81 Internet use rates of disabled persons

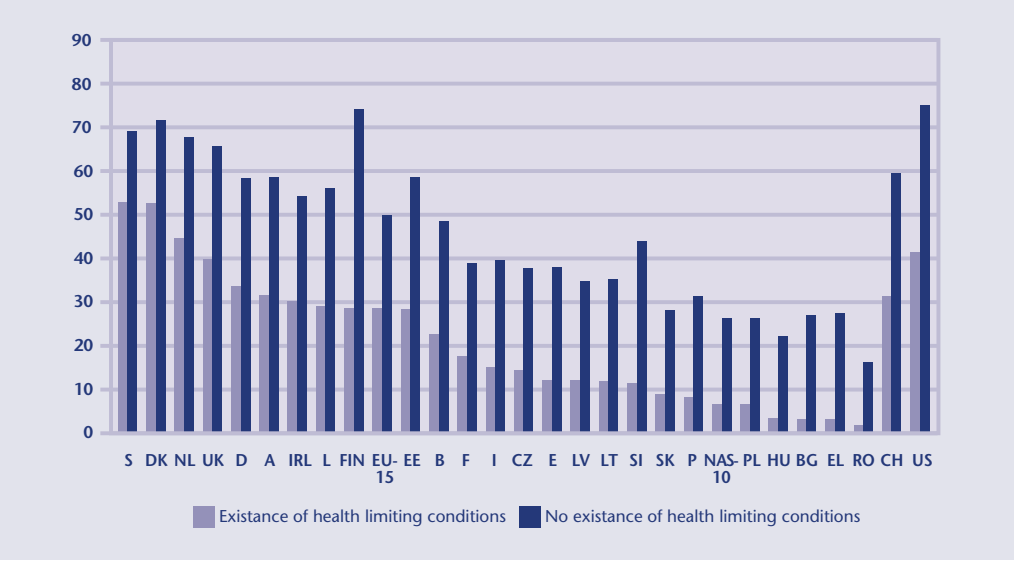
Internet usage of disabled and non disabled people

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	CH	US
Internet usage of disabled people																													
Regular users	22	53	34	3	12	18	30	15	29	45	32	8	29	53	40	28	3	14	28	3	12	12	7	2	11	9	7	31	41
Occasional users	2	16	6	5	4	3	9	3	8	15	2	2	5	5	7	6	2	4	5	1	2	3	4	1	5	4	3	3	6
Non users	76	32	60	92	84	79	61	82	63	41	66	90	67	42	53	66	95	81	66	96	86	85	90	97	84	87	91	66	53
Internet usage of non disabled people																													
Regular users	49	72	58	27	38	39	54	40	56	68	59	31	74	69	66	50	27	38	59	22	35	35	26	16	44	28	26	59	75
Occasional users	8	7	8	11	9	7	14	9	5	9	6	7	7	10	10	8	7	7	8	6	6	12	5	7	9	7	6	10	8
Non users	43	21	33	61	53	54	31	52	39	23	35	62	19	21	25	42	67	55	33	72	59	54	69	76	47	65	67	31	17

Bases: Respondents with health limiting conditions and without health-limiting conditions, weighted column percentages
Questions: A7, Z14
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

Enhancing the Internet access and use rates for people with disabilities is an important aspect of ensuring participation for all in the Information Society. While this group itself is a very diverse one, both in terms of accessibility needs and access rates, it is nevertheless characterised by relatively lower participation rates as a whole. It is however encouraging to see that the gap is apparently not so wide in some more advanced European information societies, such as Sweden and Denmark.

Internet usage in the last 4 weeks by existence of a long standing illness (% of people in each group)



No. 82 Impact of being connected to the Internet on social integration

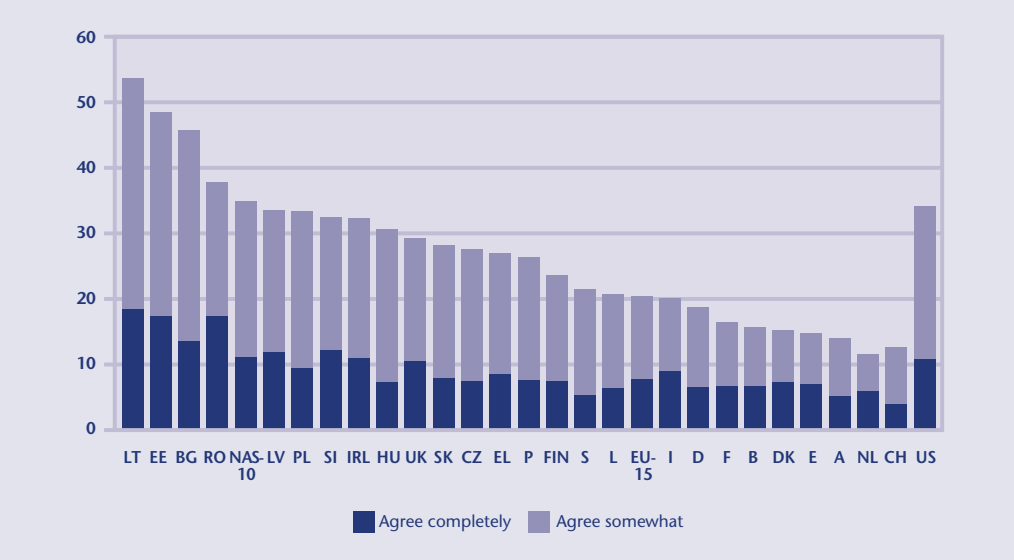
What would it mean, if the country would not be connected to the Internet: Would you say that you would feel socially excluded?

	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	CH	US
Agree completely	6	7	6	8	7	6	10	9	6	5	5	7	7	5	10	7	13	7	17	7	18	11	9	17	12	7	4	10
Agree somewhat	9	8	12	18	8	10	21	11	14	6	9	19	16	16	19	13	32	20	31	23	35	22	24	21	20	20	9	23
Do not agree	84	85	81	73	85	84	68	80	78	88	85	73	76	79	71	80	52	72	51	66	38	63	66	59	67	69	88	66
Don't know	1	0	1	-	0	-	-	0	2	1	1	1	0	-	0	0	2	1	1	3	9	4	1	4	1	3	-	0

Base: Regular Internet users
Questions: B5b
Source: SIBIS GPS 2002, SIBIS GPS-NAS 2003

One way of assessing the impact of being connected to the Internet on individuals' perception of feeling socially included is by assessing the hypothetical situation of non availability of the Internet to the current users. Especially the users in the NAS perceive social networking benefits of the Internet to be valuable and something that they would hardly want to miss. Also in the EU a significant share of the current users (one-in-five) would have felt socially excluded at least to some extent were their access removed from them, although somewhat higher rates might have been expected in some more mature information societies.

Life without Internet: Would users feel socially excluded? (% of regular Internet users)



No. 83 Adherence to formal accessibility guidelines in European organisations

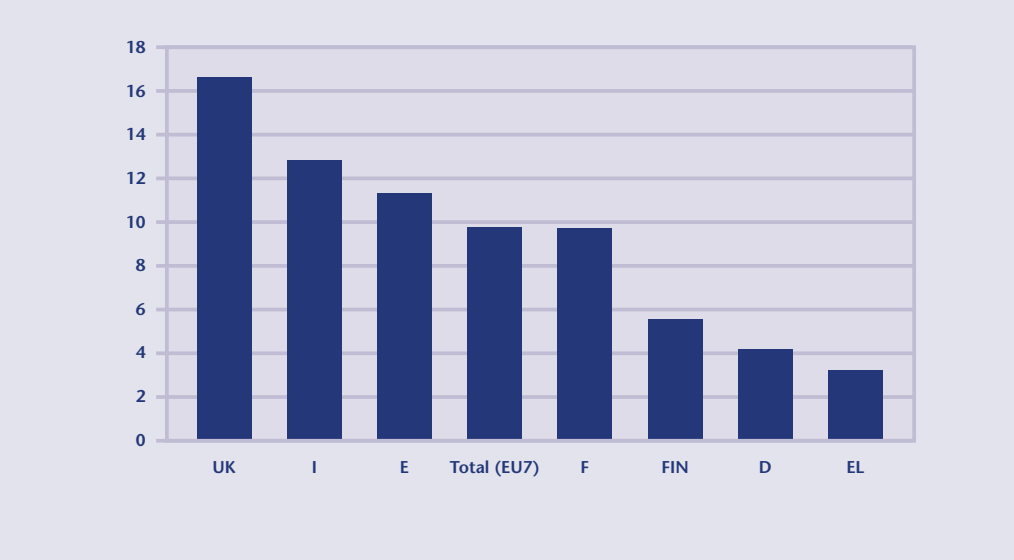
Are there formal guidelines for making website accessible to people with special needs?

	D	EL	E	F	I	FIN	UK	EU-7
Yes	4	3	11	10	13	5	17	10
No	27	11	27	15	35	32	33	28
Don't know	3	4	6	8	10	5	7	6
Low priority or "don't know" to all special groups	65	82	56	67	42	57	44	57

Base: Establishments with online presence, weighted column percentages
Questions: G1a, G2
Source: SIBIS DMS 2002

Internet content providers have been encouraged to improve their online accessibility, primarily by following and adopting relevant accessibility standards, the best example of which is the website accessibility initiative (WAI[9]). However, the levels of adherence to some formal accessibility guidelines (being a good proxy for WAI) appear to be rather low amongst European companies, with only one-in-ten having undertaken this particular accessibility-related course of action.

Adherence to formal accessibility guidelines (only establishments with high or medium priority given for accessibility to special groups; % of establishments with online presence)



No. 84 Priority of online accessibility in European organisations

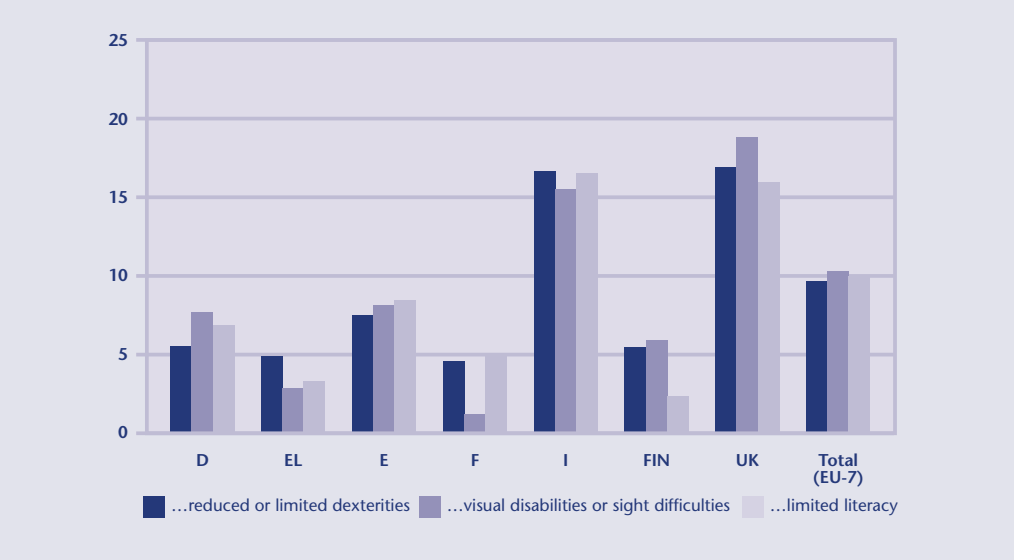
Priority of making website user-friendly for

	D	EL	E	F	I	FIN	UK	EU-7
...people with visual disabilities or sight difficulties								
High priority	8	3	8	1	16	6	19	10
Medium priority	16	11	26	15	21	17	26	20
Low priority	70	58	55	66	47	63	46	59
Don't know	7	28	11	19	17	15	9	11
...people with reduced or limited dexterities								
High priority	6	5	7	5	17	5	17	10
Medium priority	18	12	28	21	22	32	27	22
Low priority	69	55	53	57	40	49	45	56
Don't know	8	28	12	17	21	14	11	12
...people with limited literacy								
High priority	7	3	8	2	16	5	17	10
Medium priority	15	12	25	28	27	18	28	21
Low priority	71	57	55	56	45	61	39	58
Don't know	7	27	11	13	11	16	16	11

Base: Establishments with online presence, weighted column percentages
Questions: G1a
Source: SIBIS DMS 2002

The majority of EU companies (with a web presence) tend to assign a rather low priority to their online accessibility, with prevalence of a high priority being given to making their websites user friendly for groups for whom accessibility is likely to be an issue apparently not featuring high on the corporate online strategies.

Corporate website accessibility - High priority for people with ...
(% of establishments with online presence)



11.1 Methodology of the GPS 2002 survey

The survey was conducted in April-May 2002 (interviews were carried out between 4th April and 18th May) in all 15 EU Member States plus Switzerland and the US, using computer-aided telephone interviews. The survey was co-ordinated and executed by INRA Deutschland GmbH, Mölln. The population for this study is all persons aged 15 and over living in private households in the respective countries and speaking the respective national language(s). 11,832 interviews were successfully completed. The average interview length per country varied between 10 (Greece) and 20 minutes (Sweden).

Sampling: Target households were selected at random in all countries, either by random dialling techniques such as permutation of final digits or by drawing a random sample from official sources. Mostly a geographical stratification was implemented beforehand. For the selection of the target person common random keys were applied in all countries except for the UK where quota was used. In two cases (Spain, the US), screening had to be directed towards male respondents towards the very end of the field in order to gain gender representativeness.

There were three adjustments necessary in order to provide reliable data:

• Transformation from household sample to person sample. As only one person per household is interviewed, the described sample procedure provides a household sample, i.e. each household of the base population has the same likelihood of being in the sample but not each person. With the weighting stage of the transformation the equal likelihood of households is replaced mathematically by the equal likelihood of the individuals. To this end, each data set is multiplied by the amount of people in the household aged 15 or over. This number is subsequently divided by the average household size in order to obtain the actual case number.

• Adjustment of unweighted sample structure to the official statistic. Because random samples are not evenly distributed across all population strata, the distribution of unweighted samples regularly and systematically deviate from the population distribution from official statistics. Through the mathematical weighting the sample distribution was adjusted to the official statistics. The national weighting factor, which results from the iterative weighting, was included in the data material.

Adjustment of weighted sample structure to the EU-15 Member States population. This weighting factor was necessary to calculate total figures according to the whole population of the European Union Member States. Furthermore it is useful to compare the EU with the US. Population sizes of each Member State are weighted to reduce the distortion based on the sample sizes in each country.

Sample characteristics GPS 2002

		Total sample	Country	B	DK	D	EL	E	F	IRL	I	L	NL	A	P	FIN	S	UK	EU-15	CH	US
Total	unweighted	11832		585	501	1001	505	1015	1000	500	1000	500	530	500	500	669	500	1000	-	522	1004
	weighted	11832		585	501	1001	505	1015	1000	500	1000	500	530	500	500	669	500	1000	-	522	1004
EU-15	unweighted	10306		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10306	-	-
	weighted	10306		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	10306	-	-

		Age groups	Up to 24	25 to 49	50 to 64	65 and more	Don't know	Terminal education age	Up to 13	14	15 to 16	17 to 20	21 and more	Still studying	Don't know	Internet usage	Total Internet use	Regular use (last 4 weeks)	Occasional use (last 12 months)	Non Internet use
Total	unweighted		1964	5511	2515	1833	9		695	715	1794	3587	3266	1687	88		6905	5944	961	5550
	weighted		2019	5309	2495	2000	9		717	742	1750	3515	3275	1751	81		6908	5948	960	5643
EU-15	unweighted		1731	4817	2191	1558	9		693	701	1641	2997	2743	1463	77		5828	4985	843	4655
	weighted		1651	4593	2209	1839	14		728	881	1820	2937	2495	1372	73		5610	4781	830	4548

Sample characteristics GPS 2002

		Employment status	Paid employment	Self-employed	Unemployed/ temporarily not working	In education	Retired or other not working	Don't know
Total	unweighted		4966	935	701	1687	3441	102
	weighted		4853	941	683	1751	3510	94
EU-15	unweighted		4291	809	621	1463	3034	88
	weighted		4133	799	631	1372	3292	80

		Long standing illness	Existence of health limiting conditions	No existence of health limiting conditions	Don't know	Mobile phone usage	Mobile phone owner	Teleworking	Home based teleworkers
Total	unweighted		1898	9868	66		8202		217
	weighted		1885	9858	90		8192		233
EU-15	unweighted		1645	8607	54		7301		168
	weighted		1610	8606	90		7121		172

		eHealth usage	Searched for health-related info online	Searched and found health-related info online
	weighted		2728	2592
	weighted		2041	1916

11.2 Methodology of the GPS-NAS 2003 survey

The survey was conducted in January 2003 (interviews were carried out between 1st January and 31st January) in the 10 Newly Associated States Bulgaria, Czech Republic, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, Slovenia and Slovakia, using personal aided personal interviews (PAPI). The survey was co-ordinated and executed by NFO AISA Czech Republic, Prague. The population for this study is all persons aged 15 and over living in private households in the respective countries and speaking the respective national language(s). 10,379 interviews were successfully completed. The average interview length per country varied between 20 (Romania) and 40 minutes (Lithuania).

Sampling: Target households were selected at random in all countries, either by multistage stratified random-route sampling or by drawing a random sample from official sources. Mostly a geographical stratification was implemented beforehand. For the selection of the target person common random keys were applied in all countries, i.e. the next birthday method and the Kish method, except for Bulgaria where quota was used.

There were three adjustments necessary in order to provide reliable data:

• Transformation from household sample to person sample in Poland and Slovenia. As only one person per household is interviewed, the described sample procedure provides a household sample, i.e. each household of the base population has the same likelihood of being in the sample but not each person. With the weighting stage of the transformation the equal likelihood of households is replaced mathematically by the equal likelihood of the individuals. To this end, each data set is multiplied by the amount of people in the household aged 15 or over. This number is subsequently divided by the average household size in order to obtain the actual case number.

• Adjustment of unweighted sample structure to the official statistic. Because random samples are not evenly distributed across all population strata, the distribution of unweighted samples regularly and systematically deviate from the population distribution from official statistics. Through the mathematical weighting the sample distribution was adjusted to the official statistics. The national weighting factor, which results from the iterative weighting, was included in the data material.

• Adjustment of weighted sample structure to the NAS-10 countries population. This weighting factor was necessary to calculate total figures according to the whole population of the Newly Associated States. Furthermore it is useful to compare the NAS with the EU. Population sizes of each of the ten states are weighted to reduce the distortion based on the sample sizes in each country.

Sample characteristics GPS-NAS 2003

		Total sample	Country	BG	CZ	EE	HU	LT	LV	PL	RO	SI	SK	NAS-10	Age groups	Up to 24	25 to 49	50 to 64	65 and more	Long standing illness	Existence of health limiting conditions	No existence of health limiting conditions	Don't know
Total	unweighted	10379		104	1096	1001	1000	1017	1006	1000	1054	102	1199	-		2036	4473	2402	1468		2272	7961	146
	weighted	10371		1008	1096	1001	1000	1017	994	1000	1054	1002	1199	-		1825	4604	2202	1740		2386	7836	149
NAS-10	weighted	10379		-	-	-	-	-	-	-	-	-	-	10379		1736	4593	2234	1816		2555	7688	137

		Terminal education age	Up to 13	14	15 to 16	17 to 20	21 and more	Still studying	Never went	Don't know	Employment status	Paid employment	Self-employed	Unemployed/ temporarily not working	In education	Retired or other no	Don't know
Total	unweighted		374	658	1099	4784	1823	1407	59	175		4038	608	1272	1407	3052	2
	weighted		433	682	1151	4816	1833	1213	59	184		3999	622	1303	1213	3231	3
NAS-10	weighted		575	855	1099	4869	1719	1057	68	138		3354	690	1506	1057	3764	9

Sample characteristics GPS-NAS 2003

		Internet usage	Never heard of the Internet (incl. don't know)	Ever heard of the Internet	Total Internet use	Regular use (last 4 weeks)	Occasional use (last 12 months)	Non Internet use	Mobile phone usage	Mobile phone owner	Telework	Home based teleworkers
Total	unweighted		1349	9030	3700	3025	675	6679		5763		162
	weighted		1437	8935	3507	2852	655	6864		5635		162
NAS-10	weighted		1506	8773	2773	2215	559	7606		4534		120

11.3 Methodology of the DMS 2002 survey

The survey was conducted in March-May 2002 (interviews were carried out between 21st March and 15th May) in seven EU Member States using computer-aided telephone interviews. The survey was co-ordinated and executed by INRA Deutschland GmbH, Mölln. The population for this study is defined as all establishments belonging to four aggregated industry sectors in the seven Member States Germany, Finland, France, Greece, the UK, Italy and Spain. The interview was conducted with IT responsible persons in companies across all sectors of the economy. 3,139 interviews were successfully completed. The average interview length per country varied between 14 (France) and 18 minutes (Italy).

Sampling: The sample was set up according to given industry and size class quota. Accordingly a stratified random sample was drawn from the universe, allowing for the relevant industries within four aggregated sectors (manufacturing, construction, primary sector; distribution, catering, transport & communication; financial & business services; public administration, education, health, other personal and social services). Drawing the sample was organised locally by the national executing institutes.

Weighting: For the SIBIS DMS a sample stratified by sector/ size cells was used which ensured that in each sector, establishments from all size classes (1 to 9, 10 to 49, 50 to 199, 200 to 499 and 500+) were sampled. In order to be able to raise figures to national level, some form of weighting is required which adequately reflects the structure and distribution of establishments (or related variables) in the universe of the respective country (and, by implication, EU-15).

• Original weight: Within each country, the interviews were split according to a quota plan which guaranteed that the sample is not dominated by micro and small companies. The quotas roughly reflect the distribution of employment over sector and establishment size bands in the EU, and derive from research in cases where the quotas could not be reached exactly in line with this quota plan (mostly due to the limited absolute number of establishments in the two biggest size classes). Note that because of the use of a single quota plan for all countries, country differences in the distribution of employment over establishment size bands which occur in reality are not reflected in the data. This is due the lack of available data on the distribution of employment across establishments size bands in almost all EU Member States, and constitutes a considerable problem. This weight is therefore not used for presenting SIBIS results.

• Weighting by employment: The data available on the distribution of employment over establishment size bands is very limited for most EU Member States. SIBIS used data from a variety of sources, including BT database (United Kingdom), ISTAT Industry and Services Intermediate Census (Italy), National Statistical Service of Greece (Greece), SIREN (France), Tilstokeskus Official Statistics (Finland), Heins + Partner B-Pool (Germany) and Schober Business Pool (Spain) and adjusted using data from the DG Enterprise/ Eurostat SME Database (latest available, 1997), to estimate the establishment/ employment structure for each country in the sample. Using this weight, the weighted sample for each country therefore reflects employee distribution between the five establishment size bands within that country. This means that a data reference of, for example, "20% of all establishments in country A" should be understood to mean "establishments accounting for 20% of all employees in country A".

• Weighting by employment for EU-7 averages: Additionally another weighting factor was created to calculate average figures for all countries in the sample (which together represent roughly 82% percentage of total EU employment). Each country is represented in this weight according to its share in the total employment of the 7 EU countries in which the survey was conducted.

11.4 Confidence limits

Observed percentages	10% or 90%	20% or 80%	30% or 70%	40% or 60%	50%
Confidence limits if N=500	+/- 2.6%	+/- 3.5%	+/- 4.0%	+/- 4.3%	+/- 4.4%
Confidence limits if N=1,000	+/- 1.9%	+/- 2.5%	+/- 2.7%	+/- 3.0%	+/- 3.1%

Readers are reminded that survey results are estimates, the accuracy of which, everything being equal, depends on the sample size and on the observed percentage. With samples of about 1,000 and 500 interviews respectively, the real percentages vary (at 95% probability level) within the following confidence limits:

11.5 Digital Divide Index (DIDIX)

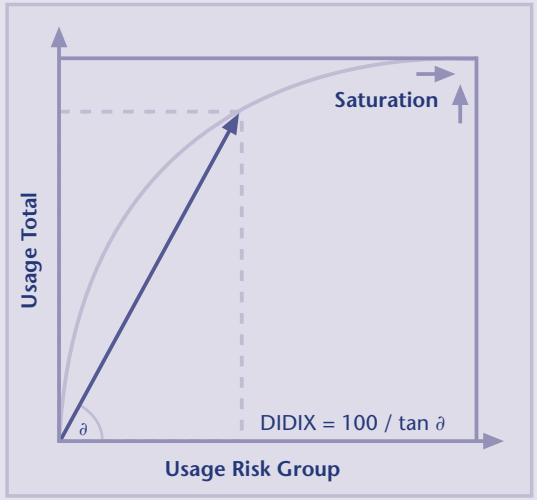
SIBIS developed a Digital Divide Index (DIDIX) to enable the manifestations of digital divides in EU Member States to be quickly compared. This index combines the divides by gender, age, education and income in relation to computer use, Internet use and Internet access at home. It measures the relative adoption of ICT by potentially deprived societal groups - relative as compared to the population as a whole.

The lower the DIDIX value, the greater the gap between the risk group and the population average. If the ICT adoption rate of a risk group is equal to that of the population average then the DIDIX value would be 100.

The most apparent divide is in relation to education. Age leaving school turns out to be the major determinant, the most powerful predictor in multivariate analyses of ICT usage. ICT diffusion among people having left school under the age of 16 is only about one fourth of that in the whole population. And even when allowing for the fact that older people are on average less well educated than younger people, education appears to exert greater effects than age.

Time series data for DIDIX based on SIBIS and earlier Eurobarometer surveys show that the overall magnitude of the digital divide in Europe has remained more or less constant at a DIDIX value of about 50 since 1997. This means that ICT uptake amongst the combined at risk groups has remained only half as advanced as it is in the whole population. However, there are indications of changes in some of the specific divides.

DIDIX - Curve of relative adoption



11.6 Time distance measure (s-distance)

The difference (gap) between two time series is in the present state-of-the-art commonly measured by ratio, absolute or percentage difference at a given point in time. There exists in general an equally universal measure of the difference (gap) between the series for a given level of the indicator expressed in time that is called time distance[10]. The operational statistical measure of the time distance concept is a special category of time distances S-distance : for a given level of XL, XL = Xi(ti) = Xj(tj) the time separating unit (i) and unit (j) is Sij(XL) = DT(XL) = Ti(XL) – Tj(XL).

The time distance approach as a new view of the information, using levels of the variable(s) as identifiers and time as the focus of comparison and numeraire, is theoretically universal, intuitively understandable and can be usefully applied as an important analytical and presentation tool to a wide variety of substantive fields. Being a new complementary view of the information by adding (n+1) dimension to existing measures, no previous results are replaced and adding this time dimension to existing analysis can only enrich understanding. As everybody understands time, from ministers, managers to media and general public, time distance is also an excellent presentation and communication tool.

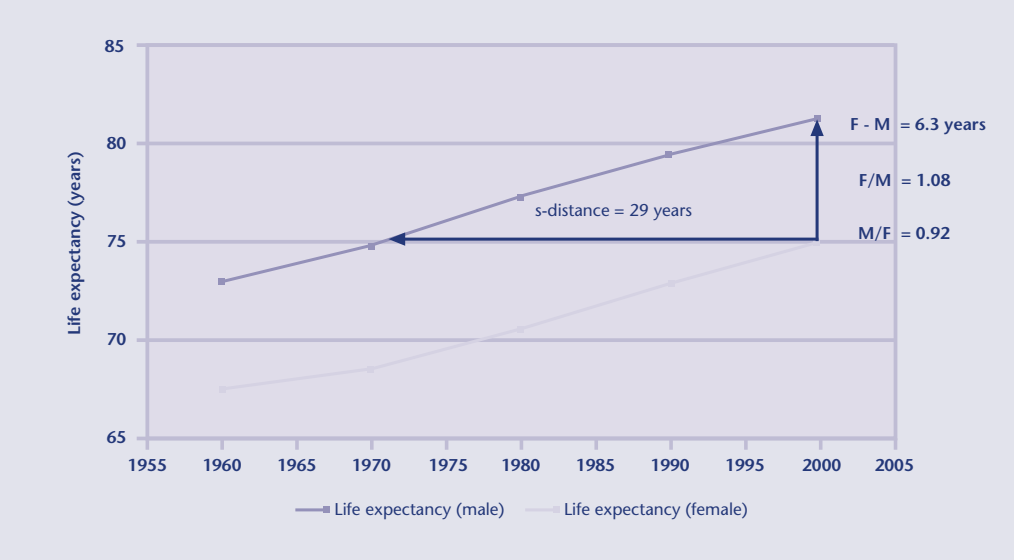
The two empirical examples show that the time distance approach can provide new insights from existing data. That is, degree of disparities may be very different in static terms and in time. A drastic example of this can be found in comparing male-female differences in life expectancy, as an important but slow growing indicator, and the delay in Internet usage for the age group 50+ behind that of total population. In the EU-15 in 2000 the female life expectancy was 6.3 years higher, which amounted to about 8 percent difference in relation to that of men[11]. However, the time distance was an astonishing 29 years. This means that women attained the male life expectancy for 2000 already in 1971, about three decades ago.

With respect to the percent of Internet usage in April 2002, the value for total population was 50.27 percent, while that for the age group 50+ amounted to 25.05 percent[12]. The former category had a 100 percent higher value,or the latter attained only 50 percent of the former. But the time distance was only about 1.6 years (19 months), due to very high growth rates of Internet usage.

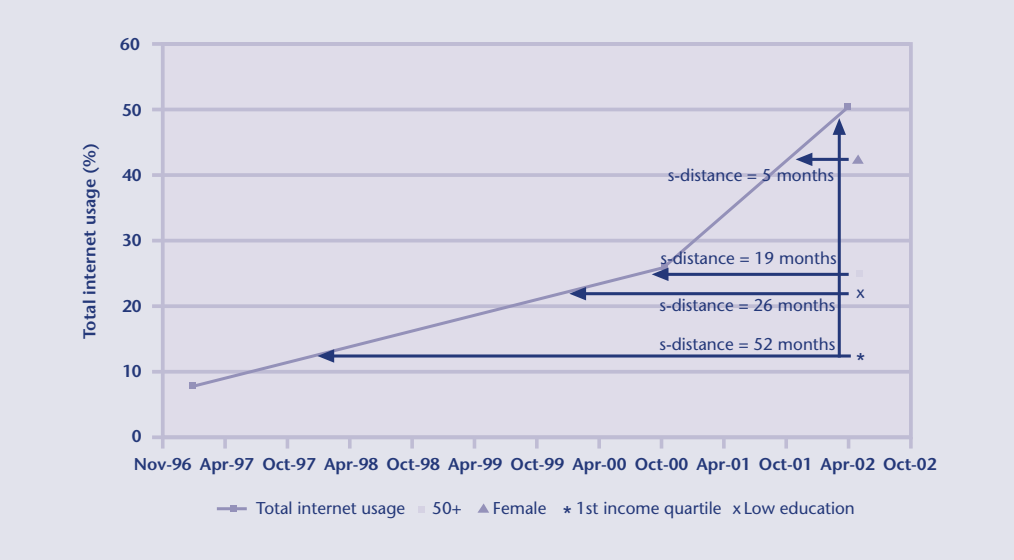
Using only static measures for these indicators, a very biased perception of the overall degree of disparity and of the difficulty in eliminating the gaps in the two domains would be reached. Comparing 100% (or 50%, depending on the formulation of the static relative measure) with 8% would mean that the gap in the Internet usage is a much more prevailing concern, in numerical terms beyond any doubt. Time distance perspective of the gap gives complementary information that leads to a qualitatively different conclusion, 1.6 years against 29 years, respectively. The conclusion is obvious, both dimensions are to be analysed simultaneously to arrive at a more realistic evaluation of the situation.

The novel time distance methodology proposes a new perspective to the problem, an additional statistical measure, and a presentation tool for policy analysis and debate that is readily understood by policy makers, media and general public. This is not a methodology oriented towards a specific substantive problem but an additional view to many problems and applications[13]. In an information age a new view of the existing databases should be evaluated as an important contribution towards a more efficient utilisation of the available information complementing, rather than substituting, the existing methods in extracting the relevant information content and new insights from available data.

Static measures disparity and time distance between life expectancy for females and males for EU-15 in 2000



Digital divide in EU-15 in time (s-distance): How many months earlier was the level of selected categories in April 2002 attained by average Internet usage



12.1 GPS 2002 Questionnaire

No Branching	Question GPS 2002	Answer categories
Module IN: Introduction and Screener questions		
INTRO TEXT ALL	Hello my name is ... calling for ... We are presently conducting a scientific survey for the European Union in fifteen countries. I would like to talk to the person in your household, that is at least 15 years old, and whose birthday is up next. [INTERVIEWER: IF NECESSARY] To topic of this survey is the Internet and the work life. [INTERVIEWER: IF NECESSARY] Your answers will be held strictly confidential and will be used only for scientific purposes. [INTERVIEWER: IF NECESSARY] Your participation is very important to us, because you have been selected through a statistical procedure that will result in a typical selection of people in [COUNTRY] [PROMPT: The interview will last about 15 minutes]	
IN1 ALL	Would you please tell me in which year you were born?	I_1_I_9_I__I__I [DK]
PROGRAMMING: IF respondent born after 1986 END INTERVIEW!		
IN2 ALL	Have you finished your full-time education or are you still studying?	(1) finished education already (2) Is still studying (3) DK
IN3 IF IN2=1	At what age did you finish full-time education? [PROMPT: HOW OLD WHERE YOU WHEN YOU STOPPED FULL-TIME EDUCATION]	I__I__I years [DK]
Transition X1 IF IN2=1	I would like to ask you a few questions regarding your employment situation.	
IN4 IF IN2=1	At present are you in paid work either as an employee, civil servant or as self-employed?	(1) yes (2) no (3) DK
IN5a IF IN4=1	Do you have one job or more than one job at present?	(1) only one job (2) more than one job (3) DK
IN5b IF IN5a=2,3	How many hours per week do you normally work, including paid overtime and taking all your jobs together?	I__I__I__I [DK]
Transition X2 IF IN5a=2	For answering the following questions, please consider only your main job, i.e. the job you spend most of your working time on.	
IN6 IF IN4=1	And are you ... [in your main job] [INTERVIEWER: Read out answer categories]	(1) selfemployed (2) in paid employment (including civil servants) (3) DK
IN7 IF IN4=2,3	And are you ... [INTERVIEWER: Read out answer categories]	(1) temporarily not working, e.g. because of unemployment, paternal leave or illness (2) retired (3) not working, because you are responsible for ordinary shopping and looking after the home. (4) DK
IN8 IF IN6=1	What kind of work do you do? Are you a ... [INTERVIEWER: Read out answer categories]	(1) Professional (eg doctor, lawyer, accountant, architect) (2) Farmer, fisherman (3) Business proprietor, owner of company/ shop, craftsmen, other self-employed person (4) DK
IN9 IF IN8=3	How many employees do you have?	I__I__I__I__I__I__I [DK]
IN10 IF IN4=1	[In your main job,] Are you working full-time or part-time?	(1) full-time (2) part-time (3) DK
IN11 IF IN4=1	How many hours per week do you normally work in your main job, [PROGRAMMER: Skip the following if IN6=1] including paid overtime?	I__I__I__I [DK] [PROGRAMMER: INCLUDE CHECK WITH IN5B]
IN12 F IN6=2,3	Are you employed ... [INTERVIEWER: Read out answer categories]	(1) on an unlimited permanent contract (2) on a fixed term contract (3) on a temporary employment agency contract (4) on apprenticeship or other training scheme (5) other (6) DK
IN13 IF IN7=2,3,4	Would you like to be in paid work?	(1) yes (2) no (3) DK
IN14 IF IN8=3 or IN6=2	What kind of work do you do? Are you ... [INTERVIEWER: Read out answer categories]	(1) working mainly at a desk (2) not working at a desk, but travelling (salesmen, driver, ...), (3) not working at a desk, but in a service job (retail shop, restaurant, ...) (4) doing some other kind of work (5) DK
IN15 IF IN6=2	What position do you hold? [INTERVIEWER: Read out answer categories]	(1) Employed professional (employed lawyer, medical practitioner, accountant, architect etc.) (2) Management (3) Other non-manual employee (4) Manual worker (5) DK

No Branching	Question GPS 2002	Answer categories
IN16 IF IN15=2	And which of the following best describes your position? [INTERVIEWER: Read out answer categories]	(1) General management, director or top management (managing directors, director general, other director) (2) Middle management, other management (department head, junior manager, teacher, technician) (3) DK
IN17 IF IN15=4	And which of the following best describes your position? [INTERVIEWER: Read out answer categories]	(1) Supervisor (2) Skilled manual worker (3) Other (unskilled) manual worker, servant (4) DK
IN18 IF IN15=2	How many employees you are responsible for?	|__|__|__|__|__| [DK]
IN19 IF IN6=2	For what kind of organisation do you work? [INTERVIEWER: Read out answer categories]	(1) a private firm or business or a limited company (2) in the public sector or in a charity, voluntary organisation or trust [PROMPT - DO NOT READ: (2) includes public companies, local or central government, civil service, armed forces, council, schools, universities or other grant funded education establishments, public authorities, charities, voluntary organisations] (3) DK
IN20 IF IN6=2	How many employees work in the company/ organisation for which you work? [INTERVIEWER: Read out answer categories]	(1) <10 (2) 10-49 (3) 50-249 (4) 250 and more (5) DK
IN21 IF IN4=1	Do you work mainly ... [INTERVIEWER: Read out answer categories]	(1) in your own home (2) in the same grounds or buildings as your home (3) in different places using home as a base (e.g. travelling salesman, free insurance agent etc.) (4) somewhere quite separate from home (5) DK
Module A: Basic ICT equipment access and use		
Transition A ALL	Now we would like to ask you a few questions about computers and the Internet	
A1 ALL	Have you used a PC, Mac or any other computer, for work or for private purposes - in the last four weeks?	(1) yes (2) no (3) DK
A3 IF A1=1	Have you sent or received any e-mail messages, for work or for private purposes, during the last four weeks?	(1) yes (2) no (3) DK
A4a IF A3=1	How many of your friends and relatives have their own e-mail address? [INTERVIEWER: Read out answer categories]	(1) all or almost all (2) about three quarters (3) about half (4) about one quarter (5) only few or no-one (6) DK
A4b IF A4a<5	And with how many of your friends and relatives do you communicate regularly via e-mail? [INTERVIEWER: Read out answer categories]	(1) all or almost all (2) about three quarters (3) about half (4) about one quarter (5) only few or no-one (6) DK
A5 ALL	Do you have access to the Internet in your home?	(1) yes (2) no (3) DK
A6 IF A5=2	Did you once have Internet access in your home?	(1) yes (2) no (3) DK
A7 ALL	Have you used the Internet at least once in the last four weeks, at home, at school or work or at any other place?	(1) yes (2) no (3) DK
A8 IF A7=2,3	Have you used it in the last 12 months at least once?	(1) yes (2) no (3) DK

A9
FOR (a):
IF A7=1
and A5=1
FOR (b)-(f):
IF A7=1
	How much time do you spend in a typical week on using the Internet ...
	[item]
	[INTERVIEWER: Read out answer categories for the first 2 items]
	(a) at home?
	(b) at the workplace?
	(c) at school, university or another educational institution?
	(d) at a public place where Internet access is free?
	(e) at an Internet café or other place where you have to pay for access?
	(f) at another place not mentioned yet
		FOR EACH
		(1) none
		(2) less than 1 hour
		(3) between 1 and 5 hours
		(4) between 6 and 10 hours
		(5) between 11 and 20 hours
		(6) more than 20 hours
		(7) DK

A10 IF A7=1 or A8=1	When did you use the Internet for first time? [INTERVIEWER: Read out answer the categories]	(1) < 6 months ago (2) 6 - 12 months ago (3) 1 year - 2 years ago (4) 2 years + ago (5) DK
A11a IF A5=1	Do you know what technical method you use at home to connect to the Internet?	(1) yes (2) no (3) NA
A11b IF A11a=1,3	I will read to you a number of methods to access the Internet. Which of these do you use at home? [INTERVIEWER: Read out and code those that apply]	MULTIPLE ANSWERS (1) Dial-up with modem (2) Cable Modem (3) Leased line (4) xDSL (5) ISDN (6) T1 or T3 line [TRANSLATOR: Digital Multiplex connection] (7) Internet access via satellite (8) Other not mentioned (e.g. mobile) (9) DK
A12 IF A11b =2,3,4,5,6,7	At home, did you have a connection before which was slower than your current one?	(1) yes (2) no (3) DK
A13 IF A12=1	Since moving to this faster type of connection, has the amount of time you spend online per week decreased, increased or remained roughly the same?	(1) Decreased (2) Increased (3) Remained roughly the same (4) DK

No Branching	Question GPS 2002	Answer categories
A14 IF A7=1	In the last four weeks, have you accessed the Internet in any other way than via PC or Mac, at least once?	(1) yes (2) no (3) DK
A15 IF A14=1	Which devices did you use for that: Did you use ... [INTERVIEWER: Read out and code those that apply]	MULTIPLE ANSWERS (1) Digital TV*, (2) a PDA or palmtop, (3) a mobile phone with WAP or 2.5G** capability, (4) a game console (5) other (6) DK [* TRANSLATOR: Make sure that you take local brand names and colloquial terms into account] ** TRANSLATOR: Use term used in your country (e.g. Germany: GPRS)]
A18 IF A7=2,3	Now I will read to you a list of statements about the Internet. Please tell me for each statement whether you agree completely, agree somewhat or do not agree. The Internet ... [item]. Do you ... (a) requires advanced computer skills, (b) is not easy enough to get access to, (c) is too time consuming, (d) is too expensive to use, (e) lacks useful or interesting information (f) is not something for me	FOR EACH (1) agree completely (2) agree somewhat (3) or do you not agree (4) DK
A19 ALL	Do you have a mobile phone for your own personal use?	(1) yes (2) no (3) DK
A20 ALL	How many of your friends and relatives have a mobile phone for their personal use? [INTERVIEWER: Read out answer categories]	(1) all or almost all (2) about three quarters (3) about half (4) about one quarter (5) only few or no-one (6) DK
A23 IF A19=1 and A15~=3	Have you used your mobile phone to view webpages or WAP pages, or to read your e-mail, at least once in the last 4 weeks? [TRANSLATORS: Confusion with SMS* to be avoided!]	(1) yes (2) no (3) DK
A26 IF A23=1	Have you used your mobile phone at least once in the last 12 months to make any purchases in the Internet, to download online information you are charged for or to make online payments?	(1) yes (2) no (3) DK
A27 IF A19=1	Have you, in the last four weeks, used SMS* messages for ... (a) communication with other people? (b) paying for purchases, admission tickets or something similar? (c) paying for downloads such as ringing tones? (d) receiving financial information, sport results or other subscription services? [* TRANSLATOR: Check if another term is more common in your country]	FOR EACH (1) yes (2) no (3) DK
A30 IF A19=1 (For (d) and (e)I: IF A19=1 and (A8=1 or A7=1) and IN4=1)	Now, think about what your everyday life would be like if you didn't have a mobile phone. Please tell me how much you agree that if you didn't have a mobile phone (ITEM). Would you say that you ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) you would often not be able to contact your friends and family, or be reached by them (b) you would be less exposed to dangerous electromagnetic radiation (c) you would be more helpless in case of emergencies (d) you would not receive some of the information you need for your job (e) you would have less exchange with some of your business contacts (f) you would have less fun	FOR EACH: (1) agree completely (2) agree somewhat (3) do not agree (4) DK
Module B: eCommerce and other uses of the Internet		
Transition B IF A8=1 or A7=1	Now I would like to ask you a few questions about the Internet.	
PROGRAMMING:	B1 to B2: for each item in B1=1 ask directly B2, then go to next item in B1	
B1 IF A8=1 or A7=1	You can use the Internet for many purposes. I´m going to read you a list of things you can do online and ask you whether you have done this online for your private purposes. For your private purposes, have you used it in the last 12 months... (a) to find information about a product or service (b) to order a product or service (c) to conduct online-banking or to buy financial products (d) to search for any health-related information (e) to look for a job	FOR EACH (1) yes (2) no (3) DK
B2 IF B1=1 and A7=1	[FOR EACH B1 ITEM] Have you done so in the last four weeks?	(1) yes (2) no (3) DK
B5 IF A7=1 (For (c) and (d): IF A7=1 and IN4=1)	Many people in this country still do not have access to the Internet yet. Now please imagine our country were without the Internet for one month. What would it mean for your everyday life? Please tell me how much you agree that if our country were without the Internet for a month you would (ITEM). Would you say that you would ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) be less well informed as a consumer (b) feel socially excluded (c) not receive some of the information you need for your job (d) have less communication with some of your contacts at work/ your business contacts (e) have less contact with some of your friends (f) have less fun	FOR EACH: (1) agree completely (2) agree somewhat (3) do not agree (4) DK

No Branching	Question	GPS 2002	Answer categories
Module D: Skills			
D1 IF A7=1 or A8=1 [Do not ask item (h) in UK, IRL, US]	I would like to ask you a few questions about your skills in using the Internet. How confident would you feel… [item] Please tell me whether you feel.. [INTERVIEWER: Read out answer categories for the first 2 items] (a) using a search engine (such as Google or Yahoo) to find information on the Internet [TRANSLATORS: List two most widely used search engine brands in your country[14]] (b) identifying the source of information provided on the Internet (c) using e-mail to communicate with others (d) using Internet chat-rooms to contact other people (e) using the Internet to make telephone calls (f) creating a personal web/ Internet page (g) downloading and installing software onto a computer [PROGRAMMING: Do not ask item (h) in UK, IRL, US] (h) understanding the content of websites written in English		FOR EACH (1) very confident (2) fairly confident (3) not confident (4) Do not know what this means [DO NOT READ OUT] (5) DK
Module L: eHealth			
Transition L IF B1 (d)=1	You said before, that you have used the Internet to search for health-related information:		
L1 IF B1(d)=1	Have you been able to find health-related information on the Internet?		(1) yes (2) no (3) DK
L2 IF L1=1	Was the information suitable for your needs?		(1) yes (2) no (3) DK
L3 IF L2=1	Websites with health related information are available in many languages. When you searched, did you find Websites in your mother tongue sufficient or did you have to expand your search and consult sites in other languages, or did you even have to rely solely on sites in other languages?		(1) Websites in mother tongue were sufficient (2) Had to expand my search and consult websites in other languages too (3) Had to rely solely on websites in other languages (4) DK
L4 IF B1(d)=1	And for what reasons did you search health-related information on the Internet? Did you search health-related information on the Internet to … [item] (a) seek a second opinion on your own, a family member's, or a friend's medical diagnosis? (b) be better informed on your general health? (c) gather additional information since you care for an ill person or a person with a disability?		FOR EACH (1) yes (2) no (3) DK
L5 IF B1(d)=1	How trustworthy would you consider each of the following providers of health-related information: [Item] : Are those … [INTERVIEWER: Read out answer categories for the first 2 items] (a) Universities and other non-profit organisations active in the health sector/ the health field (b) pharmaceutical companies (c) private health insurance providers (d) patient advocacy and self-help groups (e) hospitals (f) professional medical associations		FOR EACH (1) very trustworthy (2) fairly trustworthy (3) not trustworthy (4) DK
Module J: Security			
Transition J IF A7=1	Now the topic is Internet security.		
J1 IF A7=1	How concerned are you about . [item]: Are you … [INTERVIEWER: Read out answer categories] (a) data security on the Internet, i.e. the loss or manipulation of your data? (b) privacy and confidentiality on the Internet, i.e. personal information about you being misused by third parties?		FOR EACH (1) very concerned (2) somewhat concerned (3) not concerned (4) DK
J2 IF J1(a)=1,2 or J1(b)=1,2	Are these concerns stopping you from using the Internet to buy goods or services online: often, sometimes, or never?		(1) often (2) sometimes (3) never (4) DK
J3 IF A7=1	Would you report violations of your online security, privacy and confidentiality to a third independent party, for example a public agency created for this task? [INTERVIEWER: Read out answer categories]		(1) yes, very likely (2) maybe (3) no (4) DK
J4 IF J3=1,2,3	Would it be easier for you to do so if you could do it anonymously?		(1) yes (2) no (3) DK
J5 IF A7=1 & (B1(b)=1 or B1(c)=1)	How often are you aware of security features of websites when you use the Internet to buy online: often, sometimes or never?		(1) often (2) sometimes (3) never (4) DK
J6 IF A7=1 & (B1(b)=1 or B1(c)=1)	And how often do you take security features of websites into account when deciding about whether to buy online: often, sometimes or never?		(1) often (2) sometimes (3) never (4) DK
Module K: eGovernment			
Transition K IF A7=1	Now I would like to ask you a few questions about the contact to government agencies through the Internet.		
	PROGRAMMING: K1 to K3: for each item in K1=1 ask directly K2, If K2=1 ask directly K3, then go to next item in K1		

No Branching	Question GPS 2002	Answer categories
K1 IF A7=1	Here is a list of activities that require citizens to get in touch with public administration. For each activity, please answer whether you would prefer to use the Internet or prefer to use the traditional way, that is face-to-face, by postal mail, fax or phone: [INTERVIEWER: Repeat answer categories for the first 2 items] (a) Tax declaration/ filing your income tax return (b) Use of job search services of public employment service (c) Request for passport, driver's licence, birth certificates or other personal documents (d) Car registration (e) Declaration to the police, e.g. in case of reporting theft (f) Searches for books in public libraries (g) Announcement of change of address	FOR EACH (1) Internet (2) traditional way (3) do not use this service [DO NOT READ OUT] (4) DK
K2 IF K1=1	FOR EACH Is it possible to use the Internet for this in the area you live?	FOR EACH (1) yes (2) no (3) DK
K3 IF K2=1	FOR EACH Have you ever tried using the Internet for this?	FOR EACH (1) yes (2) no (3) DK
K4 IF A7=1	For each of the following statements about online services of public administration, please indicate whether you agree. Public services on the Internet ...[item]. [INTERVIEWER: Read out answer categories for the first 2 items] (a) are not useful enough (b) are faster than the traditional way (c) require that you install special equipment or software (d) reduce the number of mistakes public authorities make (e) do not seem as safe as using the traditional way (f) make it possible to deal with the authorities at more convenient times (g) make it possible to deal with the authorities at more convenient locations, e.g. from home or from the workplace (h) are difficult to use	(1) agree completely (2) agree somewhat (3) do not agree (4) DK
Module E: Telework		
Transition E IF IN4=1 or IN13=1 or IN7=1	Now let's talk about another topic: With the help of telephone, fax and computer, many types of work can be done from home. If work results are transferred electronically, this is sometimes called telework.	
E1 IF IN4=1	Do you presently telework from home, for at least some of your working time?	(1) yes (2) no (3) DK
E2 IF E1=2,3	Have you teleworked on a regular basis before, in the last five years?	(1) yes (2) no (3) DK
E3 IF E2=1	Did you spend, on average, at least one full working day a week at home when you were teleworking?	(1) yes (2) no (3) DK
E4 IF E1=1	Do you spend, on average, at least one full working day a week teleworking from home?	(1) yes (2) no (3) DK
E5 IF E1=1	You indicated before that you work on average [PROGRAMMER: Insert result from IN5b, if blank insert result from IN11] hours per week. How many of these do you spend at home in a typical week?	|__|__|__| [DK] [PROGRAMMER: Insert check with IN5b or IN11]
E7 IF E1=1 and IN6=2	Has the equipment you use for teleworking at home been mainly, not mainly but partly, or not at all been paid for by your employer?	(1) mainly paid for by employer (2) not mainly, but partly paid for by employer (3) not at all paid for by employer (4) DK
E8 IF IN7=1 or IN13=1 or (E1=2,3 or E4=2,3)	If it was offered to you, how interested would you be in ... [item]. Would you be ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) doing almost all your work teleworking at home (b) telework where you did not spend all your working time, but at least one full working day per week at home (c) work in an office provided near your home which would allow you to reduce commuting?	FOR EACH (1) very interested (2) somewhat interested (3) not interested (4) DK
E9a IF E1=2,3 or E4=2,3	Would you say that your job is feasible for telework, under the assumption that you spend at least one full working day per week at home?	(1) yes (2) no (3) DK
E9b IF E9a=2 and IN6=2	What are the main reasons why you consider your current job not to be feasible for telework? Is it because ... [INTERVIEWER: Read out answer categories and code all that apply]	MULTIPLE ANSWERS (1) your company does not permit telework? (2) your superior does not approve of telework? (3) your job requires face-to-face contact with customers, colleagues or other persons (4) your job requires access to machines or other things which cannot be accessed from home (5) Other reasons (DO NOT READ OUT) (6) DK

No Branching	Question GPS 2002	Answer categories
E10 IF E1=1	For what reasons did you start teleworking? Please indicate for each of the following aspects how important it was for your decision to start teleworking. [item] Was this ... for you. [INTERVIEWER: Read out answer categories for the first 2 items] (a) I needed a more peaceful working environment (b) I want to participate more in family life (c) I want to be closer to clients or customers (d) I need to look after a child or an other person who needs care (e) My company asked me to start teleworking (f) I want to reduce commuting (g) I wanted to have more flexibility in how to organise my work	(1) very important (2) somewhat important (3) not important (4) DK
E11 IF E1=1	Most working people are not allowed to work from home. Please consider you would not be allowed to telework from home, for whatever reasons. What would that mean for your ability to do your job? Would it mean that you...[item]. Do you ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) could not be in paid work at all (b) could not do your job as well as with telework (c) would have to look for another job which is located closer to your home (d) would have to reduce your working hours per week	FOR EACH: (1) agree completely (2) agree somewhat (3) do not agree (4) DK
Module F: Mobile work		
Transition F IF IN4=1	Now let's talk about the topic of mobile working.	
F1 IF IN4=1	In the last four weeks, have you spent any of your working time away from your home and from your main place of work, e.g. on business trips, in the field, travelling or on customer's premises?	(1) yes (2) no (3) DK
F2 IF F1=1	You indicated before that you work on average [PROGRAMMER: Insert result from IN5b, or if blank result from IN11] hours per week. How many of these do you spend away from home and your main place of work?	|__|__|__| [DK] [PROGRAMMER: Insert check with IN5b or IN11]
F3 IF F2>5	In the last four weeks, have you used online computer connections when travelling? By this I mean have you accessed the Internet for business purposes, or electronically transferred data to colleagues?	(1) yes (2) no (3) DK
F4 IF F3=1	For what purpose did you use these online connections? Have you used these to ... (a) access the Internet (b) send or read e-mails (c) connect to your company's internal computer system	FOR EACH: (1) yes (2) no (3) DK
F5 IF F3=1	Where did you use an online computer connection? Have you used it in the last four weeks at ... (a) a hotel, conference site or similar location? (b) another company's premises? (c) an Internet café or an other commercial teleservice center? (d) or on the move, using a mobile device for data transfer?	FOR EACH: (1) yes (2) no (3) DK
Module G: Tele-cooperation/ Tele-collaboration		
Transition G IF IN4=1 and (A1=1 or A7=1)	And how about the use of telecommunication technology at your work place:	
G1 IF IN4=1 and A1=1	When you communicate with external contacts, do you sometimes use e-mail, video conference or electronic data transfer? [PROGRAMMER: skip the following if IN6=1] By external persons we mean customers, clients, suppliers, other business contacts, but also colleagues working at other locations of the same company.	(1) yes (2) no (3) DK
G2 IF G1=1	In a typical week, how often do you ...[item] for these external contacts? [INTERVIEWER: Read out answer categories for the first 2 items] (a) use e-mail (b) use video-conferencing (c) use e-mail attachments or other electronic data transfer	FOR EACH (1) 10 or more times a day, (2) at least once a day, (3) at least once a week (4) less often than once a week (5) never (6) DK
G4 IF IN6=1 and A7=1	I would like to know about the role the Internet plays in your business. Do you sometimes attract new business through the Internet or via e-mail?	(1) yes (2) no (3) DK
G5 IF IN6=1 and A7=1	Do you sometimes deliver work results to your clients or customers through the Internet or via e-mail?	(1) yes (2) no (3) DK
G6 IF G4=1 and G5=1	Does it sometimes happen that you communicate with clients or customers exclusively by electronic means, i.e. via Internet, e-mail, phone or fax and without meeting face-to-face?	(1) yes (2) no (3) DK
Module H: Outcomes of work		
Transition H IF IN4=1	I would like to ask you a few more questions about your work.	
H1 IF IN4=1	Please tell me for each of the following, how often you experience this. How often do you .. [item]? [INTERVIEWER: Read out answer categories for the first 2 items] (a) Find your work stressful (b) Come home from work exhausted (c) Find your job prevents you from giving the time you want to your partner or family (d) Feel too tired after work to enjoy the things you would like to do at home (e) Find your partner/ family gets fed up with the pressure of your job	FOR EACH (1) often (2) sometimes (3) never (4) does not apply [DO NOT READ] (5) DK

No Branching	Question GPS 2002	Answer categories
H2 IF IN6=2,3	In your current work arrangement, do you agree with the following statements about your job? [item] Do you ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) I have a lot of say over what happens in my job (b) I need to keep learning new things continuously (c) I have concerns about whether my job is secure (d) I have a high income (e) I can adapt my starting & finishing times to my personal preferences (f) I can adapt the number of weekly working hours to my personal preferences	FOR EACH: (1) strongly agree (2) somewhat agree (3) disagree (4) DK
H3 IF IN4=1	On the whole, are you very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied or very dissatisfied with your job/ your main job?	(1) very satisfied (2) somewhat satisfied (3) neither satisfied nor dissatisfied (4) somewhat dissatisfied (5) very dissatisfied (6) DK
Module C: Educational attainment and lifelong learning		
Transition C IF IN4=1 or IN13=1 or IN7=1	Now I would like to ask you a few questions about training and learning.	
C2 IF IN6=2,3	Did you participate in some kind of work-related training activities that were provided either by your company or by an other organisation, in the last four weeks?	(1) yes (2) no (3) DK
C9b IF IN7=1 or IN6=1	Did you participate in some kind of training activities with the aim of preparing you for a future job, in the last four weeks?	(1) yes (2) no (3) DK
C14a IF IN4=1	Apart from the training that may have been provided by others, did you engage in some kind of self-directed learning related to your work, in the last four weeks?	(1) yes (2) no (3) DK
C14b IF IN7=1 or IN6=1	Apart from the training that may have been provided by others, did you engage in some kind of self-directed learning which was aimed at preparing you for a future job, in the last four weeks?	(1) yes (2) no (3) DK
C18 IF A1=1 and (C2=1 or C9b=1 or C14a=1 or C14b=1)	Did you use, in the course of your training and learning in the last four weeks, electronic learning materials such as learning programmes on CD-ROM, in company-internal computer systems or on the Internet?	(1) yes (2) no (3) DK
C19 IF C18=1	What did you use? Did you use (a) CD-ROMs or other so-called offline media such as diskettes, audio or video tapes etc.? (b) online learning materials provided on the internal computer system of your organisation or through the Internet	FOR EACH (1) yes (2) no (3) DK
C20 IF IN2=2 and A1=1	Did you use, in the course of your studies in the last four weeks, electronic learning material such as learning programmes on CD-ROM, on the internal computer system of your school/ university or through the Internet?	(1) yes (2) no (3) DK
C21 IF C20=1	What did you use? Did you use (a) CD-ROMs or other so-called offline media such as diskettes, audio or video tapes etc.? (b) online learning material provided on the internal computer system of your school/ university or through the Internet?	FOR EACH (1) yes (2) no (3) DK
Module Z: Standard demography		
	Finally we would like to ask you a few more questions for statistical purposes:	
Z17 ALL	How many people live in your household, yourself included?	|__|__| [DK]
Z18a IF Z17>1	How old is the youngest?	|__|__| [DK]
Z18b IF Z17>1	How many are 15 years and older?	|__|__| [DK] [PROGRAMMER: Build in check with Z17 and Z18a]
Z14 ALL	Do you have any long-standing illness, disability or infirmity that limits your activities in any way? By long-standing I mean anything that has troubled you over a period of time or that is likely to affect you for a period of time.	(1) yes (2) no (3) DK
Z19 ALL	We also need some information about the income of this household to be able to analyse this survey. What is your household's monthly net income (after tax)? Please count the total wages and salaries per month of all members of this household; all pensions and social security benefits; child allowances and any other income like rents etc. [ADD IF NECESSARY: Of course, your answer (as all other answers in this interview) will be treated confidentially and referring back to you or your household will be impossible.] Is it less or more than <income 1>, <income 2> or <income 3>.	(1) less than <income 1> (2) <income 1> to less than <income 2> (3) <income 2> to less than <income 3>. (4) <income 3> or more (5) DK (6) Refusal
Z20 ALL	Looking back over the last three years, has your household income increased, decreased, or remained roughly the same?	(1) increased (2) decreased (3) remained roughly the same (4) DK (5) Refusal
Z21 ALL	Gender [INTERVIEWER: Ask only if in doubt]	(1) male (2) female

No Branching	Question GPS 2002	Answer categories
	Data provided by survey organisation	**Categories**
P0	Survey Number	101438
P1	Country Code	I__I__I
P2	Interview Number	I__I__I__I__I
P3	Date of Interview:	Day I__I__I, Month I__I__I
P4	Time of the beginning of the interview (USE 24 HOUR CLOCK):	Hour I__I__I, Minute I__I__I
P5	Number of minutes the interview lastet	I__I__I__I
P6	Size of locality	I__I__I
P7	Region	I__I__I
P8a	Postal Code/ Area code **must be convertible into NUTS 2 regions**	I__I__I__I__I__I__I__I__
P8b	NUTS 2 regions	I__I__I__I__I__I__I__I__I
P9	Interviewer Number	I__I__I__I__I__I
P10	Weighting Factor	I__I . I__I__I__I__I__I
P11	Language of interview (Luxembourg, Belgium, Finland, Switzerland)	I__I

12.2 GPS-NAS 2003 Questionnaire

No Branching	Question	GPS-NAS 2003	Answer categories
Module IN: Introduction and Screener questions			
INTRO TEXT ALL	Hello my name is ... We are presently conducting a scientific survey for the European Union. I would like to talk to the person in your household, that is at least 15 years old, and whose birthday is up next. [INTERVIEWER: IF NECESSARY] The topic of this survey is the use of technology in everyday and working life. [INTERVIEWER: IF NECESSARY] Your answers will be held strictly confidential and will be used only for scientific purposes. [INTERVIEWER: IF NECESSARY] Your participation is very important to us, because you have been selected through a statistical procedure that will result in a typical selection of people in [COUNTRY] [PROMPT: The interview will last about 15 minutes]		
IN1 ALL	Would you please tell me in which year you were born?		|_1_|_9_|__|__| [DK] » terminate interview
INTERVIEWER: IF respondent born after 1987 END INTERVIEW!			
IN2 ALL	Have you finished your full-time education or are you still studying?		(1) finished education already » IN3 (2) Is still studying » X-IN1 (3) DK » X-IN1 (4) never went to school » X-IN1
IN3 IF IN2=1	At what age did you finish full-time education? [PROMPT: HOW OLD WHERE YOU WHEN YOU STOPPED FULL-TIME EDUCATION]		|__|__| years » X-IN1 (99) [DK]
Transition X-IN1 ALL	I would like to ask you a few questions regarding your employment situation.		» IN4
IN4 ALL	At present are you in paid work either as an employee, civil servant or as self-employed? PROMPT: Parental leave should be coded as "no"		(1) yes » IN5a (2) no » IN7 (3) DK » IN7
IN5a IF IN4=1	Do you have one job or more than one job at present?		(1) only one job » IN6 (2) more than one job » X-IN2 (3) DK » X-IN2
Transition X-IN2 IF IN5a =2 or 3	For answering the following questions, please consider only your main job, i.e. the job you spend most of your working time on.		» IN6
IN6 IF IN4=1	And are you ... [in your main job] [INTERVIEWER: Read out answer categories]		(1) self-employed » IN8 (2) in paid employment (including civil servants) » IN10 (3) DK » IN10
IN7 IF IN4=2,3	And are you ... [INTERVIEWER: Read out answer categories]		(1) temporarily not working, e.g. because of unemployment, paternal leave or illness » A19a (2) retired » IN13 (3) not working, because you are responsible for ordinary shopping and looking after the home. » IN13 (4) studying full-time » IN13 (5) DK » IN13
IN8 IF IN6=1	What kind of work do you do? Are you a ... [INTERVIEWER: Read out answer categories]		(1) Professional (eg doctor, lawyer, accountant, architect) » IN10 (2) Farmer, fisherman » IN10 (3) Business proprietor, owner of company/ shop, craftsmen, other self-employed person » IN9 (4) DK » IN10
IN9 IF IN8=3	How many employees do you have?		|__|__|__|__|__|__| » IN10 (999999) [DK] » IN10
IN10 IF IN4=1	[In your main job,] Are you working full-time or part-time?		(1) full-time » IN11 (2) part-time » IN11 (3) DK » IN11
IN11 IF IN4=1	How many hours per week do you normally work in your main job, including paid overtime?		|__|__|__| »Y-IN1 [DK] » Y-IN1
Y-IN1 BRANCHING			IF IN6=2,3 » IN12 IF IN6 = 1 » IN14
IN12 IF IN6=2,3	Are you employed ... [INTERVIEWER: Read out answer categories]		(1) on an unlimited permanent contract » IN14 (2) on a fixed term contract » IN14 (3) on a temporary employment agency contract » IN14 (4) on apprenticeship or other training scheme » IN14 (5) other » IN14 (6) DK » IN14
IN13 IF IN7=2,3,4,5	Would you like to be in paid work?		(1) yes » A19a (2) no » A19a (3) DK » A19a
IN14 IF IN4 = 1	What kind of work do you do? Are you ... [INTERVIEWER: Read out answer categories]		(1) working mainly at a desk »Y-IN2 (2) not working at a desk, but travelling (salesmen, driver, ...) » Y-IN2 (3) not working at a desk, but in a service job (retail shop, restaurant, ...) » Y-IN2 (4) doing some other kind of work » Y-IN2 (5) DK » Y-IN2
Y-IN2 BRANCHING			IF IN6=2,3 » IN15 IF IN6 = 1 » IN21
IN15 IF IN6=2,3	What position do you hold? [INTERVIEWER: Read out answer categories]		(1) Employed professional (employed lawyer, medical practitioner, accountant, architect etc.) » IN19 (2) Management » IN16 (3) Other non-manual employee » IN19 (4) Manual worker » IN17 (5) DK » IN19

No Branching	Question GPS-NAS 2003	Answer categories
IN16 IF IN15=2	And which of the following best describes your position? [INTERVIEWER: Read out answer categories]	(1) General management, director or top management (managing directors, director general, other director) » IN18 (2) Middle management, other management (department head, junior manager) » IN18 (3) DK » IN18
IN17 IF IN15=4	And which of the following best describes your position? [INTERVIEWER: Read out answer categories]	(1) Supervisor » IN19 (2) Manual worker, having received formal training to acquire work specific skills» IN19 (3) Other manual worker, not having received formal training to acquire work specific skills » IN19 (4) DK » IN19
IN18 IF IN15=2	How many employees you are responsible for?	|_|_|_|_|_|_| » IN19 (999999) [DK] » IN19
IN19 IF IN6=2	For what kind of organisation do you work? [INTERVIEWER: Read out answer categories]	(1) a private firm or business or a limited company » IN20 (2)in the public sector or in a charity, voluntary organisation or trust » IN20 [PROMPT - DO NOT READ: (2) includes public companies, local or central government, civil service, armed forces, council, schools, universities or other grant funded education establishments, public authorities, charities, voluntary organisations] (3) DK » IN20
IN20 IF IN6=2	How many employees work in the company/ organisation for which you work? [INTERVIEWER: Read out answer categories]	(1) <10 » IN21 (2) 10-49 » IN21 (3) 50-249 » IN21 (4) 250 and more » IN21 (5) DK » IN21
IN21 IF IN4=1	Do you work mainly ... [INTERVIEWER: Read out answer categories]	(1) in your own home » A19a (2) in the same grounds or buildings as your home » A19a (3) in different places using home as a base (e.g. travelling salesman, free insurance agent etc.) » A19a (4) somewhere quite separate from home » A19a (5) DK » A19a
Module A: Basic ICT equipment access and use		
A19a ALL	Do you have access to a fax machine in your household?	(1) yes » A19b (2) no » A19b (3) DK » A19b
A19b ALL	Do you have access to a tele-phone in your household?	(1) yes » A19c (2) no » A19c (3) DK » A19c
A19c ALL	Do you have a mobile phone for your own personal use? PROMPT: Includes office phone which can be used for own personal use	(1) yes » A20 (2) no » A20 (3) DK » A20
A20 ALL	How many of your friends and relatives have a mobile phone for their personal use? [INTERVIEWER: Read out answer categories]	(1) all or almost all » Y-A1 (2) about three quarters » Y-A1 (3) about half » Y-A1 (4) about one quarter » Y-A1 (5) only few or no-one » Y-A1 (6) DK » Y-A1
Y-A1 BRANCHING		IF A19c=1» A27 IF A19c=2,3 » X-A1
A27 IF A19c=1	Have you, in the last four weeks, used SMS* messages for communicating with other people? [* TRANSLATOR: Check if another term is more common in your country]	(1) yes » A30 (2) no » A30 (3) DK » A30
A30 IF A19c=1 but see (d) and (e)	Now, think about what your everyday life would be like if you didn't have a mobile phone. Please tell me how much you agree that if you didn't have a mobile phone (ITEM). Would you say that you ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) you would often not be able to contact your friends and family, or be reached by them (b) you would be less exposed to dangerous electromagnetic radiation (c) you would be more helpless in case of emergencies [IF in4=1] (d) you would not receive some of the information you need for your job [IF in4=1] (e) you would have less exchange with some of your business contacts (f) you would have less fun	FOR EACH: (1) agree completely (2) agree somewhat (3) do not agree (4) DK/ not applicable » X-A1
Transition X-A1 ALL	Now we would like to ask you a few questions about computers and the Internet	
A1 ALL	Have you used a PC, Mac or any other computer, for work or for private purposes - in the last four weeks?	(1) yes » A5a (2) no » A5a (3) DK » A5a
A5a ALL	Have you ever heard of the Internet? PROMPT: The Internet is a worldwide computer network that allows you to access information through a computer	(1) yes» A5b (2) no» Y-E1 (3) DK» A5b
A5b IF A5a=1,3	Do you have access to the Internet in your home?	(1) yes» A11a (2) no» A6 (3) DK» A6
A6 IF A5b=2,3	Did you once have Internet access in your home?	(1) yes» A7 (2) no» A7 (3) DK» A7

No Branching	Question GPS-NAS 2003	Answer categories
A11a IF A5b=1	Do you know what technical method you use at home to connect to the Internet	(1) yes » A11b (2) no » A7 (3) NA » A11b
A11b IF A11a=1,3	I will read to you a number of methods to access the Internet. Which of these do you use at home? [INTERVIEWER: Read out and code those that apply]	MULTIPLE ANSWERS (1) Dial-up with modem (2) DSL (e.g. ADSL) (3) ISDN (4) Other not mentioned (e.g. mobile, leased line, Internet via satellite) (5) DK » A7
A7 IF A5a=1,3	Have you used the Internet at least once in the last four weeks, at home, at school or work or at any other place?	(1) yes» A9 (2) no» A8 (3) DK» A8
A8 IF A7=2,3	Have you used it in the last 12 months at least once?	(1) yes» A10 (2) no » A3 (3) DK» A3
A9 IF A7=1	How much time do you spend in a typical week on using the Internet ... [item] [INTERVIEWER: Read out answer categories for the first 2 items] (a) at home? (b) at the workplace? (c) at school, university or another educational institution? (d) at a public place where Internet access is free? (e) at an Internet café or other place where you have to pay for access? (f) at another place not mentioned yet	FOR EACH (1) none (includes no usage there at all/ not applicable) (2) less than 1 hour (3) between 1 and 5 hours (4) between 6 and 10 hours (5) between 11 and 20 hours (6) more than 20 hours (7) DK » A10
A10 IF A7=1 or A8=1	When did you use the Internet for the first time? [INTERVIEWER: Read out answer categories]	(1) < 6 months ago (2) 6 - 12 months ago (3) 1 year - 2 years ago (4) 2 years + ago (5) DK » A3
A3 IF A1=1 and A5a=1,3	Have you sent or received any e-mail messages, for work or for private purposes, during the last four weeks?	(1) yes » A4a (2) no » A18 (3) DK » A18
A4a IF A3=1	With how many of your friends and relatives do you communicate regularly via e-mail? [INTERVIEWER: Read out answer categories]	(1) all or almost all » A4b (2) about three quarters » A4b (3) about half » A4b (4) about one quarter » A4b (5) only few or no-one » A4b (6) DK » A4b
A4b IF A3=1	And how many of your friends and relatives have their own e-mail address? [INTERVIEWER: Read out answer categories]	(1) all or almost all (2) about three quarters (3) about half (4) about one quarter (5) only few or no-one (6) DK » A18
A18 A5a=1,3	Now I will read to you a list of statements about the Internet. Please tell me for each statement whether you agree completely, agree somewhat or do not agree. The Internet ... [item]. Do you ... (a) requires advanced computer skills, (b) is not easy enough to get access to, (c) is too time consuming, (d) is too expensive to use, (e) lacks useful or interesting information (f) is not something for me	FOR EACH (1) agree completely (2) agree somewhat (3) or do you not agree (4) DK » Y-B1
Module B: eCommerce and other uses of the Internet		
Y-B1 BRANCHING		IF A8=2,3 » Y-E1 IF A7=1 or A8=1 » X-B1
Transition X-B1 IF A8=1 or A7=1	Now I would like to ask you a few questions about the Internet.	» B1
B1 IF A8=1 or A7=1	INTERVIEWER: B1 to B2: for each item in B1=1 ask directly B2, then go to next item in B1 You can use the Internet for many purposes. I´m going to read you a list of things you can do online and ask you whether you have done this online for your private purposes. For your private purposes, have you used it in the last 12 months... (a) to find information about a product or service (b) to order a product or service (c) to conduct online-banking or to buy financial products (d) to search for any health-related information (e) to look for a job	FOR EACH (1) yes » B2 (FOR EACH) (2) no » NEXT IN THE LIST B1 (3) DK » NEXT IN THE LIST B1
B2 IF B1=1 and A7=1	[FOR EACH B1 ITEM] Have you done so in the last four weeks?	(1) yes » NEXT IN THE LIST B1 (2) no » NEXT IN THE LIST B1 (3) DK » NEXT IN THE LIST B1 » B5
B5 IF A8=1 or A7=1	Many people in this country still do not have access to the Internet yet. Now please imagine our country were without the Internet for one month. What would it mean for your everyday life? Please tell me how much you agree that if our country were without the Internet for a month you would (ITEM). Would you say that you would ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) be less well informed as a consumer (b) feel socially excluded (c) not receive some of the information you need for your job (d) have less communication with some of your contacts at work/ your business contacts (e) have less contact with some of your friends (f) have less fun	FOR EACH: (1) agree completely (2) agree somewhat (3) do not agree (4) DK/ not applicable » D1

No Branching	Question	GPS-NAS 2003	Answer categories
Module D: Skills			
D1 IF A7=1 or A8=1	I would like to ask you a few questions about your skills in using the Internet. How confident would you feel... [item] Please tell me whether you feel.. [INTERVIEWER: Read out answer categories for the first 2 items] (a) using a search engine (such as Google or Yahoo) to find information on the Internet [TRANSLATORS: List two most widely used search engine brands in your country[15]] (b) identifying the source of information provided on the Internet (c) using e-mail to communicate with others (d) using Internet chat-rooms to contact other people (e) using the Internet to make telephone calls (f) creating a personal web/ Internet page (g) downloading and installing software onto a computer (h) understanding the content of websites written in English		FOR EACH (1)very confident (2) fairly confident (3) not confident (4) Do not know what this means [DO NOT READ OUT] (5) (Do not know because) never tried to do it [DO NOT READ OUT] (6) DK » X-J1
Module J: Security			
Transition X-J1 IF A7=1 or A8 = 1	Now the topic is Internet security.		» J1a
J1a IF A7=1 or A8 = 1	How concerned are you about data security on the Internet, i.e. the loss or manipulation of your data? Are you ...[INTERVIEWER: Read out answer categories]		(1) very concerned (2) somewhat concerned (3) not concerned (4) DK » J1b
J1b IF A7=1 or A8 = 1	How concerned are you about privacy and confidentiality on the Internet, i.e. personal information about you being misused by third parties? Are you ... [INTERVIEWER: Read out answer categories]		(1) very concerned (2) somewhat concerned (3) not concerned (4) DK » Y-J1
Y-J1			IF J1a=1,2 or J1b=1,2 » J2 IF J1a=3 and J1b=3 » J3
J2 IF J1(a)=1,2 or J1(b)=1,2	Are these concerns stopping you from using the Internet to buy goods or services online: often, sometimes, or never?		(1) often » J3 (2) sometimes » J3 (3) never » J3 (4) DK » J3 (5) Never tried to buy online (DO NOT READ) » J3
J3 IF A7=1 or A8 = 1	Would you report violations of your online security, privacy and confidentiality to a third independent party, for example a public agency created for this task? [INTERVIEWER: Read out answer categories]		(1) yes, very likely » J4 (2) maybe » J4 (3) no » J4 (4) DK » J5
J4 IF J3=1,2,3	Would it be easier for you to do so if you could do it anonymously?		(1) yes » J5 (2) no » J5 (3) DK » J5
J5 IF A7=1 or A8 = 1	How often are you aware of security features of websites when you use the Internet to buy online: often, sometimes or never?		(1) often » J6 (2) sometimes » J6 (3) never » J6 (4) DK » J6 (5) Never tried to buy online (DO NOT READ) » X-K1
J6 IF (A7=1 or A8 =1) & J5 ~=5	And how often do you take security features of websites into account when deciding about whether to buy online: often, sometimes or never?^		(1) often » X-K1 (2) sometimes » X-K1 (3) never » X-K1 (4) DK » X-K1
Module K: eGovernment			
Transition X-K1 IF A7=1 or A8 = 1	Now I would like to ask you a few questions about the contact to government agencies through the Internet.		» K1
	INTERVIEWER: K1 to K3: for each item in K1=1 ask directly K2, If K2=1 ask directly K3, then go to next item in K1		
K1 IF A7=1 or A8 = 1	Here is a list of activities that require citizens to get in touch with public administration. For each activity, please answer whether you would prefer to use the Internet or prefer to use the traditional way, that is face-to-face, by postal mail, fax or phone: [INTERVIEWER: Repeat answer categories for the first 2 items] (a) Tax declaration/ filing your income tax return (b) Use of job search services of PUBLIC employment service (c) Request for passport, driver's licence, birth certificates or other personal documents (d) Car registration (e) Declaration to the police, e.g. in case of reporting theft (f) Searches for books in public libraries (g) Announcement of change of address to PUBLIC institutions		FOR EACH (1) Internet (2) traditional way (3) do not use this service [DO NOT READ OUT] (4) DK » K2
K2 IF (A7=1 or A8 =) & K1=1	FOR EACH Is it possible to use the Internet for this in the area you live, i.e. is it offered by the authorities responsible?		FOR EACH (1) yes (2) no (3) DK » K3
K3 IF (A7=1 or A8 = 1) & K2=1	FOR EACH Have you ever tried using the Internet for this?		FOR EACH (1) yes » NEXT IN THE LIST K1 (2) no » NEXT IN THE LIST K1 (3) DK » NEXT IN THE LIST K1 » Y-E1 BRANCHING

No Branching	Question	GPS-NAS 2003	Answer categories
Module E: Telework			
Y-E1 BRANCHING			IF IN4=1 » X-E1 IN13=1 or IN7=1 » X-E2 IF IN13 = 2,3 » Y-C1
Transition X-E1	Now let's talk about another topic: With the help of telephone, fax and computer, many types of work can be done from home. If work results are transferred electronically, this is sometimes called telework.		» E1
Transition X-E2	Now let's talk about another topic: With the help of telephone, fax and computer, many types of work can be done from home. If work results are transferred electronically, this is sometimes called telework.		» E8
E1 IF IN4=1	Do you presently telework from home, for at least some of your working time?		(1) yes » E4 (2) no » E2 (3) DK » E2
E2 IF E1=2,3	Have you teleworked on a regular basis before, in the last five years?		(1) yes » E3 (2) no » E8 (3) DK » E8
E3 IF E2=1	Did you spend, on average, at least one full working day a week at home when you were teleworking?		(1) yes » E8 (2) no » E8 (3) DK » E8
E4 IF E1=1	Do you spend, on average, at least one full working day a week teleworking from home?		(1) yes » E5 (2) no » E5 (3) DK » E5
E5 IF E1=1	You indicated before that you work on average [INTERVIEWER: Look up result from IN11] hours per week. How many of these do you spend at home in a typical week?		|_|_|_|_| » E8 (999) [DK] » E8
E8 IF IN7=1 or IN13=1 or IN4 = 1	If it was offered to you, how interested would you be in ... [item]. Would you be ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) doing almost all your work teleworking at home (b) telework where you did not spend all your working time, but at least one full working day per week at home (c) work in an office provided near your home which would allow you to reduce commuting?		FOR EACH (1) very interested (2) somewhat interested (3) not interested (4) already practised (DO NOT READ OUT) (5) DK » Y-E2
Y-E2 BRANCHING			IF IN7=1 » X-C1 IF IN4=1 » E9a IF IN7=2,3,4 » Z17
E9a IF IN4 = 1	Would you say that your job is feasible for telework, under the assumption that you spend at least one full working day per week at home?		(1) yes » X-F1 (2) no » E9b (3) DK » X-F1
E9b IF E9a=2	What are the main reasons why you consider your current job not to be feasible for telework? Is it because ... [INTERVIEWER: Read out answer categories and code all that apply]		MULTIPLE ANSWERS (1) your company does not permit telework? (2) your superior does not approve of telework? (3) your job requires face-to-face contact with customers, colleagues or other persons (4) your job requires access to machines or other things which cannot be accessed from home (5) Other reasons (DO NOT READ OUT) (6) DK » X-F1
Module F: Mobile work			
Transition X-F1 IF IN4=1	Now let's talk about the topic of mobile working.		» F1
F1 IF IN4=1	In the last four weeks, have you spent any of your working time away from your home and from your main place of work, e.g. on business trips, in the field, travelling or on customer's premises?		(1) yes » F2 (2) no» X-G1 (3) DK» X-G1
F2 IF F1=1	You indicated before that you work on average [INTERVIEWER: Look up result from IN11] hours per week. How many of these do you spend away from home and your main place of work?		|_|_|_|_|» Y-F1 (999) [DK] » F3
Y-F1 BRANCHING			IF F2>5 or F2 = DK » F3 IF F2<=5» Y-G1
F3 IF F2>5 or F2 = DK	In the last four weeks, have you used online computer connections when travelling? By this I mean have you accessed the Internet for business purposes, or electronically transferred data to colleagues?		(1) yes » F4 (2) no » Y-G1 (3) DK » Y-G1
F4 IF F3=1	For what purpose did you use these online connections? Have you used these to ... (a) access the Internet (b) send or read e-mails (c) connect to your company's internal computer system		FOR EACH: (1) yes » F5 (2) no » F5 (3) DK » F5
F5 IF F3=1	Where did you use an online computer connection? Have you used it in the last four weeks at ... (a) a hotel, conference site or similar location? (b) another company's premises? (c) an Internet café or an other commercial teleservice center? (d) or on the move, using a mobile device for data transfer?		FOR EACH: (1) yes » Y-G1 (2) no » Y-G1 (3) DK » Y-G1
Module G: Tele-cooperation/ Tele-collaboration			
Y-G1 BRANCHING			IF IN4=1 and (A1=1 or A7=1) » X-G1 IF IN4=2,3 » Y-C1 IF IN4=1 and (A1=2,3 and A7=2,3) » X-H1
Transition X-G1 IF IN4=1 and A1=1	And how about the use of telecommunication technology at your work place:		» G1
G1 IF IN4=1 and A1=1	When you communicate with external contacts, do you sometimes use e-mail, video conference or electronic data transfer? By external persons we mean customers, clients, suppliers, other business contacts, but also colleagues working at other locations of the same company.		(1) yes » G2 (2) no » X-H1 (3) DK » X-H1

No Branching	Question GPS-NAS 2003	Answer categories
G2 IF G1=1	In a typical week, how often do you ...[item] for these external contacts? [INTERVIEWER: Read out answer categories for the first 2 items] (a) use e-mail (b) use e-mail attachments or other electronic data transfer	FOR EACH (1) 10 or more times a day, (2) at least once a day, (3) at least once a week (4) less often than once a week (5) never (6) DK » X-H1
Module H: Outcomes of work		
Transition X-H1 IF IN4=1	I would like to ask you a few more questions about your work.	» H1
H1 IF IN4=1	Please tell me for each of the following, how often you experience this. How often do you .. [item]? [INTERVIEWER: Read out answer categories for the first 2 items] (a) Find your work stressful (b) Come home from work exhausted (c) Find your job prevents you from giving the time you want to your partner or family (d) Feel too tired after work to enjoy the things you would like to do at home (e) Find your partner/ family gets fed up with the pressure of your job	FOR EACH (1) often (2) sometimes (3) never (4) does not apply [DO NOT READ] (5) DK » H2
H2 IF IN4=1	In your current work arrangement, do you agree with the following statements about your job? [item] Do you ... [INTERVIEWER: Read out answer categories for the first 2 items] (a) I have a lot of say over what happens in my job (b) I need to keep learning new things continuously (c) I have concerns about whether my job is secure (d) I have a high income (e) I can adapt my starting & finishing times to my personal preferences (f) I can adapt the number of weekly working hours to my personal preferences	FOR EACH: (1) strongly agree (2) somewhat agree (3) disagree (4) DK » H3
H3 IF IN4=1	On the whole, are you very satisfied, somewhat satisfied, neither satisfied nor dissatisfied, somewhat dissatisfied or very dissatisfied with your job/ your main job?	(1) very satisfied (2) somewhat satisfied (3) neither satisfied nor dissatisfied (4) somewhat dissatisfied (5) very dissatisfied (6) DK » Y-C1
Module C: Educational attainment and lifelong learning		
Y-C1 BRANCHING		IF IN6=2,3 » C2 IF IN7=1 or IN6 = 1 » C9b IF IN7=2,3,4, 5 » Z17
C2 IF IN6=2,3	Now I would like to ask you a few questions about training and learning. Did you participate in some kind of work-related training activities that were provided either by your company or by an other organisation, in the last four weeks?	(1) yes » C14a (2) no » C14a (3) DK » C14a
C14a IF IN6=2,3	Apart from the training that may have been provided by others, did you engage in some kind of self-directed learning related to your work, in the last four weeks?	(1) yes » Y-C2 (2) no » Y-C2 (3) DK » Y-C2
Y-C2 BRANCHING		IF C2=1 or C14a=1 » C18a IF C2=2,3 and C14a=2,3 » Z17
C18a IF (C2=1 or C14a=1)	Did you use, in the course of your training and learning in the last four weeks, electronic learning materials such as learning programmes on CD-ROM, in company-internal computer systems or on the Internet?	(1) yes » C19a (2) no » Z17 (3) DK» Z17
C19a IF C18a=1	What did you use? Did you use (a) CD-ROMs or other so-called offline media such as diskettes, audio or video tapes etc.? (b) online learning materials provided on the internal computer system of your organisation or through the Internet	FOR EACH (1) yes (2) no (3) DK » Z17
C9b IF IN7=1 or IN6=1	Now I would like to ask you a few questions about training and learning. Did you participate in some kind of training activities with the aim of preparing you for your occupational future, in the last four weeks?	(1) yes » C14b (2) no » C14b (3) DK » C14b
C14b IF IN7=1 or IN6=1	Apart from the training that may have been provided by others, did you engage in some kind of self-directed learning which was aimed at preparing you for a future job, in the last four weeks?	(1) yes » Y-C3 (2) no » Y-C3 (3) DK » Y-C3
Y-C3 BRANCHING		IF C9b=1 or C14b=1 » C18b IF C9b=2,3 and C14b=2,3 » Z17
C18b IF C9b=1 or C14b=1	Now I would like to ask you a question about training and learning. Did you use, in the course of your training and learning in the last four weeks, electronic learning materials such as learning programmes on CD-ROM, in company-internal computer systems or on the Internet?	(1) yes » C19b (2) no » Z17 (3) DK » Z17
C19b IF C18=1	What did you use? Did you use (a) CD-ROMs or other so-called offline media such as diskettes, audio or video tapes etc.? (b) online learning materials provided on the internal computer system of your organisation or through the Internet	FOR EACH (1) yes (2) no (3) DK » Z17

No Branching	Question GPS-NAS 2003	Answer categories
Module Z: Standard demography		
Z17 ALL	Finally we would like to ask you a few more questions for statistical purposes: How many people live in your household, yourself included?	(1) only me » Z14 (2) 2 » Z18a (3) 3 » Z18a (4) 4 » Z18a (5) 5 » Z18a (6) 6 » Z18a (7) 7 » Z18a (8) 8 » Z18a (9) 9 » Z18a (10) 10 or more » Z18a (11) DK » Z14
Z18a IF Z17>1	How old is the youngest (yourself included)?	I__I__I » Z18b (99) [DK] » Z18b
Z18b IF Z17>1	How many are 15 years and older (yourself included)?	I__I__I » Z14 (99) [DK] » Z14 [INTERVIEWER: Check with Z17 and Z18a]
Z14 ALL	Do you have any long-standing illness, disability or infirmity that limits your activities in any way? By long-standing I mean anything that has troubled you over a period of time or that is likely to affect you for a period of time.	(1) yes » Z19 (2) no » Z19 (3) DK » Z19
Z19 ALL	We also need some information about the income of this household to be able to analyse this survey. What is your household's monthly net income (after tax)? Please count the total wages and salaries per month of all members of this household; all pensions and social security benefits; child allowances and any other income like rents etc. [ADD IF NECESSARY: Of course, your answer (as all other answers in this interview) will be treated confidentially and referring back to you or your household will be impossible.] Use standard question and procedure for asking household income (eg showcards)	use a minimum of 8 classes
Z20 ALL	Looking back over the last three years, has your household income increased, decreased, or remained roughly the same?	(1) increased » Z21 (2) decreased » Z21 (3) remained roughly the same » Z21 (4) DK » Z21 (5) Refusal » Z21
Z21 ALL	Gender [INTERVIEWER: Ask only if in doubt]	(1) male » END INTERVIEW. (2) female » END INTERVIEW.
	Data provided by survey organisation	**Categories**
P0	Survey Number	101438
P1	Country Code	I__I__I
P2	Interview Number	I__I__I__I__I
P3	Date of Interview:	Day I__I__I, Month I__I__I
P4	Time of the beginning of the interview (USE 24 HOUR CLOCK):	Hour I__I__I, Minute I__I__I
P5	Number of minutes the interview lasted	I__I__I__I
P6	Size of locality	I__I__I
P7	Region	I__I__I
P8a	Postal Code/ Area code **must be convertible into EUROSTAT equivalent to NUTS 2 regions** [16]	I__I__I__I__I__I__I__I__I
P8b	Regional identifier[17]	I__I__I__I__I__I__I__I__I
P9	Interviewer Number	I__I__I__I__I__I
P10	Weighting Factor	I__I . I__I__I__I__I__I
P11	Language of interview	I__I

No Branching	Question DMS 2002	Answer categories
Module IN: Introduction and Screener questions		
	Database/ address information:	**Categories**
A11 ALL	Main business activity PROGRAMMER: Copy from database	NACE code (2-digit level) I__I__I
	Check QUOTA!	
	QUOTA I	1 Mining, Energy (includes NACE 10 - 14/ 40, 41) 2 Manufacturing (includes NACE 15 - 37) 3 Construction (includes NACE 45)
	QUOTA I I	4 Distribution (includes NACE 50, 51, 52) 5 Hotels, Restaurants (includes NACE 55) 6 Transport, Communication (includes NACE 60, 61, 62, 63, 64)
	QUOTA I I I	7 Banking, Insurance (includes NACE 65, 66, 67) 8 Business Services (includes NACE 70, 71, 72, 73, 74 [except: 74.13])
	QUOTA I V	9 Public Administration (includes NACE 75 [except 75.2]) 10 Education (includes NACE 80) 11 Health and Social Work (includes NACE 85) 12 Other personal or social services (includes NACE 90, 91, 92, 93)
A12 ALL	Establishment/ size (if available) PROGRAMMER: Copy from database	According to database a) OPEN (if available) I__I__I__I__I__I__I 6-digit numerical [1] not available from database and b) in categories, i.e. (1) 0 - 9 (2) 10 - 49 (3) 50 - 199 (4) 200 - 499 (5) 500+ (6) not available from database
S1 (INTRO) ALL	At reception/ switchboard: Good morning/ good afternoon. My name is ... . I am calling for ... [name of institute]. We are presently conducting a scientific survey in several European countries. The topic is the use of information and communications technologies. I would like to talk to the person who is responsible for DP/IT decisions at your location. INT.: NOTE: THIS SHOULD BE THE HEAD OF THE DP/ IT DPT. OR A SENIOR PERSON IN THE DP/ IT DPT. IN SMALLER FIRMS IT CAN ALSO BE THE MANAGING DIRECTOR, THE GENERAL MANAGER OR THE OWNER. INT.: ADD, IF NECESSARY: Your participation is very important to us, because your firm has been selected through a statistical procedure that will result in a typical selection of firms in [COUNTRY] INT.: ADD, IF NECESSARY: The interview will last approx. 15 minutes	(1) put through to target person• CONTINUE (2) target person currently unavailable• MAKE APPOINTMENT FOR CALLBACK (3) no such person• TERMINATE (4) refusal to participate• END
S2 (INTRO) ALL	At target person: Good morning/ good afternoon. My name is ... . I am calling for ... [name of institute]. We are presently conducting a scientific survey in several European countries. The topic is the use of information and communications technologies. We are talking to people who are responsible for DP/ IT decisions at their respective locations. Can I just check: Would you be the right person to talk to at your location and can we do the interview now? INT.: ADD, IF NECESSARY: Your participation is very important to us, because your firm has been selected through a statistical procedure that will result in a typical selection of firms in [COUNTRY] INT.: ADD, IF NECESSARY: The interview will last approx. 15 minutes	(1) yes, interview now• CONTINUE (2) yes but no time at the moment• MAKE APPOINTMENT FOR CALLBACK (3) no, other person responsible at this location• ASK TO BE PUT THROUGH TO THAT PERSON , RESPECTIVELY ASK FOR CONTACT DETAILS. AT NEW TARGET PERSON START AGAIN WITH QUESTION S2 (4) no, other person responsible at another location• TERMINATE (5) refusal to participate• TERMINATE
A13 ALL	Function of target person What is your position in your establishment? What of the following is the most appropriate? INT.: READ OUT. SINGLE ANSWER.	(1) Owner/ Proprieter (2) Managing Director/ Board Member (3) Head of Establishment/ Site (4) Head of IT/ DP (5) Other senior member of IT/ DP Department (6) Other• TERMINATE
Module A: Basic characteristics		
Transition A ALL	Let us start with some general questions about your establishment.	
A2 ALL	Does your organisation have only one establishment, or has it more than one establishment? By establishment we mean a single indentifiable unit at a particular address. [TRANSLATOR: Be very careful to identify a correct translation for "establishment"]	(1) only one establishment (2) more than one establishment (3) DK
A4 IF A2=2	How many employees does your organisation have in total in [country], including yourself? INT.: IF "DK" SAY: If you do not know it exactly, can you give me an estimate?	I__I__I__I__I__I__I 6-digit numerical [DK]

No Branching	Question DMS 2002	Answer categories
A5 ALL	And how many employees work for your organisation AT THIS ESTABLISHMENT, including yourself? INT.: IF "DK" SAY: If you do not know it exactly, can you give me an estimate? PROGR.: CHECK: IF A2=(2), Answer in A5 MUST be < Answer in A4! IF NOT RE-ASK A4/ A5	I__I__I__I__I__I__I 6-digit numerical [DK]• TERMINATE INTERVIEW
	PROGR.: CHECK QUOTA (according to answer in A5) 1 up to 9 employees • 2 10 - 49 employees • 3 50 - 199 employees • 4 200 - 499 employees • 5 500+employees • IF "DK" TO QUESTIONS A5 •	 QUOTA QUOTA QUOTA QUOTA QUOTA TERMINATE
A3 IF A2=2	Is your establishment ...? INT.: READ OUT ALL ANSWER CATEGORIES. SINGLE ANSWER.	(1) the headquarters of an internationally operating organisation (2) the headquarters of an organisation that only operates in this country (3) a division or branch operation of an internationally operating organisation (4) a division or branch operation of an organisation that only operates in this country (5) other [INT.: DO NOT READ] (6) DK
A8 ALL EXCEPT IF A11 (NACE Code) = 75, 80, 85	Please indicate your establishment's turnover in the last financial year. INT.: IF "DK", SAY: If you do not know it exactly, can you give me a rough estimate? INT.:PLEASE TRY TO GET AT LEAST AN ESTIMATE. INDICATE IF ANSWER IS GIVEN IN EURO OR IN PREVIOUS NATIONAL CURRENCY (UK: RESP. OR IN GBP)	(1) Turnover given IN EURO (2) Turnover given IN PREVIOUS NATIONAL CURRENCY (UK: Always use GBP) (3) DK, no answer to turnover Turnover given: I__I__I__I.I__I__I__I. I__I__I__I.I__I__I__I 12-digit numerical
A9 ALL EXCEPT IF A11 (NACE-Code) =75, 80, 85	Has the turnover of your establishment increased, decreased or roughly stayed the same when comparing the last financial year with the year before?	(1) increased (2) decreased (3) roughly stayed the same (4) DK
Module B: Basic ICTs take-up and intensity of use (eBusiness)		
Transition B ALL	Now we would like to ask you some questions about the use of Information and Communications Technologies in your establishment.	
B1 ALL	Does your establishment use e-mail?	(1) yes (2) no (3) DK
B2 ALL	Does your establishment have access to the World Wide Web, i.e. the Internet?	(1) yes (2) no (3) DK
B3 ALL	Does your establishment have an Intranet, i.e. an internal computer network that uses the Internet protocol?	(1) yes (2) no (3) DK
B5 ALL	Does your establishment use EDI, i.e. electronic data interchange using the EDI standard?	(1) yes (2) no (3) do not know what this is [IF SPONTANEOUSLY SAID] (4) DK
B6 IF B5=1	Is your EDI Internet based?	(1) yes (2) no (3) do not know what this is [IF SPONTANEOUSLY SAID] (4) DK
B7 ALL	Does your establishment use video-conferencing in your own facilities?	(1) yes (2) no (3) DK
B8 ALL	Does your establishment use a call center for communication with customers or other external contacts?	(1) yes (2) no (3) DK
B11 IF B1=1	Which applications can be accessed by the majority of your office workers? Can the MAJORITY OF YOUR OFFICE WORKERS ... send e-mails to external addresses?	(1) yes (2) no (3) DK
B12 IF B2=1	(What applications can be accessed by the majority of your office workers?) Can the MAJORITY OF YOUR OFFICE WORKERS ... browse Internet sites?	(1) yes (2) no (3) DK
B13 IF B3=1	(What applications can be accessed by the majority of your office workers?) Can the MAJORITY OF YOUR OFFICE WORKERS ... browse INTRANET sites?	(1) yes (2) no (3) DK
Module C: eCommerce		
Transition C ALL	Now we would like to ask you some questions about eCommerce. Please refer to your establishment when answering.	
C1 ALL	Does your establishment put information on the Internet, for example by means of a website?	(1) yes (2) no (3) DK
C2 IF C1=1 or 3	Do you sell goods or services via the Internet?	(1) yes (2) no (3) DK
C3a IF C1=1 or 3	Do you offer online reservation? By this we mean that your customers can make a reservation for a product or service through the Internet.	(1) yes (2) no (3) DK
C3b IF C2=1	Do you distribute digital products or services online? By this we mean that the product is transferred to the customer online, or the service is provided online.	(1) yes (2) no (3) DK

No Branching	Question DMS 2002	Answer categories
C4a IF C2=1	Are some of your online sales to businesses?	(1) yes (2) no (3) DK
C5a IF C4a=1	How large a share of your total sales to businesses are conducted online? Would you say ... INT.: READ OUT. SINGLE ANSWER	(1) less than 5% (2) 5 up to 25% (3) 26 up to 50% (4) 51 up to 75% (5) more than 75% (6) DK
C4b IF C2=1	Are some of your online sales to consumers?	(1) yes (2) no (3) DK
C5b IF C4b=1	How large a share of your total consumer sales are conducted online? Would you say ... INT.: READ OUT. SINGLE ANSWER	(1) less than 5% (2) 5 up to 25% (3) 26 up to 50% (4) 51 up to 75% (5) more than 75% (6) DK
C4c IF C2=1	Are some of your online sales to the public sector?	(1) yes (2) no (3) DK
C5c IF C4c=1	How large a share of your total sales to the public sector are conducted online? Would you say ... INT.: READ OUT. SINGLE ANSWER	(1) less than 5% (2) 5 up to 25% (3) 26 up to 50% (4) 51 up to 75% (5) more than 75% (6) DK
C6 IF C2=1	Are your online sales MAINLY to a local, national or global market? INT.: SINGLE ANSWER.	(1) local market (2) national market (3) global market (4) DK
C7 IF C1=2 OR IF C2=2 or 3	I am now going to read you a list of statements about selling online. For each statement, please tell me whether you agree completely, agree somewhat or do not agree from the point of view of your establishment. How about the statement ... [item]. Do you ... INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) Selling our products and services requires face-to-face interaction with customers (b) The necessary technology is expensive (c) The costs for the promotion of the online offer are high (d) The revenue potential of online sales is low (e) Customers might be concerned about data protection or security issues (f) Adapting corporate culture to eCommerce is difficult (g) The necessary skills are not readily available (h) Handling the delivery process causes problems	FOR EACH: (1) agree completely (2) agree somewhat (3) or do you not agree (4) DK
C8 IF C2=1	You said earlier that you make sales online. According to your experience, what effect has selling online on ... [item]? Would you say the effect is ... INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) your sales (b) your costs (c) your sales area (d) the quality of your customer service (e) the efficiency of your internal business processes	FOR EACH: (1) very positive (2) rather positive (3) neither positive nor negative (4) rather negative (5) very negative (6) DK
C9 IF B2=1 or 3	Do you use the Internet or other online services to purchase goods or services?	(1) yes (2) no (3) DK
C10 IF C9=1	Roughly what proportion of the maintenance, repair and organisation goods your establishment buys are purchased online, measured in amount spent? Would you say ... INT.: READ OUT. SINGLE ANSWER	(1) less than 5% (2) 5 up to 25% (3) 26 up to 50% (4) 51 up to 75% (5) more than 75% (6) DK
C11 IF B2=2 OR IF C9=2 or 3	I am now going to read you a list of statements about purchasing online. For each statement, please tell me whether you agree completely, agree somewhat or do not agree from the point of view of your establishment. How about the statement ... [item]. Do you ... INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) Purchasing procurement products or services requires face-to-face interaction with suppliers (b) Our suppliers do not sell online (c) The necessary technology is expensive (d) The cost advantage is negligible (e) We are concerned about data protection or security issues (f) The legal protection of online contracts is not sufficient (g) The necessary skills are not readily available (h) Suppliers´ technical systems are not compatible with ours	FOR EACH: (1) agree completely (2) agree somewhat (3) or do you not agree (4) DK
C12 IF C9=1	You said earlier that you purchase goods or services online. According to your experience, what effect has online procurement on ... [item]? Would you say the effect is ... INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) your procurement costs (b) stock-keeping of maintenance, repair and organisation goods (c) the number of suppliers (d) your relations to suppliers (e) the efficiency of your internal business processes	FOR EACH: (1) very positive (2) rather positive (3) neither positive nor negative (4) rather negative (5) very negative (6) DK
C13 IF C1=1	Does your establishment have an EXTRANET, i.e. a private, secure network running on the Internet protocol and accessible for selected external users?	(1) yes (2) no (3) DK

No Branching	Question DMS 2002	Answer categories
C14 IF C13=1	For which of the following purposes do you use your Extranet? Do you use it for ... [item] INT.: ONE ANSWER PER ITEM. (a) communication with customers or clients? (b) communication with suppliers?	FOR EACH: (1) yes (2) no (3) DK
C15 IF B2=1	Do you have access to the Extranet of one of your supplier, partner or customer organisations? PROGR.: IF C1=2 or 3, add: By Extranet I mean a private, secure network running on the Internet protocol and accessible for selected external users.	(1) yes (2) no (3) DK
C19 IF B2=1	Does your establishment trade goods or services through an eMarketplace? By eMarketplace I mean a business-to-business Internet trading forum in which multiple buyers and sellers exchange goods and services within an industry group or geographic region.	(1) yes (2) no (3) DK
C20 IF C19=1	On eMarketplaces, different types of business transactions can be accomplished. In which of the following types is your establishment actively involved? INT.: READ OUT AND CODE ALL THAT APPLY	(1) catalogue-based offering of products or services (2) catalogue-based purchasing of products or services (3) auctions -- as a seller (4) auctions -- as a bidder (5) launching calls for tenders (6) answering calls for tenders (7) powerbuying, i.e. joint purchases together with other organisations to save costs (8) none of these (9) DK
Module D: eBusiness security		
Transition D IF C1=1	Let us now turn to the topic of information security. Again, please refer to your establishment when answering.	
D1 IF C1=1	Many establishments are affected by security breaches such as identity theft, online fraud, manipulation of software applications, computer viruses or unauthorised entry to internal networks. Have any breaches of your information security occurred in your establishment in the last 12 months?	(1) yes (2) no (3) DK
D2a IF D1=1	Progr.: Note for D2a to D2b: For each item in D2a=1, ask directly D2b; then go to next item in D2a!! Which of the following types of information security breaches have occurred in your establishment in the last 12 months? Did you experience cases of ... [item]? INT.: READ OUT. ONE ANSWER PER ITEM. (a) Identity theft (b) Online fraud (c) Manipulation of software applications (d) Computer virus infections (e) Unauthorised entry to internal networks	FOR EACH: (1) yes (2) no (3) DK
D2b (For Each Item) IF D2a=1	And how substantial were the consequences of this security breach for your establishment? Would you say they were ... INT.: READ OUT ANSWER CATEGORIES. SINGLE ANSWER (PER ITEM ASKED)	FOR EACH ITEM IF D2a=1 (1) very substantial (2) rather substantial (3) not substantial (4) DK
D3 IF D1=1	Where do you believe these breaches mainly came from? Do you think the largest threat to online security came from ... INT.: READ OUT ANSWER CATEGORIES. CODE ALL THAT APPLY	MULTIPLE ANSWERS (1) Customers (2) Suppliers/ competitors (3) Former employees (4) Computer hackers (5) Internal users (6) Others, not mentioned yet (7) DK
D4 IF D1=1	How have you learned about these breaches, in most cases? Were you ... [item] INT.: READ OUT, CODE ALL THAT APPLY	MULTIPLE ANSWERS (1) alerted by a customer/ supplier (2) alerted by employees or did you notice yourself (3) notified by your own information security system (4) made aware by damage or loss of data (5) alerted by the providers of outsourced security services (6) in another way (DO NOT READ) (7) DK
D5 IF C1=1	Does your establishment or your organisation have an information security policy?	(1) yes (2) no (3) DK
D6 IF D5=1	How would you describe it? As formal or informal?	(1) formal (2) informal (3) DK
D7 IF D5=1	Which are your information security priorities? How much priority is given to ... [item] INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) Blocking of unauthorised access (b) Expanding budget for security measures (c) Defining the security architecture (d) Outsourcing security management	FOR EACH (1) high priority (2) medium priority (3) low priority (4) DK
D8 IF C1=1	How important are the following factors as barriers to effective information security inside your establishment? How about ...[item]: Is this factor as a barrier to effective information security inside your establishment… INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) High costs for security measures (b) Lack of staff training (c) Lack of staff time (d) Complexity of the technology (e) Lack of employee co-operation	FOR EACH: (1) very important (2) fairly important (3) not important (4) DK

No Branching	Question DMS 2002	Answer categories
D9 IF C1=1	Which of the following tools do you use for information security in your establishment? Do you make use of ... [item] INT.: ONE ANSWER PER ITEM. (a) Control of access to the computer system (b) Cryptography/ data encryption (c) Vulnerability Assessment Tools (d) Firewalls (e) Security Training and Awareness Rising Activities (f) Intrusion Detection Systems (g) End-user Security Training Classes	FOR EACH: (1) yes (2) no (3) DK
Module F: eGovernment		
Transition F IF B2=1	Now let´s turn to the topic of using online services for interacting with public administration.	
F1 IF B2=1 AND A11 (NACE-Code) NOT =75 (Public Admin)	Progr.: Note for F1 to F2: For each item in F1=2, ask directly F2; then go to next item in F1!! I am going to read you a list of activities for which establishments have to get in touch with public administration. For which of these activities do you already use online media such as EDI or the Internet? What about ...[item]? Do you use online media such as EDI or the Internet for this? INT.: ONE ANSWER PER ITEM. (a) Payment of social contribution for employees (b) Corporation tax declaration (c) VAT declaration (d) Submission of data to statistical offices (e) Obtaining environment-related permits (f) Participation in public invitation to tender	FOR EACH (1) yes (2) no (3) DK
F2 (For Each Item) IF F1=2	Would your establishment prefer to use online media such as EDI or the Internet for this purpose?	FOR EACH ITEM IF F1=2 (1) yes (2) no (3) DK
Transition F3 IF B2=2 or 3	Now let´s turn to the topic of using online services for interacting with public administration. It is now possible to conduct at lest some of the interaction with public administration online, i.e. by using EDI or the Internet.	
F3 ALL	Now I will read you a list of statements about using online media for interacting with public administration. Please tell me for each statement whether you agree completely, agree somewhat or do not agree. Public services on the Internet ... [item]. Do you ... INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) are not useful enough (b) are faster than the traditional way (c) require that you install special equipment or software (d) reduce the number of mistakes public authorities make (e) do not seem as safe as using the traditional way (f) make it possible to deal with the authorities at more convenient times (g) make it possible to deal with the authorities at more convenient locations, e.g. from the workplace (h) are difficult to use	FOR EACH (1) agree completely (2) agree somewhat (3) or do you not agree (4) DK
Module G: Website accessibility		
Transition G IF C1=1	Now a few questions about the accessibility of your website for people with special needs.	
G1a IF C1=1	What priority has making your website user friendly for ... [item] in your establishment? INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) People with visual disabilities or sight difficulties (b) People with reduced or limited dexterities (c) People with limited literacy	FOR EACH: (1) high priority (2) medium priority (3) low priority (4) DK
G1b IF G1a (a) =2,3 or IF G1a (b) =2,3 or IF G1a (c) =2,3	Bearing the these groups in mind: Would you say that your website could be adapted rather easily, would prove difficult to adapt, or could not at all be adapted to these people's needs? INT.: SINGLE ANSWER.	(1) could be adapted rather easily (2) would prove difficult to adapt (3) could not at all be adapted (4) DK
G2 IF G1a (a) =1,2 or IF G1a (b) =1,2 or IF G1a (c) =1,2	Does your establishment or your organisation have formal Guidelines for making your website accessible to people with such special needs? By guidelines I mean rules which have to be followed by your website developers?	(1) yes (2) no (3) DK
G3 IF G1a (a) =1,2 or IF G1a (b) =1,2 or IF G1a (c) =1,2)	Was your website ever evaluated concerning its accessibility for people with such special needs?	(1) yes (2) no (3) DK
G4 IF G3=1	Was this evaluation done internally or using external evaluators? INT.: SINGLE ANSWER.	(1) internal evaluation (2) using external evaluators (3) both (4) DK
Module E: R&D		
E1a ALL	You said before that xyz [PROGR.: Insert answer to question A5] employees work for your organisation at this establishment. From this, how many work in research & development, i.e. R&D? Please add up possible part time R&D personnel to full-time personnel. INT.: IF "DK", PROMPT: If you do not know it exactly, can you give me an estimate? INT.: IF NECESSARY, EXPLAIN: Among R&D we include all creative work undertaken on a systematic basis in order to increase the stock of knowledge and the use of this stock of knowledge to devise new applications.	[OPEN] |__|__|__|__|__|__| 6-digit numerical INT.: IF NONE, CODE "0". [DK] Progr.: Answer to E1a (Number employed in R&D) must be≥ Answer to A5 (Total number employed in establishment) If not, re-ask E1a

No Branching	Question DMS 2002	Answer categories
E1b IF E1a > 0 and E1a is NOT DK	R&D can be centralised in R&D units, or it can be distributed over various units of an establishment. Do you have at least one central R&D unit at your establishment?	(1) yes (2) no (3) DK
E2 IF E1b=1	What is the size of the computer staff in your central R&D unit(s)? Please add up part time computer staff to full-time staff. INT.: IF NECESSARY, EXPLAIN: By computer staff we mean all staff that - manages the computers, networks and digital resources, or - manages the Internet access and presentation, or - carries out information searches and computations as their major work tasks, or - provides user training. INT.: IF "DK", PROMPT: If you do not know it exactly, can you give me an estimate?	[OPEN] |__|__|__|__|__| 6-digit numerical INT.: IF NONE, CODE "0". [DK] Progr.: Answer to E2 (Computer staff in R&D) must be≥ Answer to E1a (Number employed in R&D) IF NOT, re-ask E2
E3 IF E1a > 0 and E1a is NOT DK	Do you get IT services for R&D from internal computer staff that are not members of your central R&D unit(s)?	(1) yes (2) no (3) DK
E4 IF E3=1	What is the size of the internal computer staff outside of your R&D unit(s) who provide IT services for R&D projects? Please add up part time computer staff to full-time staff again. INT.: IF "DK", PROMPT: If you do not know it exactly, can you give me an estimate?	[OPEN] |__|__|__|__|__| 6-digit numerical INT.: IF NONE, CODE "0". [DK] Progr.: Answer to E4 (Computer staff outside R&D) must be≥ Answer to A5 (Total number employed in establishment) IF NOT, re-ask E4
E5 IF E1a > 0 and E1a is NOT DK	Do you buy IT services for R&D from external service providers?	(1) yes (2) no (3) DK
E6 IF E5=1	What is the number of additional computer staff in your establishment that would be necessary to substitute for the IT services for R&D projects which are currently obtained from external service providers? INT.: IF "DK", PROMPT: If you do not know it exactly, can you give me an estimate?	[OPEN] |__|__|__|__|__| 6-digit numerical INT.: IF NONE, CODE "0". [DK]
E7 IF E1a > 0 and E1a is NOT DK	Do your R&D activities suffer from a low supply of qualified computer staff in your establishment?	(1) yes (2) no (3) DK
E8 IF E7=1	Please specify the number of open jobs for computer staff needed to provide IT services for R&D projects in your establishment? INT.: IF "DK", PROMPT: If you do not know it exactly, can you give me an estimate?	[OPEN] |__|__|__|__|__| 6-digit numerical [INT.: IF NONE, CODE "0". [DK]
X1 ALL	Finally I would like to ask you for a brief assessment: In the course of the interview we talked, among others, about the areas eCommerce, i.e. selling and interacting online with public administration. That is about areas, which might not necessarily fall into your direct responsibility. Thinking back to the questions about ... [item]: What would you say: How familiar were you with the topics covered in those questions? Would you say... INT.: READ OUT ANSWER CATEGORIES. ONE ANSWER PER ITEM. (a) eCommerce, i.e. selling and buying online (b) eGovernment, i.e. interacting online with public administration	FOR EACH (1) very familiar (2) fairly familiar (3) not very familiar (4) not at all familiar (5) DK/ no answer
X2 ALL	And all in all: How interesting did you find the questionnaire as a whole? Would you say ... INT.: READ OUT ANSWER CATEGORIES. SINGLE ANSWER.	(1) very interesting (2) fairly interesting (3) not very interesting (4) not at all interesting (5) DK/ no answer
End Text ALL	These were all my questions. I would like to thank you very much for participating in the interview. Have a nice day/ evening!	
	Data to be provided by survey organisation	**Categories**
P0	Survey Number	1 0 1 4 3 9
P1	Country Code	|__|__|
P2	Interview Number	|__|__|__|__|
P3	Date of Interview:	Day |__|__|, Month |__|__|
P4	Time of the beginning of the interview (USE 24 HOUR CLOCK):	Hour |__|__|, Minute |__|__|
P5	Number of minutes the interview lasted |__|__|__|	
P9	Interviewer Number |__|__|__|__|__|__|__|__|	

1 Statistical Indicators Benchmarking the Information Society.

2 The reports are available at http://www.sibis-eu.org.

3 eCommerce typology is a compound indicator based on the following criteria:
- Offline: Establishments without access to the Internet, e-mail and without a Website.
- Basic online: Establishments without a presence on the Internet (e.g. Website), but with access to the Internet or e-mail.
- Web marketing: Establishments with a presence on the Internet (e.g. website), but none of the following.
- Web sales: Establishments that sell goods or services via the Internet (through own website and/or via eMarketplaces), but none of the following.
- CBNI - Closed Business Network Integration: Establishments that use EDI or Extranets for communication with forward or backward linkages in the communication network, but none of the following.
- All round eCommerce: Establishments that sell online as well as practice value chain integration.

4 DBC synthetic indicator calculated on the basis of the following components: Pervasiveness of Internet technologies in the consumer market - Ranking by country (Source: STAR Issue Report No. 29/ Databank Consulting's elaboration on data from OVUM 2000, European Commission 2000); Share of population using the Internet in the last 4 weeks (Source: SIBIS GPS 2002; question A7); Secure servers for eCommerce (Source: Netcraft - www.netcraft.com, OECD Communications Outlook 2001, p.102); Share of Internet buyers ordering products or services online in the last 4 weeks (SIBIS GPS 2002, question B2); Share of Internet users spending 1-5 hours on the Internet at home (SIBIS GPS 2002, question A9). For more information see SIBIS Topic Report No.7 "eCommerce", available on www.sibis-eu.org.

5 For the AWAI index, SIBIS distinguishes between worker-centred and company-centred flexibility. The AWAI thus consists of two elements: one subindex measuring worker-centred flexibility and another one measuring company-centred flexibility. For each of these, a number of key indicators were identified. The selection of component indicators was not derived using statistical methods, but through consensus-building involving experts and policy-makers at the EU and nation state level, taking the SIBIS model of changes in work relationships as a starting point. Data sources are the SIBIS surveys plus the Community Labour Force Survey, the European Survey on Working Conditions, the European Continuing Vocational Training Survey and the OECD. For more information see www.sibis-eu.org.

6 For more information see SIBIS Topic Report No.4 "Education", available on www.sibis-eu.org.

7 See e.g. Sicherl, P. (2003), Comparing in Two Dimensions: A Broader Concept and a Novel Statistical Measure of the Time Dimension of Disparities, European Societies (forthcoming).

8 Sicherl, P. (2003), 'Different Statistical Measures Provide Different Perspectives on Digital Divide', eWISDOM 2/2003 (forthcoming).

9 Website accessibility initiative WAI: The World Wide Web Consortium's (W3C) commitment to lead the Web to its full potential includes promoting a high degree of usability for people with disabilities. WAI, in coordination with organizations around the world, pursues accessibility of the Web through five primary areas of work: technology, guidelines, tools, education and outreach, and research and development. See http://www.w3.org/WAI/.

10 See e.g. Sicherl, P. (1997), A Novel Methodology for Comparisons in Time and Space, Reihe Osteuropa No. 45, Institute for Advanced Studies, Vienna. Several papers of the author of the time distance concept of measuring differences between time series Professor Pavle Sicherl, SICENTER and University of Ljubljana, can be found on http://www.sicenter.si/td.html. They provide more details on time distance methodology with empirical application to a range of problems. The time distance concept can be generalised to other types of applications - analysis of discrepancy between the estimated and actual values and goodness-of-fit in time series, regressions and models, forecasting and monitoring etc., and extended to variables other than time.

11 Based on data by Eurostat.

12 Based on data from the survey in the SIBIS project, the detailed description of the definition of the disadvantaged groups is found in Hannes Selhofer, Tobias Hüsing: The digital divide index - a measure of social in-equalities in the adoption of ICT. Paper presented at the IST 2002 Conference, Session "Bridging the Digital Divide" Copenhagen, 4-6 Novermber 2002

13 In comparative analyses a better integration of comparisons across time and space is needed. In the dynamic world of today it is hardly satisfactory to rely only on static measures of disparity. Among other problems, the static statistical measu res of disparities like ratios or percentage differences (or Gini coefficient, Theil index or coefficient of variation for the case of many units) are insensitive to the changes in the absolute magnitude of growth rates of the indicator (or differences in growth rates among different indicators) and take into account only differences in growth rates between the units. They have to be supplemented by Sicherl distance to incorporate the temporal relative position of a given unit against the benchmark as an essential element of analysis.

14 For example, check http://www.jupitermmxi.com/europelan ding.html.

15 For example, check http://www.jupitermmxi.com/europelan ding.html.

16 Regional identifier referring to level 2 regions as defined in the Eurostat publication "Statistical regions in the EFTA countries and the Central European Countries (CEC), November 2001"; level 3 is to be used in case level 2 regions are not defined for the respective country (Baltic states, Slovenia)" (cf. http://europa.eu.int/comm/eurostat/ramon/nuts/ statistical_regions_t1_en.html).

17 See note above.

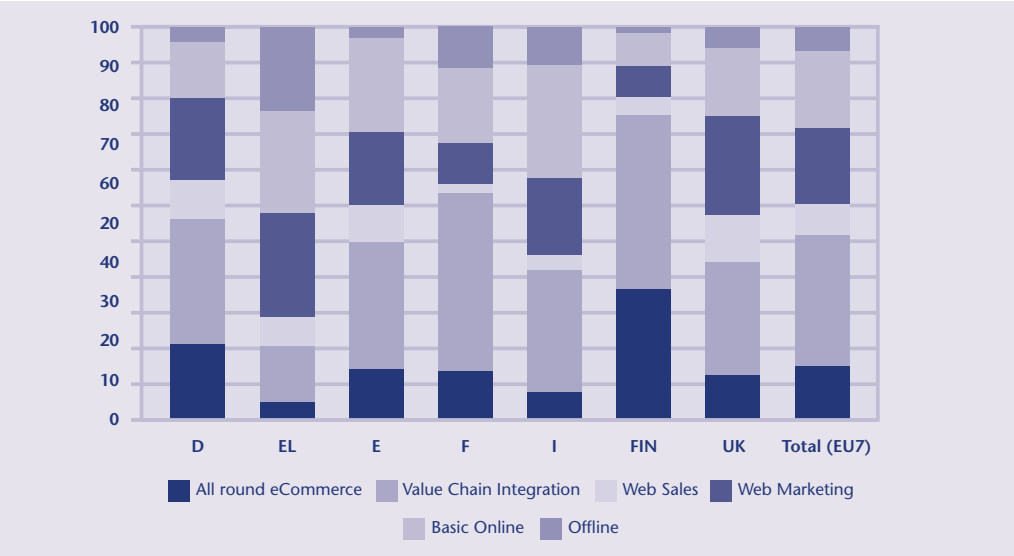
Corrigenda

Unfortunately because of problems in the printing process some text and figures in this publication have been reproduced incorrectly. Please find the corrections below. We apologize for any inconvenience.

1. Section "The SIBIS partners", page 1: Change the name of last but one mentioned partner on the page from >>Univerza V Lujbljani<< to >>Univerza V Ljubljani<<.

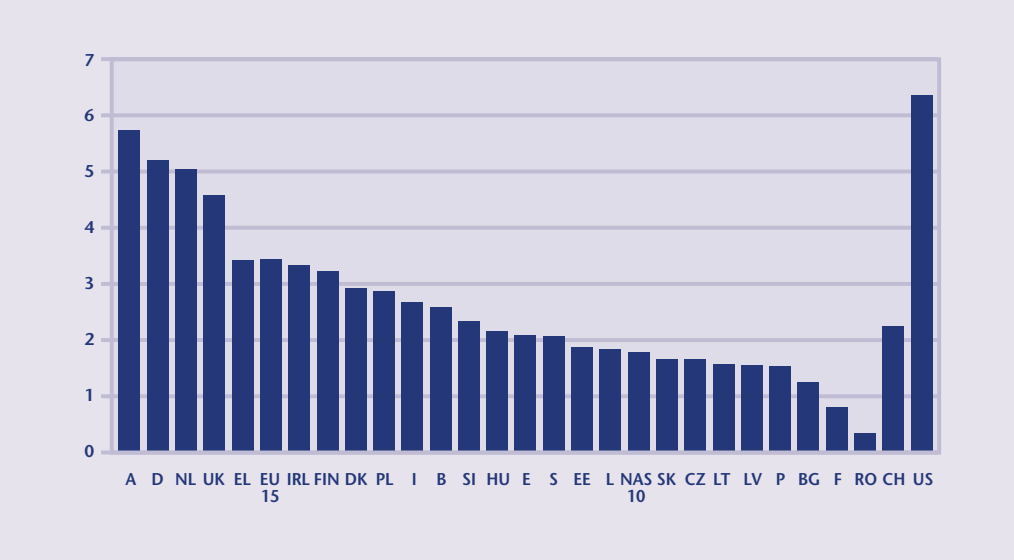
2. Chapter 4 "eCommerce", page 59, indicator No. 26, chart "Share of establishments according to eCommerce typology (% of establishments)": Change the order of country abbreviations in the labelling of the columns from >>FIN, D, UK, Total (EU7), E, F, I, EL<< to >>D, EL, E, F, I, FIN, UK, Total (EU7)<<. The correct chart is as follows:

Share of establishments according to eCommerce typology (% of establishments)



3. Chapter 5 “eWork”, page 87, indicator No. 40, chart “Self-employed teleworkers in SOHOs (% of employed population)”: Change the order of country abbreviations in the labelling of the columns from >>FIN, D, I, S, UK, IRL, NL, EU-15, EE, A, EL, SI, DK, B, LV, CZ, F, SK, L, NAS-10, BG, PL, HU, E, RO, P, LT, CH, US<< to >>A, D, NL, UK, EL, EU-15, IRL, FIN, DK, PL, I, B, SI, HU, E, S, EE, L, NAS-10, SK, CZ, LT, LV, P, BG, F, RO, CH, US<<. The correct chart is as follows:

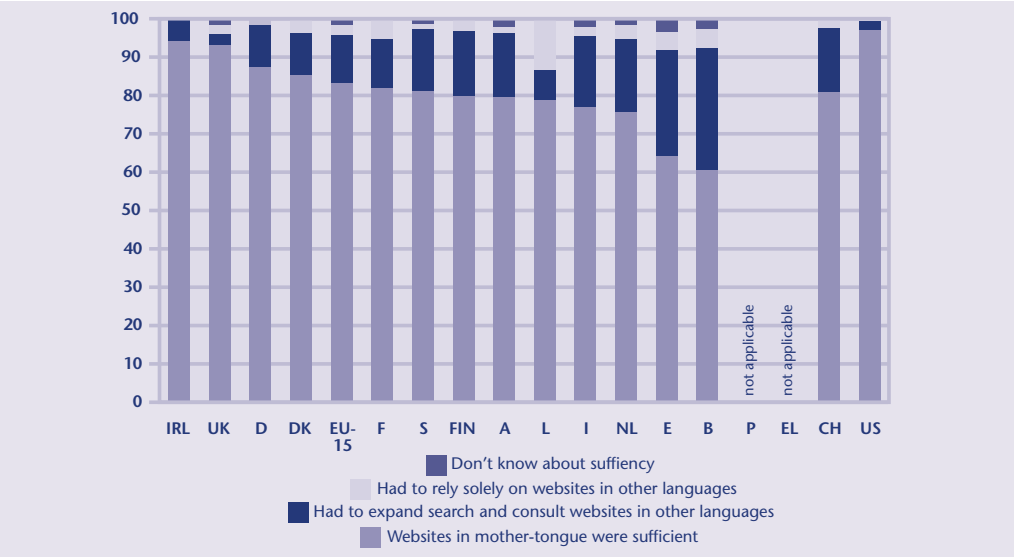
Self-employed teleworkers in SOHOs (% of employed population)



4. Chapter 6 “eGovernment”, page 110, indicator No. 52, table “Preference for public services: average numbers out of seven services”: Below the table, change the information about the used sources from >>Source: SIBIS GPS 2002<< to >>Sources: SIBIS GPS 2002, SIBIS GPS-NAS 2003<<

5. Chapter 7 “eHealth”, page 118, indicator No. 56, chart “Sufficiency of mother-tongue websites for finding health-related information suitable for needs (% of people who have searched and found health-related information on the Internet)”: In the key, turn around the order of the labelling and replace the colour of >>Websites in mother-tongue were sufficient<< with the colour of >>Had to expand search and consult websites in other languages<<. The correct chart is as follows:"

Sufficiency of mother-tongue websites for finding health-related information suitable for needs (% of people who have searched and found health-related information on the Internet)



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