

E-commerce and the Internet in European businesses

Data 2001 - 2002



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FOREWORD

The Lisbon European Council of March 2000 set the ambitious objective for Europe to become within ten years the most competitive and dynamic economy in the world. The Lisbon strategy reinforced the response to the knowledge-based society within existing processes and launched the eEurope 2002 Action Plan in June 2000. One of the key actions was to accelerate the use of e-commerce. In March 2001 the Commission launched the "Go digital" initiative with the aim "to help SMEs to adopt e-business".

In November 2001 the Commission adopted a Communication on "the impact of the e-Economy on European enterprises: economic analysis and policy implications" reviewing the state-of-play in the e-Economy and highlighting the main policy challenges. In May 2002 it adopted a Communication on "eEurope 2005: an Information Society for all" which aims to further contribute to the implementation of the Lisbon strategy, and this was endorsed by the Seville European Council of June 2002 and adopted in December last year. The focus of eEurope 2005 is to exploit broadband technologies to deliver online services in both the public and private sector.

The eEurope 2002 Action Plan included a benchmarking exercise. For eEurope 2005 a new set of benchmarking indicators were proposed by the Commission in November 2002. In order to meet the need for ICT and e-commerce indicators, Eurostat, with the statistical authorities of the EU Member States and Candidate countries, and in co-ordination with the OECD, have worked to develop standards to measure ICT usage and e-commerce within the business community and households.

This publication reports on the results of the second enterprise survey in this area. The survey was undertaken by all EU Member States and Norway. The surveys were generally carried out during the first half of 2002. The surveys concentrated on the measurement of e-commerce in terms of sales and purchases by enterprises via Internet and other computer mediated networks, as well as looking at the use of key information and communication technologies.

E-commerce and the Internet in European businesses

This publication has been prepared under the responsibility of unit D7 of Eurostat, responsible for "Information society and services". The opinions expressed are those of the individual authors alone and do not necessarily reflect the position of the European Commission.

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1. DEFINING AND MEASURING E-COMMERCE

For the purposes of this publication electronic commerce (e-commerce) is defined as transactions conducted over Internet Protocol-based networks and over other computer-mediated networks; the products are ordered over such networks, but the payment and/or delivery of the products may be made on or off-line. Note that orders received via non-interactive systems (for example manually typed e-mails) are not counted as electronic commerce. What distinguishes e-commerce from traditional commerce is primarily the way in which information is exchanged and processed: instead of being exchanged through direct personal contact, information is transmitted via a digital network, or some other electronic channel.

1.1 FROM EDI TO INTERNET E-COMMERCE

EDI AND OTHER NETWORKS

Enterprises started adopting e-commerce in the early 1970s using an industry standard called Electronic Data Interchange (EDI). As a structured way of exchanging data between companies, EDI mainly allowed enterprises to automate their purchasing procedures, for example, by linking large retailers' stores to their suppliers, limiting the recourse to paperwork and automating the restocking of goods. The adoption of just-in-time production processes by manufacturing enterprises further fuelled the recourse to EDI. EDI, however, had several shortcomings that make it generally confined to large enterprises; the most important was the requirement to set up an expensive, private or dedicated network connection between parties.

Apart from EDI there are a few other alternatives to the Internet for e-commerce, the most notable examples being interactive telecommunications systems (interactive television or telephone systems) and videotext (for example Minitel).

INTERNET

Internet networks are based on the Internet Protocol (IP), the latter being the method by which data is passed from one computer to another. The extremely rapid penetration of Internet connections amongst businesses and households developed alongside new ways of doing business. Rather than the fixed, direct, expensive connections of EDI, the Internet offered flexibility, a global framework and a relatively low cost of access and operation, as well as interactivity.

Internet Protocol based networks can also work inside enterprises, in the form of intranets and extranets. Intranets are designed for use within a single organisation, while extranets are used to share information with external parties, for example, other organisations or customers.

The Internet offers new means for buying, selling and providing customer service, which in turn impacts on traditional relationships between buyers and sellers.

RELATIVE IMPORTANCE OF DIFFERENT TYPES OF E-COMMERCE

On average 24% of all enterprises made some purchases via the Internet (see table 1.1) and 10% some sales, both considerably higher than the proportion that used other networks for e-commerce, such as EDI. This greater penetration of Internet e-commerce was more notable in terms of e-purchases than e-sales, and was evident in all Member States for which data is available except for the UK where more enterprises sold via EDI than over the Internet.

When considering e-commerce not by the proportion of enterprises having participated but by the value of the transactions a different picture emerges. In all countries except Greece, which has a very low uptake of EDI, the value of transactions by EDI and other networks was higher than via Internet, both in terms of e-purchases and e-sales.

Table 1.1: E-commerce using various networks, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of enterprises using e-commerce (%)																	
Proportion of enterprises having purchased																	
via Internet (1)	24	:	46	38	11	7	:	38	7	23	32	32	16	52	59	26	:
via EDI and other non-Internet networks (2,3)	3	:	5	3	0	1	:	8	1	8	:	5	2	6	8	22	6
Proportion of enterprises having sold																	
via Internet (1)	10	:	24	16	9	2	:	21	4	12	34	21	7	17	14	10	23
via EDI and other non-Internet networks (2,4)	2	:	6	2	1	1	:	9	1	6	:	4	2	7	8	21	5
Proportion of e-commerce in total purchases and total sales (%)																	
Proportion of total purchases																	
via Internet (1)	:	:	:	1	1	1	:	1	0	2	:	3	1	:	:	2	:
via EDI and other non-Internet networks (2)	:	:	:	2	0	2	:	7	3	6	:	10	2	:	:	:	:
Proportion of sales																	
via Internet (1)	1	:	1	1	1	0	:	4	0	0	:	2	1	1	2	1	2
via EDI and other non-Internet networks (2)	4	:	6	4	0	2	:	11	2	3	:	6	1	10	7	13	8

(1) NL, all electronic networks.

(2) SE, EDI only.

(3) NO, only enterprises using these forms of e-commerce for 1% or more of total purchases.

(4) DK, NO, only enterprises using these forms of e-commerce for 1% or more of total sales.

Source: E-commerce database, Eurostat.

1.2 DESTINATION OF INTERNET E-COMMERCE

The results of this survey allow e-commerce sales to be analysed in terms of their destination according to customer type. Reference is often made to B2B (business to business) Internet sales when enterprises do business with each other, and B2C (business to consumer) Internet sales when enterprises sell to consumers (households) using the Internet. These are the most commonly discussed forms of e-commerce and are those covered by the present survey which focused on enterprises.

Enterprises in the EU generated Internet sales of 95.6 billion EUR in 2001 (see table 1.2). A breakdown by type of customer shows that the majority of Internet sales by enterprises were to business customers, although in Germany the difference in the size of these two markets was very narrow.

1.3 WEB PRESENCE AND MARKET PLACES

A web site can be considered as the web presence of an organisation or person. A web site consists of one or more interconnected web pages. Web sites are located on the World Wide Web and can be identified by a unique Web address.

Web sites are increasingly offered by enterprises for different purposes, to provide elementary information about specific issues or, in a more sophisticated manner to allow the purchase of products.

THIRD-PARTY WEB SITES

Third-party web-sites include information about an enterprise but have been created by another enterprise. Enterprises, particularly small ones with limited financial and human resources for supporting their own web site, may use this possibility for establishing an Internet presence. This may be particularly important for certain sectors such as hotels which have a big market potential for Internet sales, but are dominated by small enterprises.

E-MARKET PLACES

E-market places have developed as an important factor in B2B e-commerce. These are generally specialist Internet based brokers although some private market places also exist that are managed by one customer. B2B market places connect buyers and sellers through a hub where on-line transactions can be executed.

Table 1.2: Internet sales and customer types, 2001 (%)

	EU-15 (1)	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Total internet sales (EUR million)	95 582	:	1 721	27 755	193	2 676	:	6 199	4 374	108	:	6 073	1 146	2 163	7 636	35 538	3 191
Proportion to business customers (B2B sales) (%)	:	:	80	51	62	:	:	72	86	75	:	75	:	86	79	:	74
Proportion to consumers (B2C sales) (%)	:	:	18	49	18	:	:	13	13	15	:	20	:	14	21	:	15
Proportion to customer type not known / no answer (%)	:	:	2	0	20	:	:	15	1	11	:	6	:	0	0	:	11

(1) Excluding BE, FR and NL.

Source: E-commerce database, Eurostat.

2. ICT USAGE AND E-COMMERCE IN THE EU

NACE activities covered in this chapter

Unless otherwise noted in tables or graphs, the NACE average presented covers the following activities

D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation (1)
I	Transport, storage and communication
K	Business services (real estate, renting and business activities) (2)

(1) NL, includes Groups 55.3 to 55.5.

2.1 ICT PENETRATION

Practically all European enterprises were equipped with computers at the beginning of 2002, as computers were present on average in 94% of enterprises taken as a whole. There was little variation from one sector to the other: business services, which includes computer services, displayed a slightly higher than average equipment rate (97%), while manufacturing was a little below average (93%). Most countries reported figures above a 95% equipment rate, but Portugal (84%), Greece (88%) and the United Kingdom (89%) reported equipment rates clearly below average.

Nevertheless, the use that was made of computers varied considerably between sectors and countries. Indeed, while more than half of employees used computers at least once a week in their normal work routine in distribution (56%) and business services (54%), the proportion was less than one-third in hotels and accommodation services (30%). In addition, while around two-thirds of employees in Nordic countries used computers, the proportion was only half as high in Spain and Portugal.

When looking at whether computers present in enterprises were connected to the Internet, the differences between sectors and countries increased. Only 17% of employees working in hotel and accommodation services used a computer connected to the Internet, which was less than half the proportion of those working in business services. Similarly, while only 19% of employees in Spain and Portugal used Internet connected computers, more than half of employees had such access in Denmark, Finland and Sweden, almost twice the EU average (27%).

Table 2.1.2: Computer penetration in enterprises, beginning 2002 (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of enterprises using computers (%)	94	:	98	95	88	95	:	95	95	97	94	93	84	99	99	89	95
Proportion of employees using (%): (2)																	
computers	47	:	59	51	43	34	:	50	42	46	:	51	34	65	72	:	60
Internet connected computers	27	:	50	27	23	19	:	26	21	26	:	29	19	51	51	:	51

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) FI, excludes part of Group 74.5.

Source: E-commerce database, Eurostat.

Size classes covered in this chapter

Data presented in this chapter cover enterprises with 10 or more persons employed.

EU aggregates in this chapter

EU-15 aggregates in this chapter exclude BE, FR, NL and UK; for data presented with an activity breakdown, IE is also excluded.

Table 2.1.1: Computer penetration in enterprises, EU, beginning 2002 (%)

	NACE average	D	G	55.1, 55.2	I	K
Proportion of enterprises using computers (%)	94	93	95	95	95	97
Proportion of employees using (%):						
computers	47	42	56	30	49	54
Internet connected computers	27	22	26	17	30	37

Source: E-commerce database, Eurostat.

As regards intranets (internal enterprise networks based on Internet standards) only 29% of enterprises used them. There was very little diversity between sectors, except for the high usage (39%) in business services. Between countries the Netherlands (80%) reported a massively higher use of intranets than other countries, although it should be noted that the wording of this question in the Dutch survey was different from the standard one.

The use of extranets, where privileged, external partners have access to a part of an enterprises network, showed a similar pattern, with a higher usage in business services (21%) than on average (13%). Furthermore a particularly low rate was recorded in hotel and accommodation services (7%). Again the Nordic countries, as well as Luxembourg and the Netherlands recorded higher rates of usage of this technology.

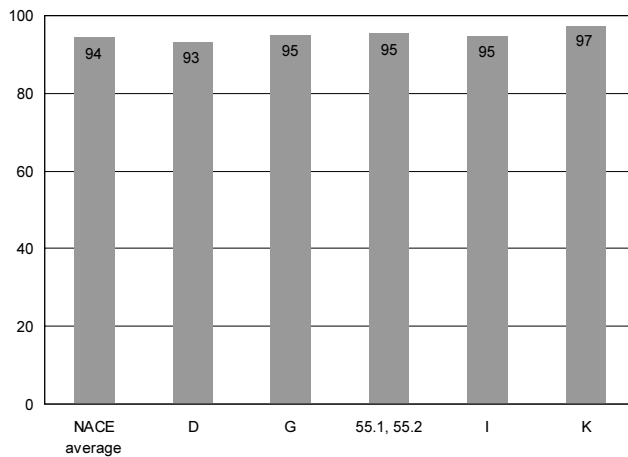
Table 2.1.3: Proportion of employees using Internet connected computers, beginning 2002 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI (1)	SE	UK	NO
NACE average (D, G, 55.1, 55.2, I, K)	27		50	27	23	19		26	21	24		29	19	51	51		50
Manufacturing (D)	22		38	24	20	16			17	14		25	14	44	41		43
Distribution (G)	26		60	26	25	18		16	21	21		28	20	56	51		42
Hotels & accommodation (55.1, 55.2)	17		14	18	9	11		7	16	24		15	23	37	37		34
Transport & communication (I)	30		48	33	30	26		36	20	18		27	29	52	52		49
Business services (K)	37		66	35	35	24		48	40	40		49	32	71	75		79

(1) FI, excludes part of Group 74.5.

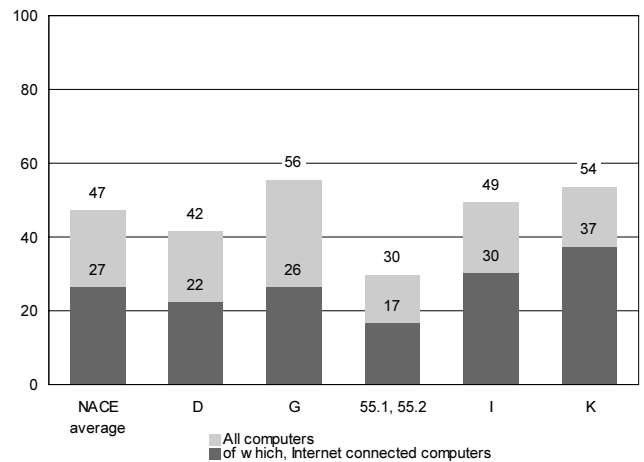
Source: E-commerce database, Eurostat.

Figure 2.1.1: Proportion of enterprises using computers, EU, beginning 2002 (%)



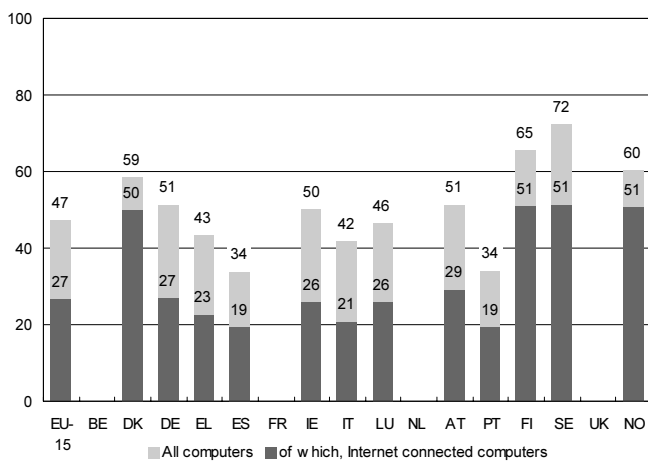
Source: E-commerce database, Eurostat.

Figure 2.1.2: Proportion of employees using computers, EU, beginning 2002 (%)



Source: E-commerce database, Eurostat.

Figure 2.1.3: Proportion of employees using computers, beginning 2002 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT; FI, excludes part of Group 74.5.

Source: E-commerce database, Eurostat.

Table 2.1.4: Proportion of enterprises using ICT, EU, 2001 (%)

	NACE average	D	G	55.1, 55.2	I	K
E-mail	78	75	79	83	76	83
Intranet	29	26	30	30	26	39
Extranet	13	10	14	7	11	21

Source: E-commerce database, Eurostat.

2. ICT USAGE AND E-COMMERCE IN THE EU

Table 2.1.5: Proportion of enterprises using ICT, 2001 (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
E-mail	78	:	83	81	65	78	:	72	70	72	84	85	66	95	87	73	:
Intranet (2)	29	:	35	31	20	23	:	31	27	40	80	37	34	36	44	26	28
Extranet (3)	13	:	19	14	5	9	:	10	13	31	24	14	14	16	18	7	13

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) NL, enterprises with computers connected in a network within the enterprise (for example a LAN).

(3) NL, enterprises with an internet protocol based closed network.

Source: E-commerce database, Eurostat.

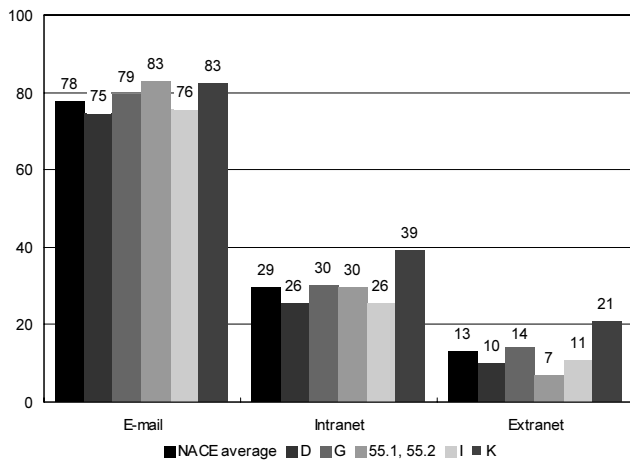
Table 2.1.6: Proportion of enterprises using intranets, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE	UK	NO
NACE average (D, G, 55.1, 55.2, I, K)	29	:	35	31	20	23	:	31	27	38	80	37	33	36	44	26	28
Manufacturing (D)	26	:	23	30	19	18	:	:	24	33	84	33	30	34	35	29	20
Distribution (G)	30	:	41	29	18	26	:	23	30	35	83	37	33	33	44	20	27
Hotels & accommodation (55.1, 55.2)	30	:	10	34	14	22	:	19	20	18	48	35	90	30	41	9	29
Transport & communication (I)	26	:	23	25	29	25	:	35	25	29	70	28	43	24	27	27	25
Business services (K)	39	:	51	39	37	28	:	45	37	55	84	49	39	49	62	34	44

(1) Enterprises with computers connected in a network within the enterprise (for example a LAN).

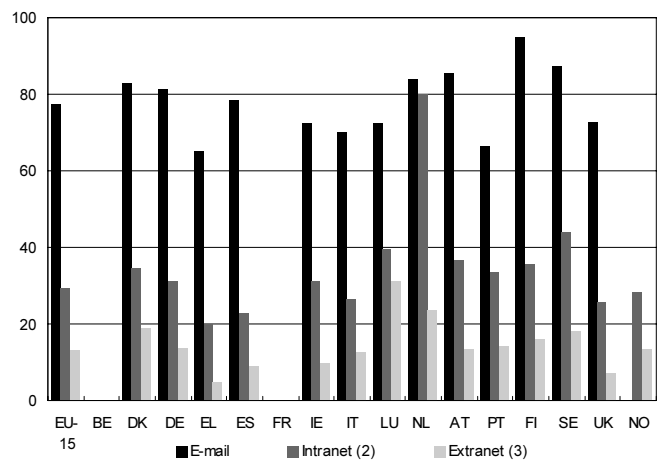
Source: E-commerce database, Eurostat.

Figure 2.1.4: Proportion of enterprises using ICT, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 2.1.5: Proportion of enterprises using ICT, 2001 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) NL, enterprises with computers connected in a network within the enterprise (for example a LAN).

(3) NL, enterprises with an internet protocol based closed network.

Source: E-commerce database, Eurostat.

2.2 INTERNET PENETRATION

By the end of 2001 just over four-fifths (81%) of EU enterprises reported using the Internet with another 5% having started to use it early in 2002 or planning to introduce later in that year. As with the other ICTs studied in this survey the highest penetration rates of this technology were in business services and manufacturing was below average. An analysis between countries again shows low penetration rates in the United Kingdom, with only 54% of enterprises using an Internet connection by the end of 2001. Greece had the next lowest rate of Internet penetration (64%), but showed signs of catching up with 11% of enterprises indicating that they had started to use the Internet early in 2002 or planned to introduce it by the end of the year.

The low use of Internet in manufacturing was common to many countries, although in the Netherlands, the United Kingdom and Norway this sector had an Internet penetration rate notably higher than the national average.

The survey looked at four Internet services used by enterprises. Of these the most commonly used was banking and other financial services, used by 65% of Internet connected enterprises. This was in fact the most commonly used service in all of the Member States except Greece and Luxembourg.

Just over two-thirds (68%) of enterprises using the Internet had a web presence (web site or home page). Transport and communications enterprises less often had a web presence (59% of Internet connected enterprises) and hotel and accommodation service enterprises more often (87%). Comparing the countries covered by the survey, the United Kingdom recorded a complete web presence among enterprises with an Internet connection, far above the next highest country,

Table 2.2.1: Use of Internet, EU

	NACE average	D	G	55.1, 55.2	I	K
Proportion of EU enterprises that: (%)						
used Internet already in 2001	81	78	83	85	80	86
started (or planned) Internet use in 2002	5	5	4	4	4	4

Source: E-commerce database, Eurostat.

Austria, Greece, Spain and Portugal reported relatively low rates of Internet connected enterprises with a web presence, ranging between 46% and 55%.

Among enterprises with a web presence by far the most common services provided were the marketing of products (81% of enterprises with a web presence) and to facilitate access to catalogues and price lists (44%). Among the other Internet services, the use of the web to deliver digital products was particularly important in business services, and this sector and the transport and communications sector were the most likely to provide mobile Internet services (8% of enterprises with a web presence). In Germany the use of a web presence to provide after sales service was particularly important and both Luxembourg and the Netherlands had notably high proportions of enterprises with a web presence using it to deliver digital products.

Table 2.2.2: Use of Internet (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of EU enterprises that: (%)																	
used Internet already in 2001	81	:	95	84	64	83	:	83	74	79	85	85	69	96	95	54	82
started (or planned) Internet use in 2002	5	:	1	4	11	2	:	1	7	8	3	4	7	1	2	:	4

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

Source: E-commerce database, Eurostat.

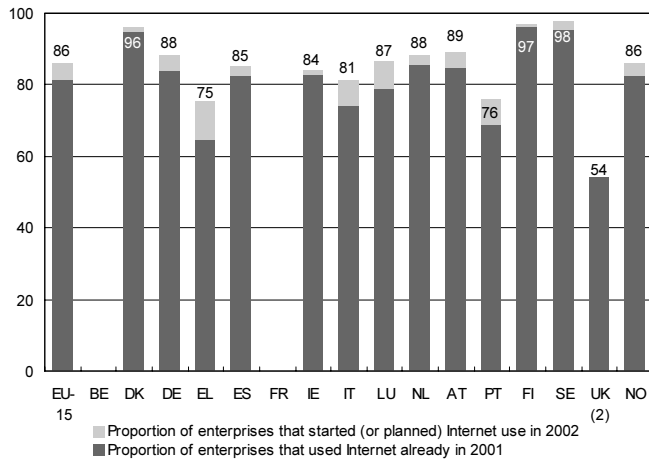
Table 2.2.3: Use of Internet

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of enterprises that used Internet already in 2001 (%)																	
NACE average (D, G, 55.1, 55.2, I, K)	81	:	95	84	64	82	:	83	74	78	85	85	69	96	95	54	82
Manufacturing (D)	78	:	92	82	62	79	:	:	73	74	89	84	64	96	96	63	92
Distribution (G)	83	:	96	83	66	88	:	75	76	71	86	83	72	95	95	45	73
Hotels & accommodation (55.1, 55.2)	85	:	85	85	47	89	:	88	82	83	67	88	100	97	97	28	92
Transport & communication (I)	80	:	94	85	76	84	:	83	65	77	79	73	84	93	90	51	79
Business services (K)	86	:	98	87	86	81	:	88	79	91	88	94	78	99	97	66	92
Proportion of enterprises that started (or planned) Internet use in 2002 (%)																	
NACE average (D, G, 55.1, 55.2, I, K)	5	:	1	4	11	2	:	1	7	8	3	4	7	1	2	:	4
Manufacturing (D)	5	:	2	6	12	3	:	:	7	9	3	3	5	0	2	:	1
Distribution (G)	4	:	1	3	9	2	:	2	7	10	2	6	10	2	4	:	6
Hotels & accommodation (55.1, 55.2)	4	:	7	2	24	3	:	2	7	0	5	4	0	0	1	:	4
Transport & communication (I)	4	:	1	3	2	4	:	0	8	9	5	4	5	1	1	:	5
Business services (K)	4	:	0	6	5	2	:	1	5	4	3	1	9	1	2	:	0

Source: E-commerce database, Eurostat.

2. ICT USAGE AND E-COMMERCE IN THE EU

Figure 2.2.1: Use of Internet, EU (%) (1)

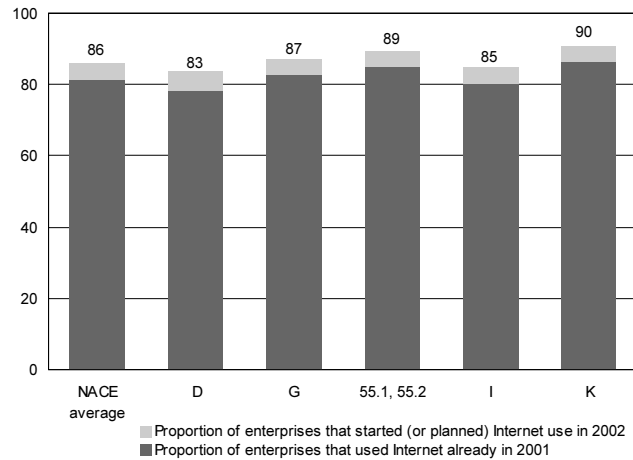


(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) Used Internet in (or planned for) 2002, data not available.

Source: E-commerce database, Eurostat.

Figure 2.2.2: Use of Internet, EU (%)



Source: E-commerce database, Eurostat.

Table 2.2.4: Enterprises using Internet in 2001: proportion using Internet for selected purposes (as a consumer), EU (%)

	NACE average	D	G	55.1, 55.2	I	K
Monitor markets	45	48	41	47	44	46
Receive digital products	36	32	35	23	27	52
Obtain after sales services	:	:	:	:	:	:
Use banking or financial services	65	64	65	57	69	70

Source: E-commerce database, Eurostat.

Table 2.2.5: Enterprises using Internet in 2001: proportion using Internet for selected purposes (as a consumer) (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Monitor markets (2)	45	:	44	41	77	54	:	40	38	55	63	66	43	61	53	:	52
Receive digital products	36	:	45	42	15	21	:	30	33	62	27	26	18	60	65	:	58
Obtain after sales services	:	:	:	50	15	23	:	22	15	31	30	16	14	36	70	:	:
Use banking or financial services (2)	65	:	72	65	60	78	:	69	52	54	78	68	71	85	75	:	73

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) SE, wording of these services was different.

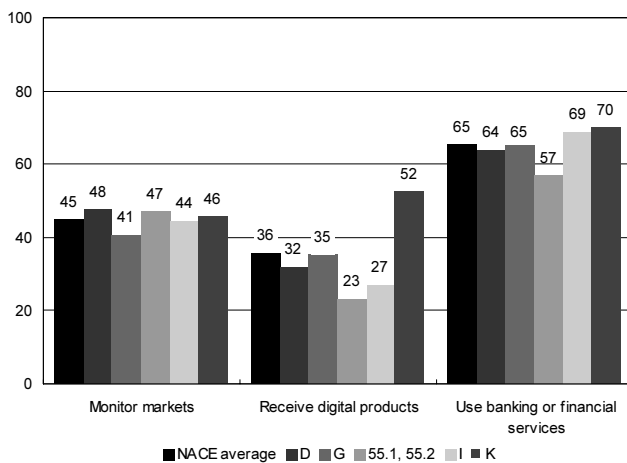
Source: E-commerce database, Eurostat.

Table 2.2.6: Enterprises using Internet in 2001: proportion using Internet for selected purposes (as a consumer) (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Monitor markets (1)																	
NACE average (D, G, 55.1, 55.2, I, K)	45	:	44	41	77	53	:	40	38	54	63	66	43	61	53	:	52
Manufacturing (D)	48	:	39	49	75	56	:	:	39	57	71	63	43	61	51	:	51
Distribution (G)	41	:	46	29	78	54	:	39	37	58	58	72	41	58	50	:	49
Hotels & accommodation (55.1, 55.2)	47	:	28	34	80	65	:	66	47	64	55	61	45	72	58	:	66
Transport & communication (I)	44	:	27	47	83	46	:	41	31	50	54	71	52	51	36	:	47
Business services (K)	46	:	58	43	75	47	:	37	36	49	69	59	41	67	64	:	57
Receive digital products																	
NACE average (D, G, 55.1, 55.2, I, K)	36	:	45	42	15	21	:	30	33	62	27	26	18	60	65	:	58
Manufacturing (D)	32	:	41	35	14	22	:	:	32	63	22	26	18	57	66	:	54
Distribution (G)	35	:	43	43	13	18	:	23	34	58	27	21	15	59	61	:	57
Hotels & accommodation (55.1, 55.2)	23	:	35	19	5	17	:	18	30	69	23	24	7	64	51	:	50
Transport & communication (I)	27	:	27	27	16	18	:	22	26	57	22	25	17	52	50	:	49
Business services (K)	52	:	62	61	34	28	:	40	44	69	36	36	28	70	78	:	72
Obtain after sales services																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	50	15	23	:	22	15	30	30	16	14	36	70	:	:
Manufacturing (D)	:	:	:	48	13	20	:	:	12	29	29	12	14	31	74	:	:
Distribution (G)	:	:	:	48	15	25	:	19	21	38	31	19	14	35	64	:	:
Hotels & accommodation (55.1, 55.2)	:	:	:	42	22	23	:	17	9	16	21	16	2	55	74	:	:
Transport & communication (I)	:	:	:	53	14	23	:	23	23	21	25	11	12	30	60	:	:
Business services (K)	:	:	:	55	21	26	:	26	16	28	35	18	24	44	77	:	:
Use banking or financial services (1)																	
NACE average (D, G, 55.1, 55.2, I, K)	65	:	72	65	60	78	:	69	52	53	78	68	71	85	75	:	73
Manufacturing (D)	64	:	72	65	61	78	:	:	52	51	79	72	70	82	69	:	70
Distribution (G)	65	:	69	59	60	82	:	70	53	56	79	68	73	84	75	:	76
Hotels & accommodation (55.1, 55.2)	57	:	66	64	68	62	:	57	39	44	76	53	48	94	75	:	73
Transport & communication (I)	69	:	68	70	50	81	:	66	54	53	77	60	69	81	78	:	71
Business services (K)	70	:	79	72	62	73	:	68	50	53	77	71	71	90	81	:	73

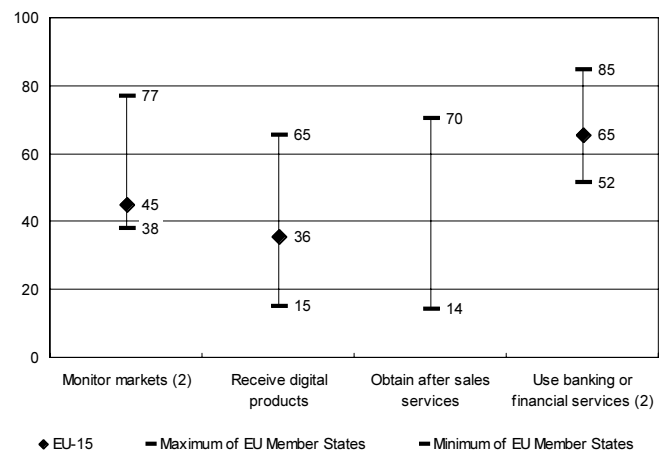
(1) SE, wording of these services was different.
Source: E-commerce database, Eurostat.

Figure 2.2.3: Enterprises using Internet in 2001: proportion using Internet for selected purposes (as a consumer), EU (%)



Source: E-commerce database, Eurostat.

Figure 2.2.4: Enterprises using Internet in 2001: proportion using Internet for selected purposes (as a consumer) (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT, NL, includes also Divisions 65 and 66.

(2) SE, wording of these services was different.
Source: E-commerce database, Eurostat.

2. ICT USAGE AND E-COMMERCE IN THE EU

Table 2.2.7: Enterprises offering Internet services, EU (%)

	NACE average	D	G	55.1, 55.2	I	K
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	68	67	67	87	59	69
of which, proportion providing selected Internet services: (%)						
Market products	81	84	76	88	82	82
Facilitate access to catalogues and lists	44	46	50	62	39	30
Deliver digital products	:	5	:	5	3	19
Provide after sales support	29	19	37	21	35	37
Provide mobile Internet services	4	4	3	3	8	8

Source: E-commerce database, Eurostat.

Table 2.2.8: Enterprises providing Internet services (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	67	:	80	78	52	46	:	64	62	65	68	75	55	72	84	100	70
of which, proportion providing selected Internet services: (%)																	
Market products	81	:	96	82	97	54	:	90	88	69	88	88	58	86	97	:	93
Facilitate access to catalogues and lists (2)	44	:	39	40	43	60	:	45	43	51	40	47	58	42	43	:	43
Deliver digital products (3)	8	:	11	11	7	6	:	12	5	20	20	7	5	11	4	:	14
Provide after sales support	29	:	27	45	11	18	:	18	7	23	30	12	16	31	35	:	30
Provide mobile Internet services	5	:	2	6	6	2	:	7	3	5	:	4	2	5	5	:	3

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) SE, wording of these services was different.

(3) DK, wording of these services was different.

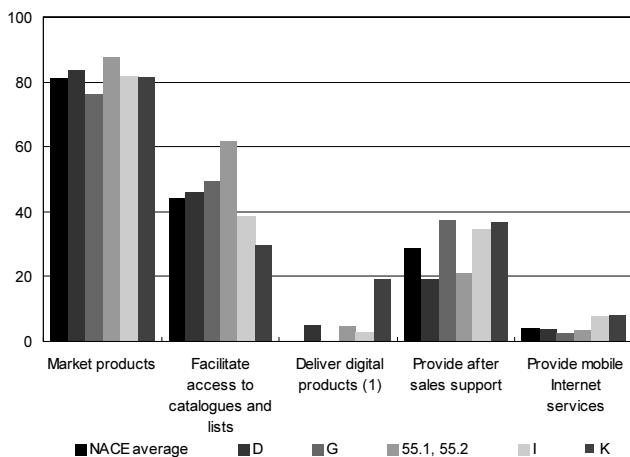
Source: E-commerce database, Eurostat.

Table 2.2.9: Enterprises using Internet in 2001: proportion having a web site or home page (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
NACE average (D, G, 55.1, 55.2, I, K)	68	:	80	78	52	46	:	64	62	65	68	75	55	72	84	100	70
Manufacturing (D)	67	:	80	80	50	47	:	:	64	64	66	74	57	73	83	100	69
Distribution (G)	67	:	80	80	53	43	:	56	60	65	63	72	48	68	82	100	61
Hotels & accommodation (55.1, 55.2)	87	:	73	89	90	71	:	92	90	89	79	98	69	93	99	100	78
Transport & communication (I)	59	:	62	65	51	46	:	68	52	52	63	70	59	63	74	100	66
Business services (K)	69	:	91	77	46	45	:	68	54	70	76	72	57	79	90	99	87

Source: E-commerce database, Eurostat.

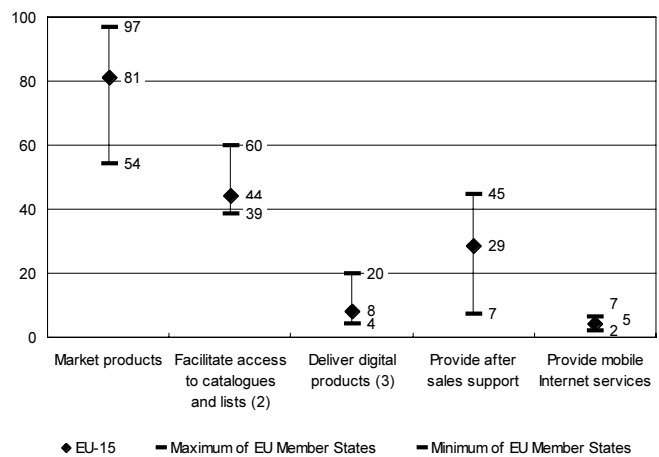
Figure 2.2.5: Enterprises with a web presence: proportion providing selected Internet services, EU, 2001 (%)



(1) NACE average, Section G, not available.

Source: E-commerce database, Eurostat.

Figure 2.2.6: Enterprises with a web presence: proportion providing selected Internet services, 2001 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) SE, wording of these services was different.

(3) DK, wording of these services was different.

Source: E-commerce database, Eurostat.

2.3 E-PURCHASES

Approximately one-third (30%) of enterprises with an Internet connection used it at least once to make e-purchases during 2001. The importance of this channel for purchasing appears to depend greatly on the sector concerned, ranging from 22% of Internet connected enterprises in manufacturing to 41% in business services. Despite limiting the population to those with an Internet connection, there was great diversity between countries in terms of e-purchasing, with less than one in ten Internet connected enterprises in Spain (8%) having purchased via the Internet yet close to half or more having done so in Germany (45%), the United Kingdom (47%), Denmark (49%), Finland (54%) and Sweden (62%). The extremely low incidence of Internet purchasing in the hotels and accommodation sector in the United Kingdom should be noted.

Table 2.3.1: Internet purchases, EU, 2001

	NACE average	D	G	55.1, 55.2	I	K
Enterprises using Internet: proportion having purchased via Internet, 2001 (%)	30	22	34	24	27	41

Source: E-commerce database, Eurostat.

Table 2.3.2: Internet purchases, 2001 (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (2)	AT	PT	FI	SE	UK	NO
Enterprises using Internet: proportion having purchased via Internet, 2001 (%)	30	:	49	45	17	8	:	46	10	29	37	37	24	54	62	47	:

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) All electronic networks.

Source: E-commerce database, Eurostat.

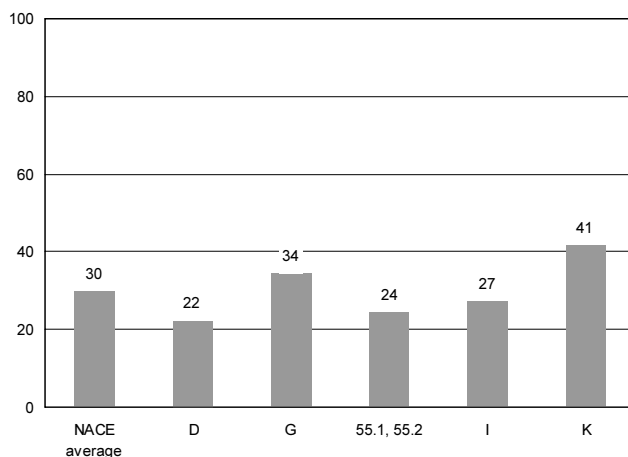
Table 2.3.3: Enterprises using Internet: proportion having purchased via Internet, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE	UK	NO
NACE average (D, G, 55.1, 55.2, I, K)	30	:	49	45	17	8	:	46	10	29	37	37	24	54	62	47	:
Manufacturing (D)	22	:	44	37	14	7	:	:	8	30	33	38	23	51	59	35	:
Distribution (G)	34	:	49	51	16	9	:	38	11	28	40	33	23	56	59	43	:
Hotels & accommodation (55.1, 55.2)	24	:	31	35	14	3	:	31	9	24	34	32	34	67	51	5	:
Transport & communication (I)	27	:	31	40	21	7	:	52	6	16	35	39	24	40	48	64	:
Business services (K)	41	:	67	53	31	9	:	58	18	37	40	45	26	64	78	67	:

(1) All electronic networks.

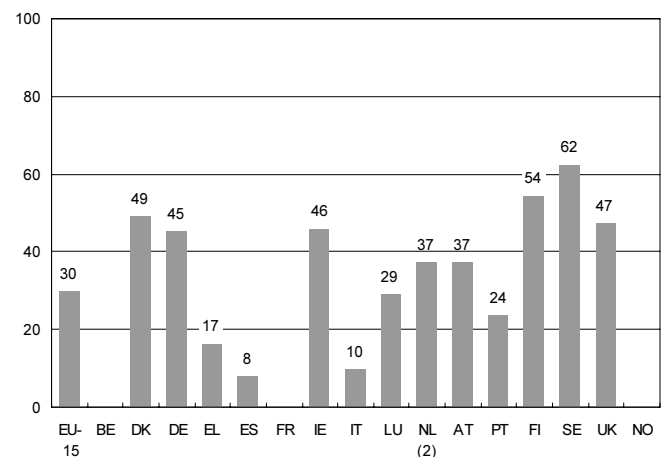
Source: E-commerce database, Eurostat.

Figure 2.3.1: Enterprises using Internet: proportion having purchased via Internet, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 2.3.2: Enterprises using Internet: proportion having purchased via Internet, 2001 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) All electronic networks.

Source: E-commerce database, Eurostat.

2.4 E-SALES

The proportion of Internet connected enterprises having made e-sales in 2001 was considerably less than had made e-purchases. Across all sectors the average was 13% of Internet connected enterprises, ranging between 9% in manufacturing and business services and 16% in distribution, with the hotels and accommodation sector far above with 49%. Most of these enterprises generated only a small proportion of their total sales via the Internet, but more than one-third (38%) generated at least 5% of their sales via this channel.

The Netherlands recorded the highest proportion of Internet connected enterprises having sold via Internet, although this did include enterprises having sold via other computer mediated networks. In most countries the proportion of internet connected enterprises that had sold via Internet was between 14% and 26%, with Spain (3%), Italy (5%) and Portugal (11%) below this range.

In every country except the Netherlands and the United Kingdom the hotels and accommodation services sector had the highest rate of Internet connected enterprises that had sold via Internet.

The results of the 2002 survey allow the destination of Internet sales to be analysed both in terms of the type of customer and their location. The majority of Internet sales were to business customers in every Member State, although in Germany the split between business and consumer clients was almost equal. In a similar manner sales to domestic customers dominated Internet sales in most countries, with Ireland and Luxembourg the only ones oriented towards exports.

Table 2.4.1: Internet sales, EU, 2001

	NACE average	D	G	55.1, 55.2	I	K
Enterprises using Internet: proportion having sold via Internet in 2001 (%)	13	9	16	49	13	9
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)						
less than 1% of total sales	:	:	:	:	:	:
1% or more of total sales	84	81	84	88	83	82
2% or more of total sales	57	59	54	68	59	48
5% or more of total sales	38	42	31	52	36	34
10% or more of total sales	:	:	8	30	20	20
25% or more of total sales	:	:	2	5	3	7
50% or more of total sales	:	1	:	1	2	4

(1) Enterprises weighted by their turnover.
Source: E-commerce database, Eurostat.

The 2002 survey studied the barriers to e-commerce (note that this was not just limited to Internet e-commerce). All enterprises were asked to indicate the importance of five specified potential barriers. In general most enterprises said that logistical problems were the least important barriers. Among enterprises that had not sold via Internet the two barriers that were regarded as being of importance were that products were perceived as not being suitable for on-line sale, and that customers (or other enterprises) were not ready for e-commerce. Among the population of enterprises that had sold on-line, the second of these reasons was also important, namely that customers were not ready, but problems relating to security and the legal framework also figured highly.

Table 2.4.2: Internet sales, 2001 (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (2)	AT	PT	FI	SE	UK	NO (3)
Enterprises using Internet: proportion having sold via Internet in 2001 (%) (4)	13	:	25	19	14	3	:	26	5	15	40	25	11	17	14	19	27
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (5)																	
less than 1% of total sales	:	:	47	1	:	55	:	:	36	16	25	16	:	18	6	:	4
1% or more of total sales	83	:	36	99	67	45	:	53	64	73	75	70	61	60	92	:	51
2% or more of total sales	56	:	30	65	36	30	:	38	47	50	61	58	33	45	64	:	36
5% or more of total sales	38	:	21	44	23	18	:	28	24	41	46	41	27	30	49	:	25
10% or more of total sales	17	:	12	18	15	8	:	17	11	18	27	24	14	16	31	:	12
25% or more of total sales	3	:	4	1	6	2	:	6	4	5	11	8	6	5	13	:	4
50% or more of total sales	1	:	2	1	5	1	:	3	1	2	5	3	2	2	5	:	2

(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) All electronic networks.

(3) Proportion having received orders via homepage.

(4) PT, estimated.

(5) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

Table 2.4.3: Enterprises using Internet: proportion having sold via Internet, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT (2)	FI	SE	UK	NO (3)
NACE average (D, G, 55.1, 55.2, I, K)	13	:	25	19	14	3	:	26	5	16	40	25	11	17	14	19	27
Manufacturing (D)	9	:	18	16	11	2	:	:	4	18	40	16	10	12	9	22	24
Distribution (G)	16	:	32	24	9	3	:	23	5	17	41	25	7	17	17	23	28
Hotels & accommodation (55.1,55.2)	49	:	44	59	59	21	:	72	36	65	46	70	60	71	49	20	61
Transport & communication (I)	13	:	21	19	24	2	:	34	3	13	59	25	14	21	16	26	23
Business services (K)	9	:	26	9	12	2	:	18	4	8	31	15	10	21	13	12	27

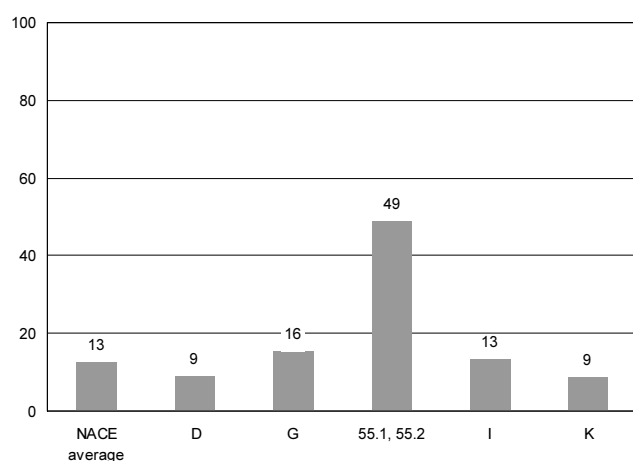
(1) All electronic networks.

(2) Estimated.

(3) Proportion having received orders via homepage.

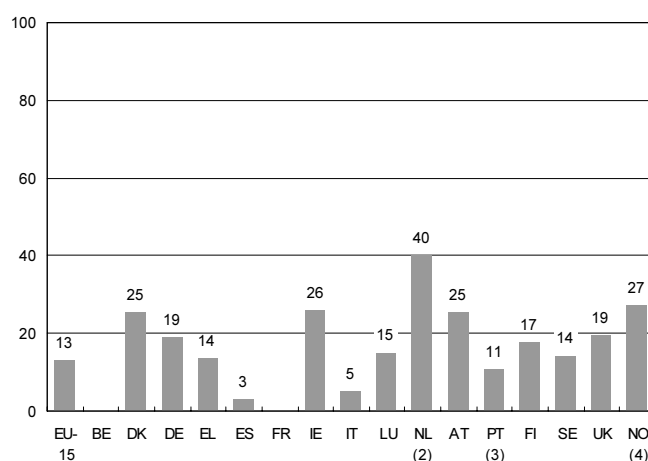
Source: E-commerce database, Eurostat.

Figure 2.4.1: Enterprises using Internet: proportion having sold via Internet, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 2.4.2: Enterprises using Internet: proportion having sold via Internet, 2001 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) All electronic networks.

(3) Estimated.

(4) Proportion having received orders via homepage.

Source: E-commerce database, Eurostat.

Table 2.4.4: Internet sales: destination, 2001 (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of Internet sales by customer type (%)																	
Business (B2B sales)	:	:	80	51	62	:	:	72	86	75	:	75	:	86	79	56	74
Consumers (B2C sales)	15	:	18	49	18	:	:	13	13	15	:	20	:	14	21	37	15
Do not know / no answer	:	:	2	0	20	:	:	15	1	11	:	6	:	0	0	8	11
Proportion of Internet sales by location customer location (%)																	
Own country (domestic sales)	78	:	76	90	64	92	:	10	70	23	:	82	89	87	78	76	91
Other EU countries	15	:	12	6	22	6	:	66	23	69	:	11	5	8	12	11	2
Rest of the world	6	:	4	4	2	2	:	16	6	5	:	5	4	5	9	5	1
Do not know / no answer	1	:	8	0	13	0	:	9	0	3	:	2	3	0	0	8	7

(1) Includes Division 67, except DK, DE, IE, IT.

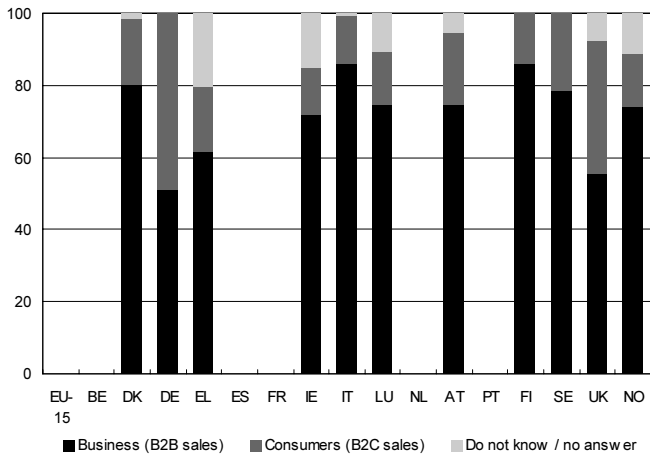
Source: E-commerce database, Eurostat.

Table 2.4.5: Internet sales: destination, 2001

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of Internet sales that were to business (B2B sales), 2001 (%)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	80	51	62	:	:	72	86	74	:	75	:	:	:	66	74
Manufacturing (D)	:	:	82	79	49	:	:	91	91	:	70	:	:	:	:	90	81
Distribution (G)	:	:	88	39	40	:	:	11	87	58	:	85	:	:	:	55	82
Hotels & accommodation (55.1,55.2)	:	:	76	47	12	:	:	3	17	42	:	11	:	:	66	35	26
Transport & communication (I)	:	:	49	45	26	:	:	0	72	54	:	54	:	:	:	49	34
Business services (K)	:	:	64	59	86	:	:	9	60	65	:	70	:	:	:	87	64
Proportion of Internet sales that were to customers in the same country (domestic sales), 2001 (%)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	76	90	64	92	:	10	70	23	:	82	89	:	:	82	91
Manufacturing (D)	:	:	53	86	20	89	:	63	7	:	35	89	:	:	:	71	79
Distribution (G)	:	:	85	92	92	93	:	73	99	52	:	95	98	:	:	85	94
Hotels & accommodation (55.1,55.2)	:	:	72	74	14	59	:	19	31	6	:	28	29	:	:	81	32
Transport & communication (I)	:	:	55	93	34	99	:	15	89	39	:	88	69	:	:	89	86
Business services (K)	:	:	78	88	99	95	:	58	85	25	:	64	98	:	:	87	86

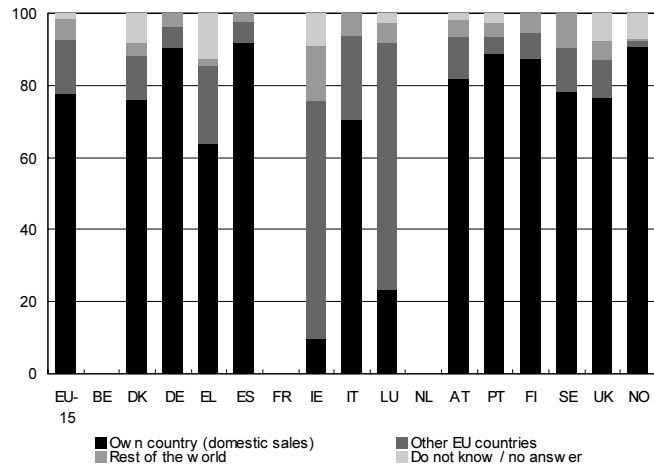
Source: E-commerce database, Eurostat.

Figure 2.4.3: Proportion of Internet sales by customer type, 2001 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT.
Source: E-commerce database, Eurostat.

Figure 2.4.4: Proportion of Internet sales by customer location, 2001 (%) (1)



(1) Includes Division 67, except DK, DE, IE, IT.
Source: E-commerce database, Eurostat.

Table 2.4.6: Barriers to e-commerce, beginning 2002 (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)																	
Products not suitable for Internet sales	:	:	67	34	79	:	51	60	13	:	55	32	63	72	:	:	50
Customers or other enterprises not ready (2)	:	:	53	47	66	:	45	60	13	:	48	31	55	61	:	:	41
Security problems with payments	:	:	43	43	58	:	37	59	14	:	60	29	38	24	:	:	37
Uncertainty concerning legal framework	:	:	45	41	55	:	34	55	13	:	57	30	40	45	:	:	39
Logistical problems	:	:	27	24	46	:	32	43	10	:	36	25	41	32	:	:	28
Other	:	:	:	2	4	:	3	:	1	:	7	:	:	:	:	:	:
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)																	
Products not suitable for Internet sales	:	:	14	44	70	:	42	55	52	:	63	67	61	43	:	:	54
Customers or other enterprises not ready (2)	:	:	11	81	92	:	58	84	59	:	58	74	74	52	:	:	40
Security problems with payments	:	:	14	73	87	:	56	80	63	:	72	64	53	52	:	:	46
Uncertainty concerning legal framework	:	:	14	75	83	:	46	74	61	:	66	54	50	43	:	:	44
Logistical problems	:	:	9	43	61	:	39	49	50	:	43	61	46	26	:	:	28
Other	:	:	:	5	2	:	4	:	3	:	7	:	:	:	:	:	:

(1) Includes Division 67, except DK, IE, IT.

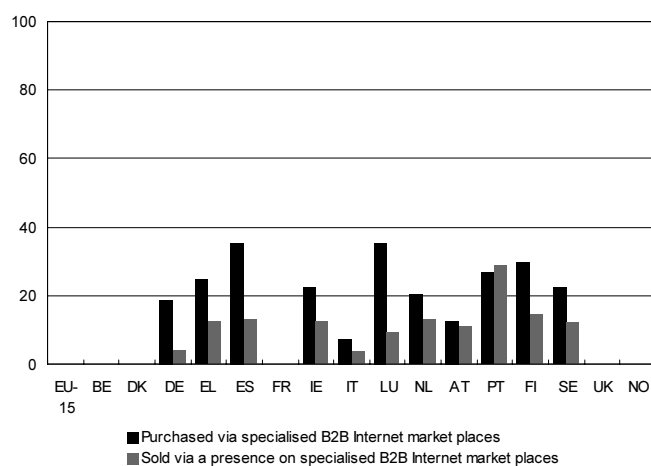
(2) SE, wording was "The potential group of customers is too small".

Source: E-commerce database, Eurostat.

2.5 USE OF SPECIALISED MARKET PLACES

One notable development in e-commerce has been the emergence of specialised B2B market places, aiming at facilitating transactions between enterprises. Approximately one in four enterprises that purchased via Internet in 2001 had made purchases from such a market place. In most countries more than one in ten Internet sellers had sold through a presence on specialised B2B market places.

Figure 2.5.1: Enterprises having traded via the Internet: proportion having traded via specialised B2B Internet market places, 2001 (%) (1)



(1) Includes Division 67, except DE, IE, IT; NL, includes also Divisions 65 and 66.
Source: E-commerce database, Eurostat.

Table 2.5.1: Use of specialised B2B market places, 2001 (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (2)	AT	PT	FI	SE	UK	NO
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	:	:	:	19	25	36	:	22	7	35	20	13	27	30	22	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places	:	:	:	4	12	13	:	13	4	10	13	11	29	15	12	:	:

(1) Includes Division 67, except DE, IE, IT; NL, includes also Divisions 65 and 66.

(2) All electronic networks.

Source: E-commerce database, Eurostat.

Table 2.5.2: Use of specialised B2B market places, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE	UK	NO
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	19	25	36	:	22	7	35	20	13	27	30	22	:	:
Manufacturing (D)	:	:	:	16	12	32	:	3	27	13	8	25	25	15	:	:	:
Distribution (G)	:	:	:	25	28	30	:	28	13	47	23	17	32	28	27	:	:
Hotels & accommodation (55.1,55.2)	:	:	:	10	21	65	:	17	7	15	13	9	13	48	17	:	:
Transport & communication (I)	:	:	:	19	32	54	:	21	11	33	27	18	19	24	19	:	:
Business services (K)	:	:	:	13	46	45	:	22	12	29	22	13	28	39	27	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	4	12	13	:	13	4	10	13	11	29	15	:	:	:
Manufacturing (D)	:	:	:	8	3	13	:	3	9	7	7	30	14	:	:	:	:
Distribution (G)	:	:	:	0	25	10	:	13	5	11	15	9	26	15	13	:	:
Hotels & accommodation (55.1,55.2)	:	:	:	3	11	19	:	11	5	6	6	15	46	17	11	:	:
Transport & communication (I)	:	:	:	7	1	18	:	19	7	7	15	9	6	9	6	:	:
Business services (K)	:	:	:	6	46	12	:	16	4	14	19	12	17	17	17	:	:

(1) All electronic networks.

Source: E-commerce database, Eurostat.

3. COMPARISON OF RESULTS FROM THE 2001 AND 2002 ICT USAGE AND E-COMMERCE SURVEYS

3. COMPARISON OF RESULTS FROM THE 2001 AND 2002 SURVEYS

NACE activities covered in this chapter

NACE activities	
D	Manufacturing
G	Distribution
I	Transport, storage and communication
K	Business services (real estate, renting and business activities) (1)

(1) FI, includes also Division 67.

ICT penetration and use within enterprises generally increased between the 2001 and 2002 e-commerce survey. However, it appears that e-commerce activity has diminished in several Member States, notably in the field of e-procurement and recourse to specialised B2B marketplaces.

ICT PENETRATION

The proportion of enterprises using computers has increased in most Member States, notably in Italy where it increased significantly from 87% to 95%. Similarly, the use of Internet has also generally increased between both surveys, the share of connected enterprises now exceeding 85% in a majority of countries. Overall, Greece and Portugal remained the countries where enterprises were the least equipped with ICT, and the Nordic Member States remained the most equipped.

Between the two surveys Italy, Spain and Luxembourg narrowed or eliminated their gap with the average rate of Internet access. The particularly low penetration of Internet within British enterprises was already evident in the results of the 2001 survey and this is the only country where the Internet penetration rate in enterprises has fallen significantly between the surveys, and as a result the United Kingdom recorded the lowest rate of Internet access of any country with data from the 2002 survey. See table 3.1.

Proportionally, the greatest increase in Internet access was recorded among business services enterprises in Spain, and in transport, communications and distribution in Luxembourg. This came in marked contrast to the British situation where all sectors reported declines. See table 3.5.

E-COMMERCE

While Greece, Austria and Portugal reported a marked increase in the proportion of enterprises purchasing via Internet, this activity decreased in Spain, Italy and Luxembourg. In addition, specialised B2B marketplaces seemed to have failed to keep their customer base as they attracted a decreasing proportion of Internet buyers in several countries. See table 3.8.

In contrast with e-procurement, enterprises appeared increasingly interested in developing Internet as a sales channel. In all countries for which data is available, the proportion of Internet connected enterprises that sold via Internet has increased, with the notable exception of Spain. Manufacturing and business services were the sectors where Internet sales developed proportionally the fastest, notably in Austria. Distribution, in contrast, recorded a slowdown of e-sales in several countries. See table 3.7.

Size classes covered in this chapter

Data presented in this chapter cover enterprises with 10 or more persons employed.

EU aggregates in this chapter

EU-15 aggregates in this chapter exclude BE, FR, IE, NL and UK.

Table 3.1: ICT usage key indicators (%) (1)

	Proportion of enterprises using computers		Proportion of enterprises using Internet	
	beginning 2001	beginning 2002	2000	2001
EU-15	:	94	:	81
BE	:	:	:	:
DK	96	98	89	95
DE	:	95	:	84
EL	86	89	52	66
ES	92	95	68	82
FR	:	:	:	:
IE	:	:	:	:
IT	87	95	67	74
LU	94	97	56	78
NL	94	95	80	87
AT	93	93	83	85
PT	86	84	69	68
FI	99	99	92	96
SE	97	99	91	95
UK	95	92	67	57
NO	94	95	74	82

(1) Activity coverage limited to NACE Sections D, G, I and K.
Source: E-commerce database, Eurostat.

Table 3.2: E-commerce key indicators (%) (1)

	Enterprises using the Internet, proportion having used Internet e-commerce for:			
	purchases		sales	
	2000	2001	2000	2001
EU-15	:	30	:	11
BE	:	:	:	:
DK	:	49	:	25
DE	:	46	:	17
EL	11	17	9	12
ES	14	8	7	2
FR	:	:	:	:
IE	:	:	:	:
IT	15	10	4	4
LU	36	29	13	14
NL	:	37	:	40
AT	15	38	9	20
PT	12	24	5	9
FI	:	54	:	17
SE	:	63	:	13
UK	27	50	:	19
NO	:	:	:	26

(1) Activity coverage limited to NACE Sections D, G, I and K.
Source: E-commerce database, Eurostat.

Table 3.3: Proportion of enterprises using computers, beginning of reference year (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
	EU-15	:	94	:	93	:	95	:	95	:
BE	:	:	:	:	:	:	:	:	:	:
DK	96	98	98	97	98	99	88	96	95	100
DE	:	95	:	94	96	92	:	99	:	98
EL	86	89	83	85	88	91	89	95	95	95
ES	92	95	92	92	98	98	79	96	88	95
FR	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	93	:	94	:	95
IT	87	95	86	95	91	98	81	86	90	95
LU	94	97	92	95	92	96	94	97	98	99
NL	94	95	95	97	95	96	85	93	93	93
AT	93	93	92	93	92	93	87	84	99	99
PT	86	84	82	79	91	90	96	97	92	92
FI	99	99	99	98	99	99	97	99	99	100
SE	97	99	98	99	97	99	89	94	99	100
UK	95	92	94	95	95	86	90	91	96	95
NO	94	95	97	97	94	94	85	90	95	98

Source: E-commerce database, Eurostat.

Table 3.4: Proportion of enterprises using intranets (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2001	2002	2001	2002	2001	2002	2001	2002	2001	2002
	EU-15	:	29	:	26	:	30	:	26	:
BE	:	:	:	:	:	:	:	:	:	:
DK	32	35	23	23	34	41	25	23	47	51
DE	:	31	:	30	46	29	:	25	:	39
EL	22	20	18	19	23	18	23	29	46	37
ES	32	23	31	18	42	26	26	25	18	28
FR	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	23	:	35	:	45
IT	22	27	21	24	21	30	19	25	30	37
LU	23	39	20	33	16	35	17	29	40	55
NL	79	82	79	84	78	83	63	70	85	84
AT	29	37	24	33	30	37	23	28	40	49
PT	25	32	21	30	29	33	40	43	33	39
FI	30	36	24	34	29	33	26	24	41	49
SE	42	44	36	35	44	44	25	27	56	62
UK	29	28	28	29	26	20	27	27	34	34
NO	24	28	17	20	24	27	24	25	35	44

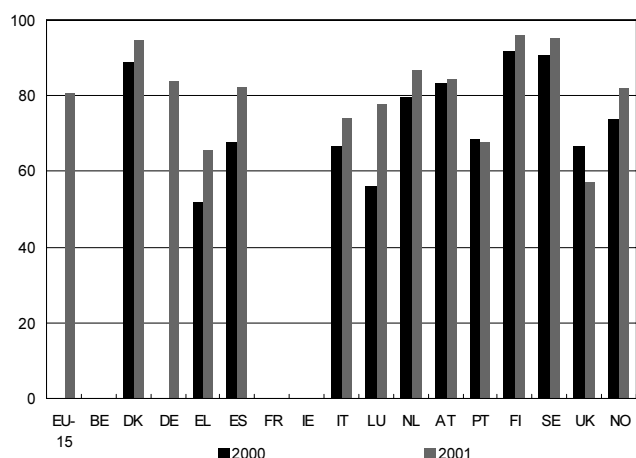
Source: E-commerce database, Eurostat.

Table 3.5: Proportion of enterprises using Internet (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	:	81	:	78	:	83	:	80	:
BE	:	:	:	:	:	:	:	:	:	:
DK	89	95	88	92	91	96	77	94	92	98
DE	:	84	:	82	83	83	:	85	:	87
EL	52	66	46	62	55	66	72	76	64	86
ES	68	82	69	79	76	88	57	84	50	81
FR	:	:	:	:	:	:	:	:	:	:
IE	:	:	:	:	:	75	:	83	:	88
IT	67	74	66	73	66	76	65	65	74	79
LU	56	78	53	74	48	71	52	77	73	91
NL	80	87	81	89	77	86	72	79	85	88
AT	83	85	80	84	83	83	78	73	95	94
PT	69	68	63	64	73	72	90	84	78	78
FI	92	96	90	96	91	95	94	93	96	99
SE	91	95	92	96	89	95	79	90	96	97
UK	67	57	69	63	59	45	56	51	75	66
NO	74	82	82	92	64	73	67	79	88	92

Source: E-commerce database, Eurostat.

Figure 3.1: Proportion of enterprises using Internet (%) (1)

(1) Activity coverage limited to NACE Sections D, G, I and K.
Source: E-commerce database, Eurostat.

3. COMPARISON OF RESULTS FROM THE 2001 AND 2002 SURVEYS

Table 3.6: Enterprises using Internet: proportion having purchased via Internet (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	: 30	: 22	: 34	: 27	: 41				
BE	: :	: :	: :	: :	: :					
DK	: 49	: 44	: 49	: 31	: 67					
DE	: 46	: 37	38 51	: 40	: 53					
EL	11 17	7 14	13 16	9 21	19 31					
ES	14 8	10 7	20 9	10 7	10 9					
FR	: :	: :	: :	: :	: :					
IE	: :	: :	: 38	: 52	: 58					
IT	15 10	11 8	17 11	14 6	27 18					
LU	36 29	32 30	40 28	21 16	38 37					
NL (1)	: 37	: 33	: 40	: 35	: 40					
AT	15 38	10 38	17 33	12 39	21 45					
PT	12 24	9 23	13 23	14 24	19 26					
FI	: 54	: 51	: 56	: 40	: 64					
SE	: 63	: 59	: 59	: 48	: 78					
UK	27 50	22 35	21 43	30 64	37 67					
NO	: :	: :	: :	: :	: :					

(1) All electronic networks.
Source: E-commerce database, Eurostat.

Table 3.8: Enterprises having purchased via Internet: proportion having purchased via a presence on specialised B2B Internet market places (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	: :	: :	: :	: :	: :				
BE	: :	: :	: :	: :	: :					
DK	: :	: :	: :	: :	: :					
DE	: 19	: 16	20 25	: 19	: 13					
EL	52 25	53 12	51 28	55 32	50 46					
ES	14 35	11 32	15 30	14 54	15 45					
FR	: :	: :	: :	: :	: :					
IE	: :	: :	: 28	: 21	: 22					
IT	4 7	7 3	1 13	6 11	1 12					
LU	40 36	19 27	57 47	28 33	33 29					
NL (1)	: 20	: 13	: 23	: 27	: 22					
AT	19 13	12 8	23 17	11 18	20 13					
PT	26 27	26 25	27 32	32 19	21 28					
FI	: 29	: 25	: 28	: 24	: 39					
SE	: 22	: 15	: 27	: 19	: 27					
UK	50 :	43 :	82 :	70 :	36 :					
NO	: :	: :	: :	: :	: :					

(1) All electronic networks.
Source: E-commerce database, Eurostat.

Table 3.10: Proportion of enterprises having purchased via EDI or other non-Internet networks (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	: 3	: 1	: 4	: 5	: 1				
BE	: :	: :	: :	: :	: :					
DK	: 5	: 3	: 8	: 2	: 3					
DE	: 3	: 2	9 4	: 10	: 1					
EL	0 0	0 0	1 1	0 0	1 1					
ES	0 1	0 0	0 1	0 0	0 0					
FR	: :	: :	: :	: :	: :					
IE	: :	: :	: 13	: 6	: 3					
IT	1 1	1 1	3 3	3 1	0 1					
LU	2 9	2 4	2 12	0 9	2 6					
NL	: :	: :	: :	: :	: :					
AT	3 5	1 3	5 9	2 2	1 2					
PT	1 2	0 1	3 4	2 4	1 2					
FI	: 6	: 3	: 12	: 3	: 3					
SE	: 8	: 7	: 12	: 5	: 6					
UK	: 24	: 25	: 28	: 22	: 21					
NO	: 6	: 4	: 10	: 4	: 2					

Source: E-commerce database, Eurostat.

Table 3.7: Enterprises using Internet: proportion having sold via Internet (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	: 11	: 9	: 16	: 13	: 9				
BE	: :	: :	: :	: :	: :					
DK	: 25	: 18	: 32	: 21	: 26					
DE	: 17	: 16	31 24	: 19	: 9					
EL	9 12	6 11	11 9	13 24	10 12					
ES	7 2	5 2	9 3	13 2	7 2					
FR	: :	: :	: :	: :	: :					
IE	: :	: :	: 23	: 34	: 18					
IT	4 4	3 4	5 5	7 3	4 4					
LU	13 14	12 18	21 17	16 13	5 8					
NL (1)	: 40	: 40	: 41	: 59	: 31					
AT	9 20	5 16	13 25	13 25	3 15					
PT (2)	5 9	4 10	7 7	9 14	6 10					
FI	: 17	: 12	: 17	: 21	: 21					
SE	: 13	: 9	: 17	: 16	: 13					
UK	: 19	: 22	: 23	: 26	: 12					
NO (3)	: 26	: 24	: 28	: 23	: 27					

(1) All electronic networks. (2) 2001, estimated.
(3) Proportion having received orders via homepage.
Source: E-commerce database, Eurostat.

Table 3.9: Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	: :	: :	: :	: :	: :				
BE	: :	: :	: :	: :	: :					
DK	: :	: :	: :	: :	: :					
DE	: 4	: 8	28 0	: 7	: 6					
EL	36 13	14 3	49 25	28 1	71 46					
ES	8 12	17 13	1 10	8 18	7 12					
FR	: :	: :	: :	: :	: :					
IE	: :	: :	: 13	: 19	: 16					
IT	6 3	11 3	0 5	3 7	2 4					
LU	29 10	14 9	26 11	44 7	41 14					
NL (1)	: 14	: 7	: 15	: 15	: 19					
AT	17 9	13 7	21 9	9 9	13 12					
PT	17 26	12 30	21 26	9 6	19 17					
FI	: 14	: 14	: 15	: 9	: 17					
SE	: :	: :	: 13	: 6	: 17					
UK	: :	: :	: :	: :	: :					
NO	: :	: :	: :	: :	: :					

(1) All electronic networks.
Source: E-commerce database, Eurostat.

Table 3.11: Proportion of enterprises having sold via EDI or other non-Internet networks (%)

	NACE average (D, G, I & K)		Manu- facturing		Distribu- tion		Transport and communi- cation		Business services	
	2000	2001	2000	2001	2000	2001	2000	2001	2000	2001
	EU-15	: 2	: 2	: 3	: 1	: 1				
BE	: :	: :	: :	: :	: :					
DK	: 7	: 6	: 9	: 8	: 3					
DE	: 2	: 2	6 3	: 0	: 1					
EL	0 1	0 1	0 1	0 0	1 0					
ES	1 1	1 2	0 1	0 0	2 0					
FR	: :	: :	: :	: :	: :					
IE	: :	: :	: 9	: 15	: 3					
IT	1 1	1 1	2 1	2 1	3 0					
LU	1 6	1 9	1 5	1 9	1 4					
NL	: :	: :	: :	: :	: :					
AT	2 4	2 4	3 6	0 3	1 1					
PT	1 2	1 2	2 2	1 3	0 0					
FI	: 7	: 9	: 8	: 5	: 4					
SE	: 8	: 13	: 9	: 5	: 4					
UK	: 23	: 33	: 21	: 22	: 16					
NO	: 5	: 5	: 7	: 5	: 3					

Source: E-commerce database, Eurostat.

4. ENTERPRISE SIZE EFFECTS OF E-COMMERCE

4. ENTERPRISE SIZE EFFECTS OF E-COMMERCE

NACE activities covered in this chapter

All data in this chapter cover an aggregate of the following activities (1)	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

(1) DK, DE, IE, IT, exclude Division 67; NL, includes Groups 55.3 to 55.5 and Divisions 65 and 66.

Size classes covered in this chapter

Data in this chapter cover enterprises with 10 persons employed or more, using the following breakdown (1)

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

(1) NL, the boundary between medium (and SME) and large enterprises is 200 persons employed, not 250 persons employed.

EU aggregates in this chapter

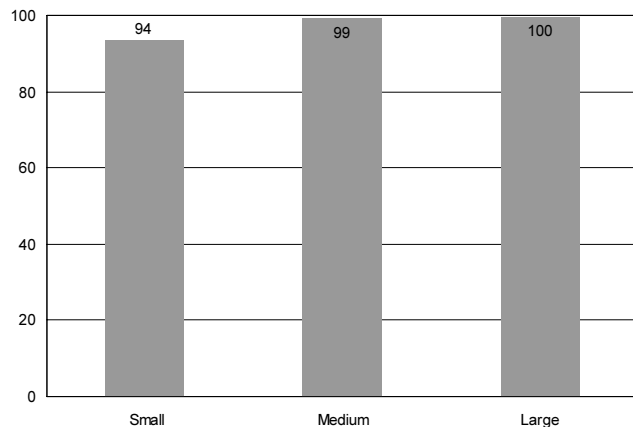
EU-15 aggregates in this chapter exclude BE, FR, NL and UK

4.1 ICT PENETRATION

Computers have made their way into practically every European enterprise, small or large. Equipment rates reached on average 94% for enterprises taken as a whole. Only the United Kingdom (89%), Greece (88%) and Portugal (84%) had enterprises with a PC equipment rate clearly below average, although still very high in absolute terms.

The size of enterprises seemed to have only a limited influence on their equipment rate. Medium-sized and large enterprises were virtually all using PCs across the EU, while smaller ones reported in most cases only slightly lower equipment rates. The equipment gap between small enterprises and larger ones was, unsurprisingly, most notable in the countries that overall recorded low average equipment rates, namely, Portugal, the United Kingdom and Greece.

Figure 4.1.1: Proportion of enterprises using computers, EU, beginning 2002 (%)



Source: E-commerce database, Eurostat.

Table 4.1.1: Use of computers, beginning 2002

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of enterprises using computers (%)																	
Total	94	:	98	95	88	95	:	95	95	97	94	93	84	99	99	89	95
SME	94	:	98	94	88	95	:	95	95	97	94	93	84	99	99	88	95
Small	94	:	97	94	87	94	:	94	94	96	94	92	81	98	98	86	95
Medium	99	:	100	99	99	99	:	99	99	99	96	99	97	100	100	98	99
Large	100	:	100	100	99	100	:	98	100	97	97	100	99	100	100	100	99
Proportion of employees using computers (%)																	
Total	47	:	59	51	43	34	:	50	42	46	:	51	34	65	72	:	60
SME	44	:	56	49	37	32	:	49	37	53	:	50	32	61	71	:	59
Small	43	:	55	53	35	31	:	47	35	54	:	48	31	60	70	:	58
Medium	44	:	57	44	45	34	:	50	41	53	:	52	32	62	72	:	59
Large	52	:	62	53	54	37	:	53	50	38	:	52	39	69	74	:	63
Proportion of employees using Internet connected computers (%)																	
Total	27	:	50	27	23	19	:	26	21	26	:	29	19	51	51	:	51
SME	26	:	48	27	20	20	:	25	19	30	:	31	18	50	52	:	46
Small	26	:	46	30	19	19	:	24	19	33	:	30	18	49	53	:	43
Medium	25	:	49	24	25	20	:	26	21	27	:	31	18	51	51	:	50
Large	28	:	52	27	27	19	:	27	23	21	:	27	21	52	51	:	56

Source: E-commerce database, Eurostat.

4.2 INTERNET PENETRATION

The results of the survey reveals that European enterprises have widely adopted Internet technologies. Some 81% of enterprises had an Internet connection, a proportion that exceeded 95% in the three Nordic countries. With the exception of the United Kingdom, close to 100% of large enterprises across the EU were connected to the Internet. Small and medium-sized enterprises reported somewhat lower connection rates, although in most cases still very high, particularly in the Nordic Member States where they exceeded 90% even for small enterprises. The lowest Internet connection rates among small enterprises were in the United Kingdom (49%), Greece (63%) and Portugal (64%) and quite low figures were also recorded in Italy (72%) and Luxembourg (77%).

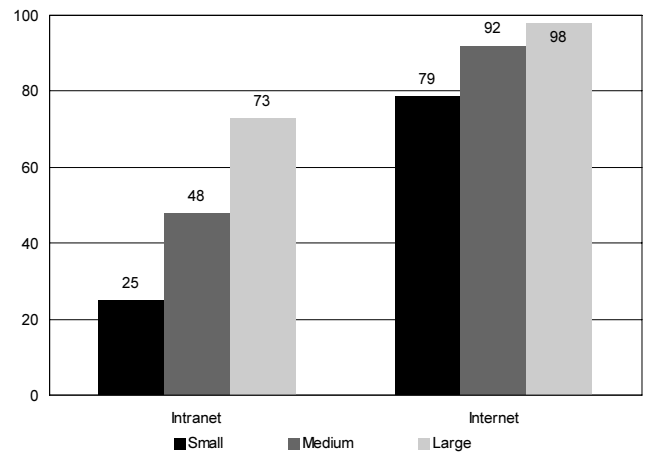
Intranets, in other words networks based on Internet standards but designed for use exclusively within an enterprise, were present in only 29% of surveyed enterprises. A breakdown by size-class shows, logically enough, that they were far more common in large enterprises (79%) than in smaller ones (25%), indicating a greater need for structured internal communication tools as the number of persons employed in an organisation grows.

The results of the survey reveal extremely varied results across the EU as regards the type of Internet access. Nevertheless, some patterns common to all countries can be identified. For example, ISDN was the most frequently used technology for enterprises accessing the Internet in the majority of countries, and was particularly favoured by SMEs. The bandwidth generally increased with the enterprise size, with large enterprises showing a greater likelihood of using broadband access technologies than SMEs in nearly every country.

Among enterprises using the Internet, the most popular Internet applications used as a customer were e-banking and other types of financial services. Interestingly, small and medium enterprises were more active users of this service (66% of connected enterprises) than large ones (57%). In contrast, large enterprises used their Internet connection to monitor their market far more than smaller ones at a rate of 69% of Internet-connected large enterprises against 44% for SMEs.

Approximately two-thirds of enterprises having an Internet connection also chose to have a presence on the web through a web site or homepage. While the proportion of Internet connected enterprises having a presence on the web was only just above half in Greece (52%) and Portugal (55%), it reached four-fifths in Denmark (80%) and Sweden (84%); in the United Kingdom all Internet connected enterprises reported having a web presence. As expected, large Internet connected enterprises were more prone to have a web presence (85%) than smaller ones (67% of SMEs), the proportion exceeding eight-tenths in a majority of countries.

Figure 4.2.1: Proportion of enterprises using intranet and Internet, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Most enterprises with a web presence used it as a marketing tool (81% to market products and 44% to show catalogues and prices) rather than as a complement to their after-sales service (29%). In general size effects were relatively limited as regards these Internet services. In other words, the proportion of enterprises that used their presence on the Internet to market their products or provide access to catalogues and price lists was fairly similar across all size classes, although slightly greater among larger enterprises. Delivering digital products or providing mobile Internet services were the least frequent services offered by enterprises with a web presence, but they were also those where the size effect was the greatest. The provision of after sales support via the Internet showed particularly great variation across countries, from a low of 7% of enterprises with a web presence (Italy) up to a high of 45% (Germany), but only limited size effect in most cases.

4. ENTERPRISE SIZE EFFECTS OF E-COMMERCE

Table 4.2.1: Proportion of enterprises using intranet and Internet, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Proportion of enterprises using intranet (1)																	
Total	29	:	35	31	20	23	:	31	27	40	80	37	34	36	44	26	28
SME	28	:	33	30	19	22	:	30	26	38	79	35	33	33	43	24	27
Small	25	:	29	26	18	18	:	26	23	34	77	32	30	29	38	21	23
Medium	48	:	50	48	48	40	:	48	47	55	92	54	48	53	66	42	48
Large	73	:	81	73	66	68	:	67	70	78	96	77	72	80	82	65	78
Proportion of enterprises using Internet																	
Total	81	:	95	84	64	83	:	83	74	79	85	85	69	96	95	54	82
SME	81	:	95	83	64	82	:	82	74	78	85	84	68	96	95	53	82
Small	79	:	94	82	63	80	:	80	72	77	84	82	64	95	94	49	80
Medium	92	:	99	90	91	94	:	94	89	83	91	96	91	99	99	75	95
Large	98	:	100	98	96	98	:	96	95	96	95	100	98	100	100	86	96

(1) NL, enterprises with computers connected in a network within the enterprise (for example a LAN).

Source: E-commerce database, Eurostat.

Table 4.2.2: Enterprises using Internet: proportion with selected types of Internet access, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE	UK	NO
Modem																	
Total	:	:	17	:	54	51	:	51	39	34	29	25	56	21	49	56	7
SME	:	:	18	:	54	51	:	51	40	33	29	25	57	22	49	59	7
Small	:	:	19	:	55	53	:	54	41	34	30	25	60	24	51	65	8
Medium	:	:	14	:	47	42	:	39	31	30	22	25	46	10	41	36	3
Large	:	:	15	:	37	41	:	35	28	45	18	33	35	10	36	15	3
ISDN																	
Total	:	:	39	:	56	37	:	:	59	68	57	65	34	35	51	:	60
SME	:	:	40	:	56	37	:	:	60	68	58	66	34	36	51	:	61
Small	:	:	41	:	56	35	:	:	60	71	59	68	29	38	51	:	66
Medium	:	:	34	:	65	45	:	:	58	56	53	56	51	27	52	:	37
Large	:	:	24	:	57	46	:	:	42	59	38	45	46	15	41	:	17
xDSL (2)																	
Total	:	:	37	:	1	:	:	6	18	17	12	23	17	31	13	16	22
SME	:	:	37	:	1	:	:	6	18	17	12	23	17	31	13	16	22
Small	:	:	36	:	1	:	:	6	16	17	11	23	18	31	13	15	19
Medium	:	:	40	:	2	:	:	6	30	17	15	23	15	33	13	19	36
Large	:	:	34	:	4	:	:	6	39	13	15	21	20	20	18	27	33
Other fixed connection (> 2Mbps) (3)																	
Total	:	:	23	:	3	6	:	5	1	7	5	11	12	15	21	13	25
SME	:	:	21	:	2	5	:	5	1	7	4	10	10	13	20	12	24
Small	:	:	18	:	2	3	:	3	1	6	4	7	9	10	18	10	23
Medium	:	:	35	:	6	12	:	11	2	14	9	23	16	27	31	17	32
Large	:	:	68	:	17	34	:	26	12	9	24	44	44	53	59	37	56

(1) Excluding cable and some other type of connections.

(2) NO, fixed connection with transmission capacity below 2 Mbps.

(3) NO, fixed connection with transmission capacity of at least 2 Mbps.

Source: E-commerce database, Eurostat.

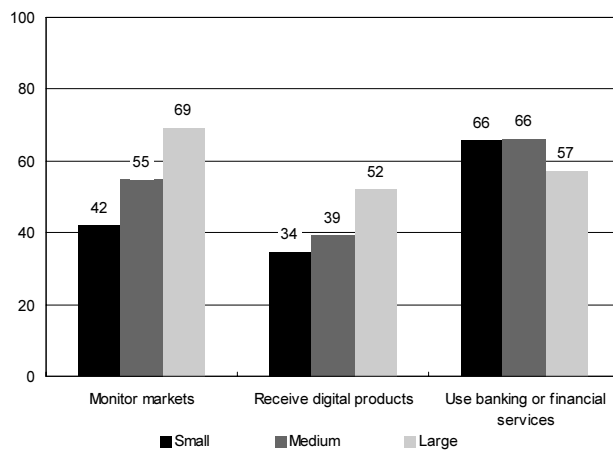
Table 4.2.3: Enterprises using Internet: proportion using selected Internet services (as a customer), 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Monitor markets (1)																	
Total	45	:	44	41	77	54	:	40	38	55	63	66	43	61	53	:	52
SME	44	:	43	39	77	53	:	39	38	55	63	65	42	59	52	:	52
Small	42	:	40	36	76	52	:	38	37	53	61	63	42	55	51	:	50
Medium	55	:	55	56	84	59	:	45	43	61	73	74	45	75	58	:	60
Large	69	:	74	69	91	73	:	44	61	67	84	84	52	88	72	:	70
Receive digital products																	
Total	36	:	45	42	15	21	:	30	33	62	27	26	18	60	65	:	58
SME	35	:	44	41	15	21	:	30	33	62	27	25	17	59	65	:	58
Small	34	:	43	41	15	19	:	28	32	62	26	24	15	57	63	:	57
Medium	39	:	50	42	19	28	:	35	38	63	29	31	25	68	72	:	61
Large	52	:	67	51	25	46	:	42	49	61	41	43	31	77	88	:	65
Obtain after sales services																	
Total	:	:	:	50	15	23	:	22	15	31	30	16	14	36	70	:	:
SME	:	:	:	49	15	22	:	21	15	30	30	15	14	34	70	:	:
Small	:	:	:	50	14	20	:	20	14	29	28	14	12	33	69	:	:
Medium	:	:	:	48	24	31	:	26	18	36	39	20	20	40	76	:	:
Large	:	:	:	56	25	45	:	39	25	42	48	36	31	53	87	:	:
Use banking or financial services (1)																	
Total	65	:	72	65	60	78	:	69	52	54	78	68	71	85	75	:	73
SME	66	:	72	66	60	78	:	69	52	54	78	68	70	85	76	:	74
Small	66	:	71	67	60	77	:	68	51	55	78	67	67	86	77	:	75
Medium	66	:	77	60	60	83	:	74	54	53	78	72	80	82	68	:	69
Large	57	:	68	45	56	82	:	69	52	48	76	73	82	80	49	:	65

(1) SE, wording of these services was different.

Source: E-commerce database, Eurostat.

Figure 4.2.2: Enterprises using Internet: proportion using selected Internet services (as a customer), EU, 2001 (%)



Source: E-commerce database, Eurostat.

4. ENTERPRISE SIZE EFFECTS OF E-COMMERCE

Table 4.2.4: Enterprises using Internet: proportion having a web site or a homepage, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Total	67	:	80	78	52	46	:	64	62	65	68	75	55	72	84	100	70
SME	67	:	80	78	52	45	:	63	62	65	67	75	54	71	84	100	69
Small	64	:	79	76	51	42	:	61	59	62	65	72	52	68	82	100	67
Medium	80	:	84	89	68	62	:	75	77	75	78	86	60	88	92	100	80
Large	85	:	92	88	74	74	:	80	82	73	86	91	71	91	97	100	87

Source: E-commerce database, Eurostat.

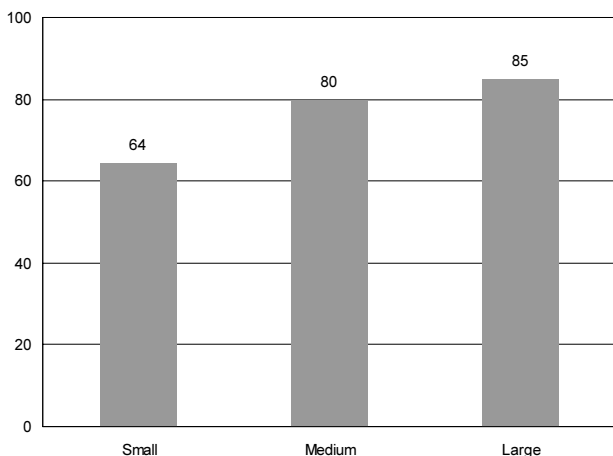
Table 4.2.5: Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Market products																	
Total	81	:	96	82	97	54	:	90	88	69	88	88	58	86	97	:	93
SME	81	:	96	81	97	55	:	90	88	69	88	88	57	86	97	:	93
Small	81	:	96	79	97	56	:	90	88	68	88	88	57	85	97	:	93
Medium	83	:	97	90	98	49	:	90	87	73	90	87	58	89	98	:	95
Large	86	:	96	96	96	50	:	80	84	57	86	85	68	86	96	:	92
Provide access to catalogues and price lists (1)																	
Total	44	:	39	40	43	60	:	45	43	51	40	47	58	42	43	:	43
SME	44	:	38	40	43	60	:	45	43	51	41	47	57	41	42	:	43
Small	43	:	36	39	43	59	:	44	43	49	43	46	57	39	42	:	43
Medium	46	:	43	40	47	62	:	46	44	58	31	51	58	47	45	:	42
Large	54	:	59	53	48	62	:	41	47	49	30	55	68	52	63	:	45
Deliver digital products																	
Total	8	:	11	11	7	6	:	12	5	20	20	7	5	11	4	:	14
SME	8	:	11	11	7	6	:	12	5	21	19	6	5	11	4	:	14
Small	9	:	10	12	7	6	:	12	5	20	21	6	5	11	4	:	13
Medium	6	:	12	6	6	8	:	11	5	22	14	6	4	11	3	:	15
Large	12	:	22	13	7	10	:	14	9	9	26	10	4	15	11	:	19
Provide after sales support																	
Total	29	:	27	45	11	18	:	18	7	23	30	12	16	31	35	:	30
SME	28	:	27	45	11	17	:	18	7	23	29	11	16	31	34	:	29
Small	29	:	26	48	11	17	:	18	6	22	30	10	17	29	34	:	29
Medium	25	:	28	34	14	18	:	17	10	25	24	15	12	36	38	:	29
Large	34	:	40	41	12	23	:	18	17	19	34	27	23	39	47	:	37
Provide mobile Internet services																	
Total	5	:	2	6	6	2	:	7	3	5	:	4	2	5	5	:	3
SME	4	:	2	6	6	2	:	6	3	5	:	4	2	4	5	:	3
Small	4	:	1	6	6	2	:	5	3	4	:	4	3	4	4	:	3
Medium	5	:	2	7	6	2	:	9	5	7	:	4	1	5	6	:	4
Large	9	:	9	9	4	6	:	20	7	6	:	6	6	7	15	:	8

(1) SE, wording of these services was different.

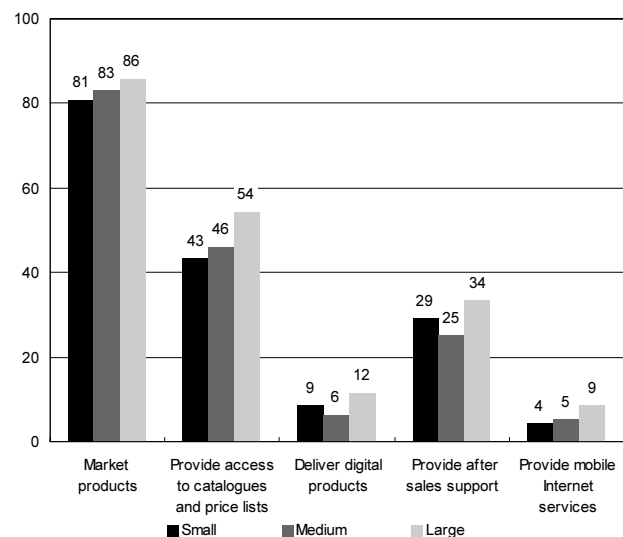
Source: E-commerce database, Eurostat.

Figure 4.2.3: Enterprises using Internet: proportion having a web site or a homepage, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 4.2.4: Enterprises with a web presence: proportion offering selected Internet services, EU, 2001 (%)



Source: E-commerce database, Eurostat.

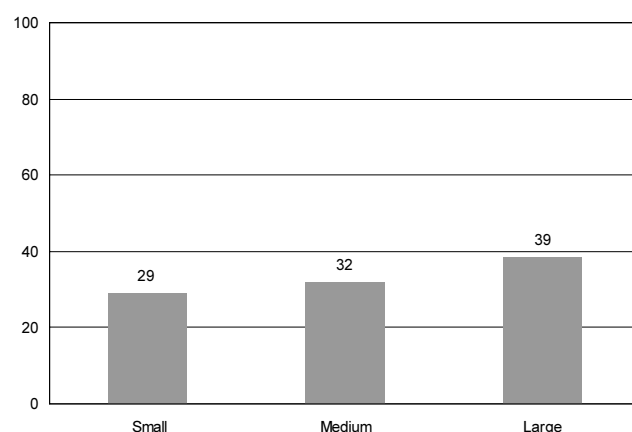
4.3 PURCHASES

Almost one third of Internet connected enterprises in the EU (30%) used e-commerce in 2001 to purchase at least some of the products they needed for their activity (e-procurement). This average hides considerable differences between Member States, from one in ten or less in Spain (8%) and Italy (10%) up to more one in two in Finland (54%) and Sweden (62%). Recourse to e-procurement generally increased with enterprise size, from 29% of connected enterprises among small ones, 32% among medium-sized ones up to 39% of large enterprises. This was nevertheless not the case in Germany, Luxembourg or the United Kingdom where SMEs were more likely to have made some Internet purchases than large enterprises.

In order to have a clearer idea of the importance of e-procurement within enterprises, it is important to look at the share of Internet purchases in total purchases, to take account of cases where e-procurement was negligible in volume terms. An important outcome from the survey is that the share of enterprises having made Internet purchases that had made at least 1% of their total purchases via the Internet was in all countries (for which data is available) greater in SMEs than in large enterprises, and in most cases was the highest in small enterprises. The same was true with higher

thresholds than 1%, as seen in table 4.3.2. In other words, among enterprises that had taken the step to make at least some Internet purchases, the most intensive users were smaller enterprises.

Figure 4.3.1: Enterprises using Internet: proportion having purchased via Internet, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Table 4.3.1: Enterprises using Internet: proportion having purchased via Internet, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE	UK	NO
Purchased via Internet																	
Total	30	:	49	45	17	8	:	46	10	29	37	37	24	54	62	47	:
SME	30	:	48	45	16	8	:	45	10	29	37	36	24	53	62	47	:
Small	29	:	45	46	16	7	:	44	9	29	35	35	23	52	60	49	:
Medium	32	:	60	41	20	10	:	52	12	31	44	42	26	62	72	42	:
Large	39	:	80	41	27	15	:	62	15	23	54	56	30	70	83	45	:
of which, proportion having purchased via specialised B2B Internet market places																	
Total	:	:	:	19	25	36	:	22	7	35	20	13	27	30	22	:	:
SME	:	:	:	18	25	35	:	22	7	36	20	12	27	29	22	:	:
Small	:	:	:	19	24	34	:	22	8	33	19	11	26	28	21	:	:
Medium	:	:	:	14	28	42	:	23	7	49	22	17	29	32	23	:	:
Large	:	:	:	37	31	37	:	35	9	7	27	27	34	36	36	:	:

(1) All electronic networks.

Source: E-commerce database, Eurostat.

Table 4.3.2: Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (2)	AT	PT	FI	SE	UK	NO
1% or more of total purchases																	
Total	:	:	48	97	63	35	:	52	38	80	73	78	69	54	:	:	:
SME	:	:	49	98	65	35	:	52	39	81	73	78	70	55	:	:	:
Small	:	:	50	98	66	38	:	53	42	81	74	80	67	56	:	:	:
Medium	:	:	44	97	55	27	:	52	22	79	70	74	78	50	:	:	:
Large	:	:	35	90	22	25	:	51	21	60	69	67	55	51	:	:	:
10% or more of total purchases																	
Total	:	:	13	17	17	15	:	10	11	24	37	22	22	18	:	:	:
SME	:	:	13	17	18	15	:	10	11	25	38	22	23	18	:	:	:
Small	:	:	16	18	19	17	:	10	13	25	40	25	24	19	:	:	:
Medium	:	:	6	9	10	11	:	9	5	22	27	13	18	15	:	:	:
Large	:	:	5	9	3	6	:	12	4	13	27	12	10	12	:	:	:
50% or more of total purchases																	
Total	:	:	4	1	3	6	:	2	2	6	15	3	5	4	:	:	:
SME	:	:	4	1	3	7	:	2	2	6	15	3	5	5	:	:	:
Small	:	:	5	1	3	8	:	2	2	5	16	4	5	5	:	:	:
Medium	:	:	1	0	4	2	:	1	1	6	10	0	5	2	:	:	:
Large	:	:	0	0	0	2	:	0	1	13	10	2	2	2	:	:	:

(1) Enterprises weighted by their purchases except LU and AT (weighted by turnover).

(2) All electronic networks.

Source: E-commerce database, Eurostat.

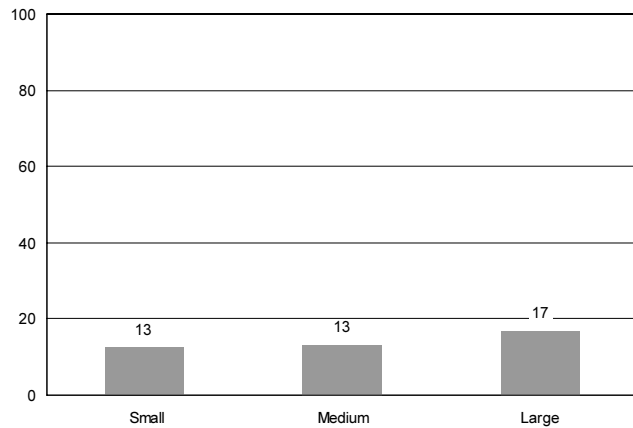
4.4 SALES

According to the results of the survey enterprises were generally far less active in Internet selling than Internet purchasing. Indeed, only 13% of enterprises using the Internet declared having received electronic orders (note that manually typed e-mail are not considered as electronic orders), less than half the proportion of enterprises having purchased via Internet. Larger enterprises recorded a somewhat higher proportion of e-sales (17%) than SMEs (13%) although only to a limited extent. More significant size effects could be observed at national level, notably in Spain, Portugal, Finland and Sweden where large Internet connected enterprises were two to three times more likely to have sold on the Internet than their smaller counterparts. In all cases, however, the proportion of e-sellers remained less than half that of e-purchasers.

Similarly to e-procurement, the survey shows that e-commerce sales represented proportionally a greater share of the total sales of small Internet selling enterprises than larger ones. For example, among enterprises that had made some sales via Internet, SMEs were more likely to have made at least 1% of their total sales this way, than were large enterprises. However, still limited to enterprises that had made some sales via Internet, enterprises that had achieved more than half of their sales via Internet were more likely to be medium-sized or large enterprises than small ones; for all size classes there were however only a small proportion of enterprises with such a large reliance on Internet sales.

Most sales made on the Internet were transactions between enterprises (B2B), regardless of the size of the selling enterprise. However, small enterprises sold proportionally more to final consumers than large enterprises in several countries.

Figure 4.4.1: Enterprises using Internet: proportion having sold via Internet, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Enterprises from Ireland and Luxembourg were the most oriented towards export markets for their Internet sales; in all other countries most sales made via the Internet were destined to domestic customers (national sales). In both Ireland and Luxembourg this was chiefly due to the relatively low share of Internet sales to domestic markets by large enterprises. In stark contrast, large enterprises in Greece were almost exclusively dependent on their domestic market for Internet sales, achieving 97% of their sales nationally, while only 19% of Internet sales by small enterprises were to the domestic market.

Large enterprises were generally more prone to have implemented online payment systems than SMEs. Germany and to a greater extent Greece stood out with a higher proportion of small and medium-sized enterprises selling via Internet having received on-line payments than large enterprises.

Table 4.4.1: Enterprises using Internet: proportion having sold via Internet, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE	UK	NO (2)
Sold via Internet (3)																	
Total	13	:	25	19	14	3	:	26	5	15	40	25	11	17	14	19	27
SME	13	:	25	19	14	3	:	26	5	15	40	25	10	17	14	19	27
Small	13	:	25	19	14	2	:	25	5	14	39	26	10	16	13	20	27
Medium	13	:	26	18	13	4	:	27	4	18	41	22	11	21	18	16	29
Large	17	:	36	18	17	7	:	33	7	13	47	29	27	27	27	22	33
of which, proportion having sold via a presence on specialised B2B Internet market places																	
Total	:	:	:	4	12	13	:	13	4	10	13	11	29	15	12	:	:
SME	:	:	:	4	12	13	:	12	4	9	13	11	30	14	11	:	:
Small	:	:	:	3	12	10	:	11	3	7	12	10	31	13	10	:	:
Medium	:	:	:	5	15	20	:	16	5	13	16	12	24	20	13	:	:
Large	:	:	:	13	18	22	:	15	10	38	24	18	19	19	32	:	:

(1) All electronic networks.

(2) Proportion having received orders via homepage.

(3) PT, estimated.

Source: E-commerce database, Eurostat.

Table 4.4.2: Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (2)	AT	PT	FI	SE	UK	NO
1% or more of total sales																	
Total	83	:	36	99	67	45	:	53	64	73	75	70	61	60	92	:	51
SME	83	:	36	99	67	45	:	53	64	74	75	70	63	60	93	:	51
Small	84	:	37	99	68	43	:	55	64	78	75	72	70	61	94	:	51
Medium	80	:	32	99	58	52	:	48	66	62	76	62	43	55	88	:	50
Large	71	:	34	91	64	36	:	47	52	25	75	61	33	60	80	:	53
10% or more of total sales																	
Total	17	:	12	18	15	8	:	17	11	18	27	24	14	16	31	:	12
SME	18	:	12	18	15	8	:	17	11	18	26	25	15	16	31	:	12
Small	18	:	13	20	15	7	:	18	10	20	25	26	14	16	30	:	12
Medium	15	:	11	12	8	10	:	16	16	15	33	17	20	18	37	:	12
Large	9	:	8	6	9	8	:	9	14	0	38	11	4	13	24	:	18
50% or more of total sales																	
Total	1	:	2	1	5	1	:	3	1	2	5	3	2	2	5	:	2
SME	1	:	2	1	5	1	:	3	1	2	4	3	2	2	5	:	2
Small	1	:	2	1	5	0	:	3	1	3	4	3	2	1	4	:	2
Medium	2	:	0	1	0	2	:	1	3	0	8	4	3	4	9	:	2
Large	2	:	0	2	0	2	:	2	1	0	17	2	1	0	4	:	1

(1) Enterprises weighted by their turnover. (2) All electronic networks.

Source: E-commerce database, Eurostat.

Table 4.4.3: Proportion of Internet sales by customer type, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Business (B2B sales)																	
Total	:	:	80	51	62	:	:	72	86	75	:	75	:	86	79	56	74
SME	:	:	82	56	49	:	:	17	83	75	:	78	:	:	75	59	80
Small	:	:	63	46	51	:	:	14	68	55	:	88	:	:	76	50	36
Medium	:	:	91	65	36	:	:	19	91	80	:	43	:	:	75	68	89
Large	:	:	78	48	73	:	:	78	90	48	:	66	:	:	81	54	54
Consumers (B2C sales)																	
Total	:	:	18	49	18	:	:	13	13	15	:	20	:	14	21	37	15
SME	:	:	17	44	25	:	:	24	16	15	:	16	:	:	25	21	10
Small	:	:	35	54	24	:	:	18	30	26	:	6	:	:	24	9	35
Medium	:	:	8	35	26	:	:	30	8	12	:	52	:	:	25	32	4
Large	:	:	19	52	12	:	:	12	10	5	:	30	:	:	19	44	32
Do not know / no answer																	
Total	:	:	2	0	20	:	:	15	1	11	:	6	:	0	0	8	11
SME	:	:	1	0	26	:	:	59	1	10	:	6	:	:	0	20	10
Small	:	:	2	0	24	:	:	67	2	18	:	6	:	:	0	41	29
Medium	:	:	0	0	38	:	:	51	1	8	:	5	:	:	0	0	7
Large	:	:	3	0	15	:	:	10	0	48	:	5	:	:	0	2	14

Source: E-commerce database, Eurostat.

Table 4.4.4: Proportion of Internet sales by customer location, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Own country (domestic sales)																	
Total	78	:	76	90	64	92	:	10	70	23	:	82	89	87	78	76	91
SME	:	:	80	83	26	88	:	37	81	24	:	86	87	:	:	63	92
Small	:	:	85	86	19	83	:	60	65	36	:	90	76	:	:	41	70
Medium	:	:	77	81	60	90	:	15	90	21	:	70	92	:	:	84	96
Large	:	:	70	94	97	93	:	7	59	5	:	72	92	:	:	83	87
Other EU countries																	
Total	15	:	12	6	22	6	:	66	23	69	:	11	5	8	12	11	2
SME	:	:	12	6	45	7	:	18	12	69	:	10	4	:	:	11	1
Small	:	:	4	7	51	7	:	9	23	39	:	6	7	:	:	12	2
Medium	:	:	16	5	14	8	:	27	7	76	:	25	3	:	:	11	1
Large	:	:	12	6	2	5	:	71	35	76	:	15	6	:	:	11	3
Rest of the world																	
Total	6	:	4	4	2	2	:	16	6	5	:	5	4	5	9	5	1
SME	:	:	5	11	3	4	:	23	6	5	:	3	5	:	:	6	1
Small	:	:	4	7	2	10	:	11	12	11	:	3	13	:	:	6	1
Medium	:	:	5	15	5	2	:	33	3	4	:	4	2	:	:	5	1
Large	:	:	2	1	1	2	:	15	6	19	:	8	0	:	:	5	0
Do not know / no answer																	
Total	1	:	8	0	13	0	:	9	0	3	:	2	3	0	0	8	7
SME	:	:	3	0	27	0	:	22	0	3	:	1	3	:	:	20	6
Small	:	:	6	0	28	0	:	20	0	15	:	1	3	:	:	41	28
Medium	:	:	2	0	21	0	:	25	0	0	:	1	3	:	:	0	2
Large	:	:	15	0	1	0	:	7	0	0	:	4	2	:	:	2	10

Source: E-commerce database, Eurostat.

Table 4.4.5: Enterprises having sold via Internet: proportion having received on-line payments, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI	SE (2)	UK	NO
Total	:	:	17	13	18	22	:	26	16	18	7	17	:	16	30	:	14
SME	:	:	17	13	18	21	:	26	16	18	7	17	:	15	29	:	14
Small	:	:	17	13	18	23	:	27	16	16	7	17	:	14	29	:	15
Medium	:	:	16	14	21	16	:	22	13	25	7	14	:	18	29	:	11
Large	:	:	20	12	14	30	:	39	26	25	9	27	:	24	34	:	13

(1) All electronic networks. (2) Wording of these services was different.

Source: E-commerce database, Eurostat.

4.5 BARRIERS TO E-COMMERCE

Table 4.5.1: Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance, beginning 2002 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Products not suitable for Internet sales																	
Total	:	:	67	:	34	79	:	51	60	13	:	55	32	63	72	:	50
SME	:	:	66	:	34	79	:	51	60	13	:	54	32	62	71	:	49
Small	:	:	62	:	33	79	:	49	59	12	:	51	29	59	70	:	47
Medium	:	:	83	:	48	79	:	62	65	21	:	71	45	74	79	:	63
Large	:	:	95	:	58	75	:	56	57	14	:	74	47	78	81	:	67
Customers or other enterprises not ready																	
Total	:	:	53	:	47	66	:	45	60	13	:	48	31	55	61	:	41
SME	:	:	52	:	47	67	:	45	60	13	:	48	30	54	61	:	41
Small	:	:	49	:	46	67	:	43	59	12	:	45	29	52	60	:	40
Medium	:	:	68	:	62	66	:	52	65	17	:	61	40	65	65	:	51
Large	:	:	71	:	63	59	:	49	57	24	:	68	41	71	63	:	50
Security problems with payments																	
Total	:	:	43	:	43	58	:	37	59	14	:	60	29	38	24	:	37
SME	:	:	43	:	43	57	:	37	59	13	:	60	29	37	24	:	37
Small	:	:	41	:	43	57	:	36	59	13	:	58	27	36	25	:	36
Medium	:	:	50	:	56	62	:	43	63	16	:	70	37	47	18	:	43
Large	:	:	49	:	66	59	:	37	55	22	:	70	39	49	14	:	39
Uncertainty concerning legal framework																	
Total	:	:	45	:	41	55	:	34	55	13	:	57	30	40	45	:	39
SME	:	:	44	:	40	55	:	34	55	13	:	56	30	40	45	:	39
Small	:	:	42	:	39	55	:	32	55	11	:	54	29	38	45	:	38
Medium	:	:	55	:	58	59	:	43	60	20	:	67	37	49	47	:	44
Large	:	:	65	:	63	54	:	37	55	25	:	68	40	51	44	:	44
Logistical problems																	
Total	:	:	27	:	24	46	:	32	43	10	:	36	25	41	32	:	28
SME	:	:	26	:	24	46	:	32	43	10	:	35	25	40	32	:	28
Small	:	:	25	:	24	46	:	31	42	8	:	34	23	38	32	:	28
Medium	:	:	33	:	31	49	:	36	46	16	:	44	37	52	34	:	31
Large	:	:	48	:	41	47	:	34	38	8	:	53	35	59	37	:	35
Other																	
Total	:	:	:	:	2	4	:	3	:	1	:	7	:	:	:	:	:
SME	:	:	:	:	2	4	:	3	:	1	:	6	:	:	:	:	:
Small	:	:	:	:	2	4	:	3	:	1	:	6	:	:	:	:	:
Medium	:	:	:	:	2	3	:	4	:	0	:	7	:	:	:	:	:
Large	:	:	:	:	6	2	:	9	:	2	:	11	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 4.5.2: Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance, beginning 2002 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Products not suitable for Internet sales																	
Total	:	:	14	:	44	70	:	42	55	52	:	63	67	61	43	:	54
SME	:	:	14	:	44	64	:	42	52	52	:	62	68	61	41	:	53
Small	:	:	14	:	44	57	:	40	45	56	:	61	76	61	41	:	53
Medium	:	:	13	:	38	83	:	48	110	40	:	72	44	64	42	:	54
Large	:	:	16	:	55	161	:	51	152	50	:	79	52	58	60	:	56
Customers or other enterprises not ready																	
Total	:	:	11	:	81	92	:	58	84	59	:	58	74	74	52	:	40
SME	:	:	11	:	81	87	:	57	80	59	:	58	74	74	51	:	39
Small	:	:	11	:	80	82	:	56	72	58	:	55	72	75	49	:	39
Medium	:	:	10	:	102	103	:	63	144	62	:	69	83	69	59	:	41
Large	:	:	12	:	86	159	:	79	211	75	:	76	75	80	62	:	45
Security problems with payments																	
Total	:	:	14	:	73	87	:	56	80	63	:	72	64	53	52	:	46
SME	:	:	14	:	73	82	:	55	77	62	:	72	64	53	52	:	46
Small	:	:	15	:	72	76	:	54	70	63	:	72	70	54	52	:	45
Medium	:	:	13	:	81	101	:	61	135	56	:	71	47	47	49	:	48
Large	:	:	13	:	91	146	:	69	176	100	:	78	65	51	60	:	59
Uncertainty concerning legal framework																	
Total	:	:	14	:	75	83	:	46	74	61	:	66	54	50	43	:	44
SME	:	:	14	:	75	79	:	46	71	61	:	65	53	51	42	:	44
Small	:	:	14	:	74	72	:	44	63	61	:	66	57	52	42	:	44
Medium	:	:	14	:	83	100	:	51	132	58	:	65	43	46	44	:	44
Large	:	:	11	:	82	128	:	61	180	75	:	71	57	40	53	:	56
Logistical problems																	
Total	:	:	9	:	43	61	:	39	49	50	:	43	61	46	26	:	28
SME	:	:	9	:	44	57	:	37	47	49	:	41	61	45	26	:	28
Small	:	:	9	:	44	48	:	36	41	48	:	41	62	45	24	:	29
Medium	:	:	6	:	46	85	:	41	95	51	:	44	58	44	34	:	26
Large	:	:	7	:	32	116	:	62	120	75	:	69	65	54	30	:	27
Other																	
Total	:	:	:	:	5	2	:	4	:	3	:	7	:	:	:	:	:
SME	:	:	:	:	5	2	:	4	:	2	:	7	:	:	:	:	:
Small	:	:	:	:	5	2	:	4	:	1	:	7	:	:	:	:	:
Medium	:	:	:	:	6	2	:	6	:	5	:	8	:	:	:	:	:
Large	:	:	:	:	5	12	:	7	:	25	:	13	:	:	:	:	:

Source: E-commerce database, Eurostat.

5. E-COMMERCE IN SELECTED SECTORS

5. E-COMMERCE IN SELECTED SECTORS

Size classes covered in this chapter

Data presented in this chapter cover enterprises with 10 or more persons employed.

5.1 RETAIL TRADE

Retail trade enterprises were generally less equipped with PCs than other sectors and were less likely to use the Internet. Nevertheless, those that did use the Internet were proportionally more involved in e-commerce activities than the average for all sectors.

PCs were present in 92% of retail trade enterprises, but only 76% of enterprises in the sector were connected to the Internet, with particularly low rates recorded in Luxembourg (57%), Greece (49%), Portugal (45%) and the United Kingdom (25%). Consequently applications based on Internet technolo-

EU aggregates in this chapter

EU-15 aggregates in this chapter exclude BE, FR, IE, NL and UK.

gies, such as e-mail, intranets and extranets were also well below average.

Despite this, the results of the survey reveal that retail trade enterprises that had invested in ICTs were generally more willing than enterprises in other sectors to use it for e-commerce activities, both for e-procurement and e-sales. Indeed, 38% of them reported purchasing on the Internet, and 14% engaged in e-sales. As expected, final consumers (B2C transactions) represented most of the customers of retail enterprises selling on-line, as opposed to the other sectors where B2B transactions dominated.

Table 5.1.1: Proportion of enterprises using ICT, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI (1)	SE	UK	NO	
Computers (2)																		
NACE average (D, G, 55.1, 55.2, I, K)	94	:	98	95	88	95	:	:	95	97	94	93	84	99	99	88	95	
Distributive trades (G)	95	:	99	92	91	98	:	93	98	96	96	93	90	99	99	86	94	
Retail trade (52)	92	:	94	91	83	95	:	:	95	93	:	86	98	98	100	72	92	
E-mail																		
NACE average (D, G, 55.1, 55.2, I, K)	78	:	83	81	65	78	:	:	70	72	84	85	66	95	87	72	:	
Distributive trades (G)	79	:	83	81	64	83	:	62	72	64	85	83	71	93	83	65	:	
Retail trade (52)	72	:	75	76	48	72	:	:	62	47	:	68	53	89	80	41	:	
Intranet (3)																		
NACE average (D, G, 55.1, 55.2, I, K)	29	:	35	31	20	23	:	:	27	38	80	37	33	36	44	26	28	
Distributive trades (G)	30	:	41	29	18	26	:	23	30	35	83	37	33	33	44	20	27	
Retail trade (52)	14	:	38	6	17	19	:	:	20	26	:	25	33	26	37	8	18	
Extranet (4)																		
NACE average (D, G, 55.1, 55.2, I, K)	13	:	19	14	5	9	:	:	13	31	23	14	14	16	18	7	13	
Distributive trades (G)	14	:	21	14	4	11	:	8	14	29	27	15	16	18	16	7	11	
Retail trade (52)	6	:	11	4	5	7	:	:	9	19	:	8	7	11	11	2	8	
Internet																		
NACE average (D, G, 55.1, 55.2, I, K)	81	:	95	84	64	82	:	:	74	78	85	85	69	96	95	54	82	
Distributive trades (G)	83	:	96	83	66	88	:	75	76	71	86	83	72	95	95	45	73	
Retail trade (52)	76	:	89	79	49	79	:	:	64	57	:	68	45	92	92	25	57	

(1) NACE average includes Division 67.

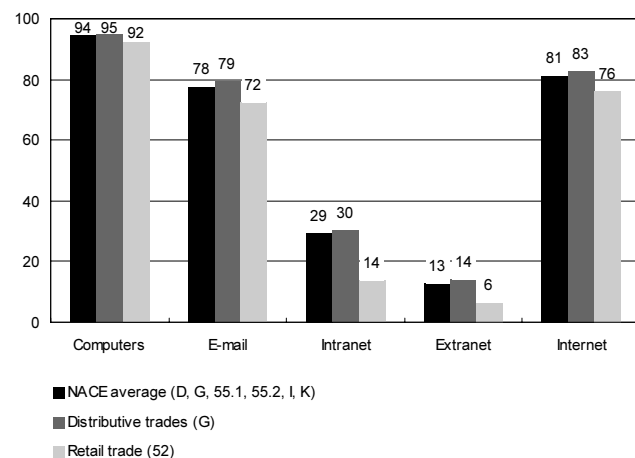
(2) Beginning 2002.

(3) NL, enterprises with computers connected in a network within the enterprise (for example a LAN).

(4) NL, enterprises with an internet protocol based closed network.

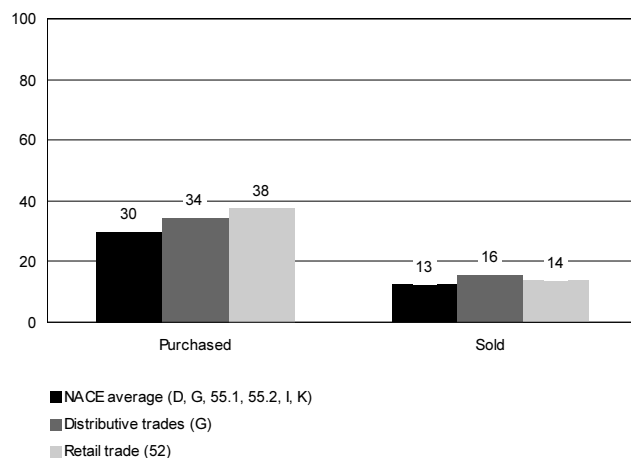
Source: E-commerce database, Eurostat.

Figure 5.1.1: Proportion of enterprises using ICT, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 5.1.2: Enterprises using Internet: proportion having used Internet for e-commerce, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Table 5.1.2: Enterprises using Internet: proportion having used Internet for e-commerce, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Purchased via Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	30	:	49	45	17	8	:	:	10	29	37	37	24	54	62	47	:
Distributive trades (G)	34	:	49	51	16	9	:	38	11	28	40	33	23	56	59	43	:
Retail trade (52)	38	:	40	51	28	9	:	:	11	32	:	31	16	49	52	39	:
of which, proportion having purchased via specialised B2B Internet market places																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	19	25	36	:	:	7	35	20	13	27	30	22	:	:
Distributive trades (G)	:	:	:	25	28	30	:	28	13	47	23	17	32	28	27	:	:
Retail trade (52)	:	:	:	19	10	43	:	:	11	51	:	35	13	24	34	:	:
Sold via Internet (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	25	19	14	3	:	:	5	16	40	25	11	17	14	19	27
Distributive trades (G)	16	:	32	24	9	3	:	23	5	17	41	25	7	17	17	23	28
Retail trade (52)	14	:	23	18	11	3	:	:	5	19	:	22	46	14	12	25	20
of which, proportion having sold via a presence on specialised B2B Internet market places (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	4	12	13	:	:	4	10	13	11	29	15	:	:	:
Distributive trades (G)	:	:	:	0	25	10	:	13	5	11	15	9	26	15	13	:	:
Retail trade (52)	:	:	:	1	47	3	:	:	1	12	:	7	79	4	18	:	:

(1) All electronic networks. (2) NACE average includes Division 67. (3) PT, estimated. (4) NO, proportion having received orders via homepage.
Source: E-commerce database, Eurostat.

Table 5.1.3: Enterprises using Internet e-commerce: proportion having used Internet e-commerce for 10% or more of total purchases/sales, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Internet purchases accounted for 10% or more of total purchases (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	13	17	17	15	:	:	11	25	38	22	22	18	:	:	:
Distributive trades (G)	:	:	13	5	15	20	:	9	27	31	51	21	25	22	:	:	:
Retail trade (52)	:	:	21	0	38	22	:	:	39	37	:	15	23	24	:	:	:
Internet sales accounted for 10% or more of total sales (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	18	15	8	:	:	11	18	27	24	14	16	:	:	12
Distributive trades (G)	8	:	10	4	0	3	:	10	10	9	23	10	16	15	31	:	16
Retail trade (52)	4	:	12	0	0	3	:	:	13	15	:	8	0	9	54	:	11

(1) All electronic networks. (2) NACE average includes Division 67. (3) Enterprises weighted by their purchases except LU and AT (weighted by turnover).
(4) Enterprises weighted by their turnover.
Source: E-commerce database, Eurostat.

Table 5.1.4: Enterprises having sold via Internet: proportion of Internet sales by customer type and location, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Business (B2B sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	80	51	62	:	:	:	86	74	:	75	:	:	:	66	74
Distributive trades (G)	:	:	88	39	40	:	:	11	87	58	:	85	:	:	:	55	82
Retail trade (52)	:	:	16	9	20	:	:	:	79	41	:	5	:	:	:	7	12
Consumers (B2C sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	18	49	18	:	:	:	13	15	:	20	:	:	:	:	15
Distributive trades (G)	:	:	11	61	19	:	:	2	11	31	:	11	:	:	:	45	7
Retail trade (52)	:	:	73	91	7	:	:	:	21	57	:	93	:	:	:	93	67
Customer type not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	2	:	20	100	:	:	:	0	:	6	:	:	:	:	11
Distributive trades (G)	:	:	1	:	41	100	:	:	:	0	:	3	:	:	:	:	11
Retail trade (52)	:	:	11	:	73	100	:	:	:	0	:	2	:	:	:	:	21
Own country (domestic sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	76	90	64	92	:	:	70	23	:	82	89	:	:	82	91
Distributive trades (G)	:	:	85	92	92	93	:	73	99	52	:	95	98	:	:	85	94
Retail trade (52)	:	:	94	100	95	93	:	:	99	44	:	92	98	:	:	96	78
Other EU countries																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	6	22	6	:	:	23	69	:	11	5	:	:	:	2
Distributive trades (G)	:	:	8	2	1	5	:	3	1	40	:	2	0	:	:	10	0
Retail trade (52)	:	:	1	0	2	5	:	1	41	:	7	0	:	:	1	:	0
Rest of the world																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	4	4	2	2	:	:	6	5	:	5	4	:	:	:	1
Distributive trades (G)	:	:	3	7	6	2	:	1	1	3	:	2	2	:	:	:	0
Retail trade (52)	:	:	0	0	0	2	:	:	0	2	:	1	0	:	:	:	1
Customer destination not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	8	:	13	0	:	:	:	0	:	2	3	:	:	:	7
Distributive trades (G)	:	:	5	:	1	0	:	:	:	0	:	1	0	:	:	:	5
Retail trade (52)	:	:	5	:	2	0	:	:	:	0	:	0	5	:	:	:	21

Source: E-commerce database, Eurostat.

5.2 HOTELS AND ACCOMMODATION

Hotels and other accommodation enterprises provide services for the tourism and business travellers markets, in which, by definition, the customers are generally not local. For these enterprises, e-commerce has emerged as a very important business tool, allowing a more convenient link between enterprises and their customers, to inform them about their products and to process certain transactions (reservation and/or payment). The results of the e-commerce survey reveal that, indeed, a large share of enterprises in this sector had grasped this new tool at their disposal, and boasted greater than average use of e-mail and Internet applications, but notably a very low use of extranets, explainable by the large number of customers.

As regards e-commerce activity, as many as 49% of Internet connected enterprises in the hotel and accommodation sector sold via Internet, which was almost four times more than the average across all sectors, and for three-tenths of these, Internet sales were significant as they exceeded 10% of total sales (in value). In contrast, e-procurement attracted only 24% of enterprises, as compared with an average across all sectors of 30%, which indicates that Internet was seen more as an additional sales channel than as a tool to improve their procurement policy.

Table 5.2.1: Proportion of enterprises using ICT, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI (1)	SE	UK	NO
Computers (2)																	
NACE average (D, G, 55.1, 55.2, I, K)	94	:	98	95	88	95	:	:	95	97	94	93	84	99	99	88	95
Hotels and accommodation (55.1, 55.2)	95	:	92	94	81	98	:	93	96	88	82	95	100	98	99	65	98
E-mail																	
NACE average (D, G, 55.1, 55.2, I, K)	78	:	83	81	65	78	:	:	70	72	84	85	66	95	87	72	:
Hotels and accommodation (55.1, 55.2)	83	:	50	85	50	87	:	70	77	76	64	88	100	97	90	29	:
Intranet (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	29	:	35	31	20	23	:	:	27	38	80	37	33	36	44	26	28
Hotels and accommodation (55.1, 55.2)	30	:	10	34	14	22	:	19	20	18	48	35	90	30	41	9	29
Extranet (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	19	14	5	9	:	:	13	31	23	14	14	16	18	7	13
Hotels and accommodation (55.1, 55.2)	7	:	9	5	4	8	:	4	10	20	9	6	2	6	15	0	9
Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	81	:	95	84	64	82	:	:	74	78	85	85	69	96	95	54	82
Hotels and accommodation (55.1, 55.2)	85	:	85	85	47	89	:	88	82	83	67	88	100	97	97	28	92

(1) NACE average includes Division 67.

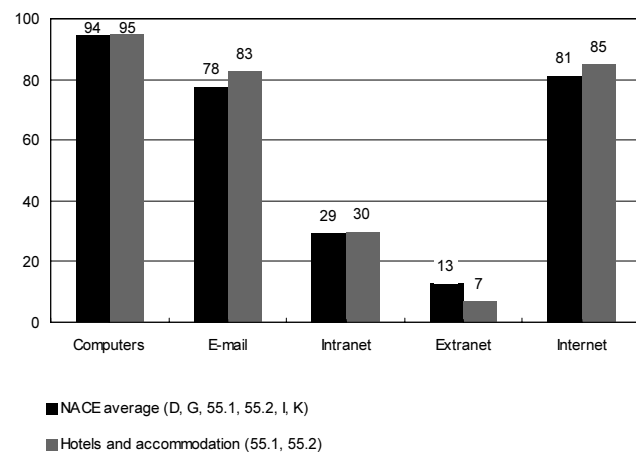
(2) Beginning 2002.

(3) NL, enterprises with computers connected in a network within the enterprise (for example a LAN).

(4) NL, enterprises with an internet protocol based closed network.

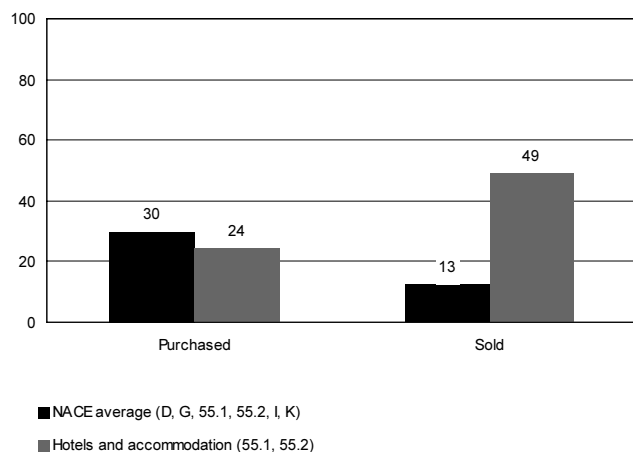
Source: E-commerce database, Eurostat.

Figure 5.2.1: Proportion of enterprises using ICT, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 5.2.2: Enterprises using Internet: proportion having used Internet for e-commerce, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Table 5.2.2: Enterprises using Internet: proportion having used Internet for e-commerce, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Purchased via Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	30	:	49	45	17	8	:	:	10	29	37	37	24	54	62	47	:
Hotels and accommodation (55.1, 55.2)	24	:	31	35	14	3	:	31	9	24	34	32	34	67	51	5	:
of which, proportion having purchased via specialised B2B Internet market places																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	19	25	36	:	:	7	35	20	13	27	30	22	:	:
Hotels and accommodation (55.1, 55.2)	:	:	:	10	21	65	:	17	7	15	13	9	13	48	17	:	:
Sold via Internet (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	25	19	14	3	:	:	5	16	40	25	11	17	14	19	27
Hotels and accommodation (55.1, 55.2)	49	:	44	59	59	21	:	72	36	65	46	70	60	71	49	20	61
of which, proportion having sold via a presence on specialised B2B Internet market places (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	4	12	13	:	:	4	10	13	11	29	15	:	:	:
Hotels and accommodation (55.1, 55.2)	:	:	:	3	11	19	:	11	5	6	6	15	46	17	11	:	:

(1) All electronic networks. (2) NACE average includes Division 67. (3) PT, estimated. (4) NO, proportion having received orders via homepage.
Source: E-commerce database, Eurostat.

Table 5.2.3: Enterprises using Internet e-commerce: proportion having used Internet e-commerce for 10% or more of total purchases/sales, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Internet purchases accounted for 10% or more of total purchases (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	13	17	17	15	:	:	11	25	38	22	22	18	:	:	:
Hotels and accommodation (55.1, 55.2)	:	:	41	8	8	4	:	12	9	23	38	19	7	49	:	:	:
Internet sales accounted for 10% or more of total sales (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	18	15	8	:	:	11	18	27	24	14	16	:	:	12
Hotels and accommodation (55.1, 55.2)	30	:	10	35	16	6	:	27	18	31	26	42	3	35	52	:	10

(1) All electronic networks. (2) NACE average includes Division 67. (3) Enterprises weighted by their purchases except LU and AT (weighted by turnover).
(4) Enterprises weighted by their turnover.
Source: E-commerce database, Eurostat.

Table 5.2.4: Enterprises having sold via Internet: proportion of Internet sales by customer type and location, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Business (B2B sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	80	51	62	:	:	:	86	74	:	75	:	:	:	66	74
Hotels and accommodation (55.1, 55.2)	:	:	76	47	12	:	:	3	17	42	:	11	:	:	66	35	26
Consumers (B2C sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	18	49	18	:	:	:	13	15	:	20	:	:	:	:	15
Hotels and accommodation (55.1, 55.2)	:	:	24	53	18	:	:	8	83	49	:	52	:	:	34	65	24
Customer type not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	2	:	20	100	:	:	:	0	:	6	:	:	:	:	11
Hotels and accommodation (55.1, 55.2)	:	:	0	:	71	100	:	:	:	0	:	37	:	:	:	:	50
Own country (domestic sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	76	90	64	92	:	:	70	23	:	82	89	:	:	82	91
Hotels and accommodation (55.1, 55.2)	:	:	72	74	14	59	:	19	31	6	:	28	29	:	:	81	32
Other EU countries																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	6	22	6	:	:	23	69	:	11	5	:	:	:	2
Hotels and accommodation (55.1, 55.2)	:	:	20	14	21	29	:	3	37	60	:	53	47	:	:	12	11
Rest of the world																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	4	4	2	2	:	:	6	5	:	5	4	:	:	:	1
Hotels and accommodation (55.1, 55.2)	:	:	8	13	11	12	:	6	31	33	:	17	9	:	:	6	4
Customer destination not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	8	:	13	0	:	:	:	0	:	2	3	:	:	:	7
Hotels and accommodation (55.1, 55.2)	:	:	0	:	54	0	:	:	:	0	:	2	15	:	:	:	52

Source: E-commerce database, Eurostat.

5.3 COMPUTER SERVICES

The sector of computer services is, by definition, an intensive user of ICT equipment, and quite logically, enterprises in this sector boasted among the highest PC equipment rates and Internet technology usage, both close to 100%. In fact, rates below this level are surprising, such as the 93% PC equipment rate recorded in the Netherlands, and this may be due to non-response.

E-commerce activity was also much higher than the average across all sectors, mainly for e-procurement, used by 62% of enterprises connected to the Internet, but also to a lesser extent for sales, with 16% of Internet connected enterprises used this channel, against an average of 13%.

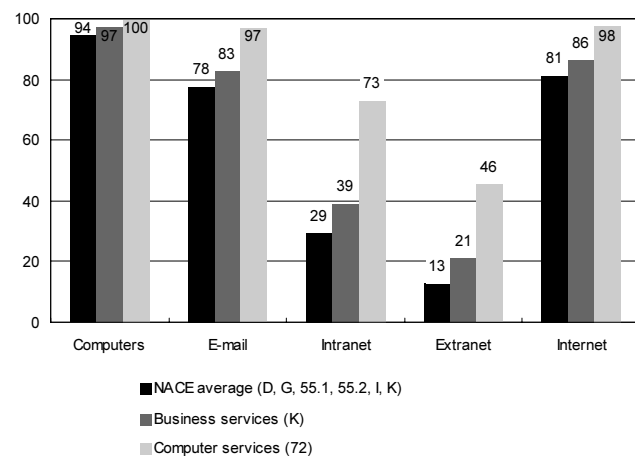
Computer service enterprises seem to mainly target the domestic market, as a generally higher than average proportion of customers were national, although this was notably not the case in Austria.

Table 5.3.1: Proportion of enterprises using ICT, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	F(1)	SE	UK	NO
Computers (2)																	
NACE average (D, G, 55.1, 55.2, I, K)	94	:	98	95	88	95	:	:	95	97	94	93	84	99	99	88	95
Business services (K)	97	:	100	98	95	95	:	95	95	99	93	99	92	100	100	95	98
Computer services (72)	100	:	100	100	100	99	:	99	100	100	93	100	100	100	100	100	99
E-mail																	
NACE average (D, G, 55.1, 55.2, I, K)	94	:	98	95	88	95	:	:	95	97	94	93	84	99	99	88	95
Business services (K)	97	:	100	98	95	95	:	95	95	99	93	99	92	100	100	95	98
Computer services (72)	100	:	100	100	100	99	:	99	100	100	93	100	100	100	100	100	99
Intranet (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	29	:	35	31	20	23	:	:	27	38	80	37	33	36	44	26	28
Business services (K)	39	:	51	39	37	28	:	45	37	55	84	49	39	49	62	34	44
Computer services (72)	73	:	75	78	65	69	:	84	60	87	89	92	88	86	88	59	76
Extranet (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	19	14	5	9	:	:	13	31	23	14	14	16	18	7	13
Business services (K)	21	:	29	22	19	13	:	17	18	42	29	24	22	25	33	12	26
Computer services (72)	46	:	56	46	53	39	:	50	36	71	49	68	68	54	60	32	49
Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	81	:	95	84	64	82	:	:	74	78	85	85	69	96	95	54	82
Business services (K)	86	:	98	87	86	81	:	88	79	91	88	94	78	99	97	66	92
Computer services (72)	98	:	100	100	100	98	:	96	95	97	93	100	100	97	100	100	94

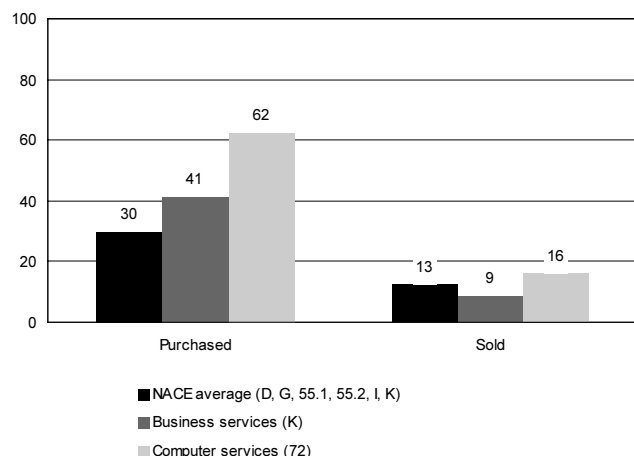
(1) NACE average and business services includes Division 67.
 (2) Beginning 2002.
 (3) NL, enterprises with computers connected in a network within the enterprise (for example a LAN).
 (4) NL, enterprises with an internet protocol based closed network.
 Source: E-commerce database, Eurostat.

Figure 5.3.1: Proportion of enterprises using ICT, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 5.3.2: Enterprises using Internet: proportion having used Internet for e-commerce, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Table 5.3.2: Enterprises using Internet: proportion having used Internet for e-commerce, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Purchased via Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	30	:	49	45	17	8	:	:	10	29	37	37	24	54	62	47	:
Business services (K)	41	:	67	53	31	9	:	58	18	37	40	45	26	64	78	67	:
Computer services (72)	62	:	90	75	76	35	:	92	39	64	69	82	50	94	95	77	:
of which, proportion having purchased via specialised B2B Internet market places																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	19	25	36	:	:	7	35	20	13	27	30	22	:	:
Business services (K)	:	:	:	13	46	45	:	22	12	29	22	13	28	39	27	:	:
Computer services (72)	:	:	:	21	49	67	:	31	15	34	31	16	34	62	39	:	:
Sold via Internet (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	25	19	14	3	:	:	5	16	40	25	11	17	14	19	27
Business services (K)	9	:	26	9	12	2	:	18	4	8	31	15	10	21	13	12	27
Computer services (72)	16	:	28	24	51	4	:	31	6	9	44	28	19	26	22	17	27
of which, proportion having sold via a presence on specialised B2B Internet market places (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	4	12	13	:	:	4	10	13	11	29	15	:	:	:
Business services (K)	:	:	:	6	46	12	:	16	4	14	19	12	17	17	:	:	:
Computer services (72)	:	:	:	15	27	53	:	32	9	0	34	0	36	18	25	:	:

(1) All electronic networks. (2) NACE average and business services includes Division 67. (3) PT, estimated. (4) NO, proportion having received orders via homepage. Source: E-commerce database, Eurostat.

Table 5.3.3: Enterprises using Internet e-commerce: proportion having used Internet e-commerce for 10% or more of total purchases/sales, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Internet purchases accounted for 10% or more of total purchases (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	13	17	17	15	:	:	11	25	38	22	22	18	:	:	:
Business services (K)	:	:	17	35	32	19	:	14	14	21	31	33	24	19	:	:	:
Computer services (72)	:	:	33	58	44	22	:	30	23	31	47	42	57	34	:	:	:
Internet sales accounted for 10% or more of total sales (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	18	15	8	:	:	11	18	27	24	14	16	:	:	12
Business services (K)	20	:	20	18	18	18	:	20	12	34	30	25	28	16	32	:	13
Computer services (72)	41	:	39	52	24	4	:	27	24	33	41	50	57	8	40	:	24

(1) All electronic networks. (2) NACE average and business services includes Division 67.

(3) Enterprises weighted by their purchases except LU and AT (weighted by turnover). (4) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

Table 5.3.4: Enterprises having sold via Internet: proportion of Internet sales by customer type and location, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Business (B2B sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	80	51	62	:	:	:	86	74	:	75	:	:	:	66	74
Business services (K)	:	:	64	59	86	:	:	9	60	65	:	70	:	:	:	87	64
Computer services (72)	:	:	69	71	90	:	:	5	84	37	:	61	:	:	:	78	64
Consumers (B2C sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	18	49	18	:	:	:	13	15	:	20	:	:	:	:	15
Business services (K)	:	:	33	41	9	:	:	38	34	8	:	27	:	:	:	13	30
Computer services (72)	:	:	31	29	10	:	:	61	7	7	:	36	:	:	:	22	34
Customer type not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	2	:	20	100	:	:	:	0	:	6	:	:	:	:	11
Business services (K)	:	:	3	:	5	100	:	:	:	0	:	3	:	:	:	:	6
Computer services (72)	:	:	0	:	0	100	:	:	:	0	:	3	:	:	:	:	2
Own country (domestic sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	76	90	64	92	:	:	70	23	:	82	89	:	:	82	91
Business services (K)	:	:	78	88	99	95	:	58	85	25	:	64	98	:	:	87	86
Computer services (72)	:	:	74	85	99	100	:	70	88	78	:	57	97	:	:	93	91
Other EU countries																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	6	22	6	:	:	23	69	:	11	5	:	:	:	2
Business services (K)	:	:	8	6	1	5	:	23	6	58	:	25	0	:	:	8	5
Computer services (72)	:	:	5	10	1	0	:	9	7	22	:	33	0	:	:	5	2
Rest of the world																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	4	4	2	2	:	:	6	5	:	5	4	:	:	:	1
Business services (K)	:	:	3	6	0	0	:	14	10	16	:	7	0	:	:	5	6
Computer services (72)	:	:	3	5	0	0	:	16	6	0	:	10	0	:	:	3	6
Customer destination not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	8	:	13	0	:	:	:	0	:	2	3	:	:	:	7
Business services (K)	:	:	12	:	0	0	:	:	:	0	:	4	1	:	:	:	4
Computer services (72)	:	:	18	:	0	0	:	:	:	0	:	0	0	:	:	:	0

Source: E-commerce database, Eurostat.

5.4 MANUFACTURING

Enterprises in these manufacturing sectors showed a significantly lower ICT use than the manufacturing average and the average across all sectors. Indeed, 86% of enterprises used computers, and 68% were connected to the Internet, the latter 10 percentage points below the manufacturing average. As a consequence, Internet based technologies, such as e-mail, intranets and extranets were also significantly below average.

E-commerce activities were also less developed than average, particularly concerning e-purchasing. Internet e-sales in con-

trast were made by 10% of Internet connected enterprises, above the manufacturing average (9%) and only slightly below the average across all sectors (13%).

In most countries studied, national customers made up a larger than average proportion of total Internet sales, particularly when compared to the other manufacturing sectors. Similarly, B2C sales were also proportionally more important, due to the type of products concerned, that include many of the consumer goods manufacturing sectors.

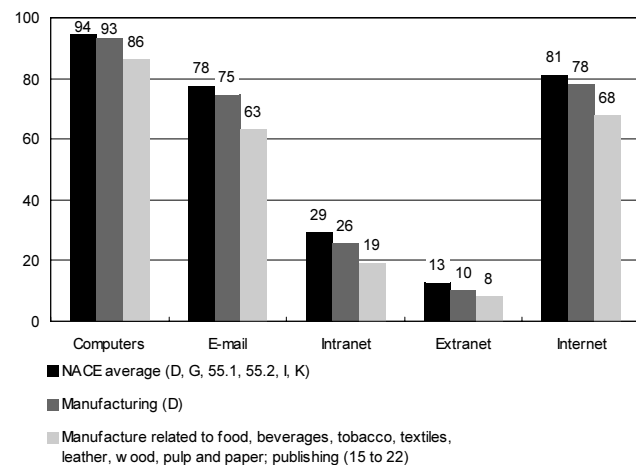
Table 5.4.1: Proportion of enterprises using ICT, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Computers (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	94	:	98	95	88	95	:	:	95	97	94	93	84	99	99	88	95
Manufacturing (D)	93	:	97	94	85	92	:	:	95	95	97	93	79	98	99	95	97
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	86	:	95	86	81	87	:	:	88	93	97	86	72	99	98	95	97
E-mail																	
NACE average (D, G, 55.1, 55.2, I, K)	78	:	83	81	65	78	:	:	70	72	84	85	66	95	87	72	:
Manufacturing (D)	75	:	81	80	63	75	:	:	69	68	89	86	60	95	89	85	:
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	63	:	77	66	60	69	:	:	56	63	86	73	55	96	87	84	:
Intranet (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	29	:	35	31	20	23	:	:	27	38	80	37	33	36	44	26	28
Manufacturing (D)	26	:	23	30	19	18	:	:	24	33	84	33	30	34	35	29	20
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	19	:	22	21	16	15	:	:	17	34	78	23	26	29	34	30	18
Extranet (5)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	19	14	5	9	:	:	13	31	23	14	14	16	18	7	13
Manufacturing (D)	10	:	12	11	3	6	:	:	11	27	19	9	12	12	12	7	9
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	8	:	14	9	3	5	:	:	8	22	18	5	10	12	14	6	9
Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	81	:	95	84	64	82	:	:	74	78	85	85	69	96	95	54	82
Manufacturing (D)	78	:	92	82	62	79	:	:	73	74	89	84	64	96	96	63	92
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	68	:	88	73	57	73	:	:	60	70	86	71	61	96	93	61	93

(1) Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing excludes the manufacture of wood and wood products (Division 20). (2) NACE average includes Division 67. (3) Beginning 2002. (4) NL, enterprises with computers connected in a network within the enterprise (for example a LAN). (5) NL, enterprises with an internet protocol based closed network.

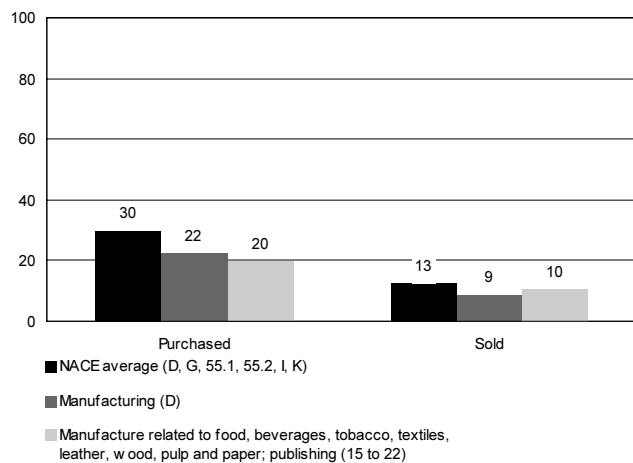
Source: E-commerce database, Eurostat.

Figure 5.4.1: Proportion of enterprises using ICT, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Figure 5.4.2: Enterprises using Internet: proportion having used Internet for e-commerce, EU, 2001 (%)



Source: E-commerce database, Eurostat.

Table 5.4.2: Enterprises using Internet: proportion having used Internet for e-commerce, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Purchased via Internet																	
NACE average (D, G, 55.1, 55.2, I, K)	30	:	49	45	17	8	:	:	10	29	37	37	24	54	62	47	:
Manufacturing (D)	22	:	44	37	14	7	:	:	8	30	33	38	23	51	59	35	:
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	20	:	47	32	12	7	:	:	7	41	33	29	23	51	54	33	:
of which, proportion having purchased via specialised B2B Internet market places																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	19	25	36	:	:	7	35	20	13	27	30	22	:	:
Manufacturing (D)	:	:	:	16	12	32	:	:	3	27	13	8	25	25	15	:	:
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	:	12	3	37	:	:	0	42	12	8	25	31	17	:	:
Sold via Internet (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	13	:	25	19	14	3	:	:	5	16	40	25	11	17	14	19	27
Manufacturing (D)	9	:	18	16	11	2	:	:	4	18	40	16	10	12	9	22	24
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	10	:	21	19	10	2	:	:	4	25	50	22	9	17	16	31	29
of which, proportion having sold via a presence on specialised B2B Internet market places (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	:	4	12	13	:	:	4	10	13	11	29	15	:	:	:
Manufacturing (D)	:	:	:	8	3	13	:	:	3	9	7	7	30	14	:	:	:
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	:	4	2	6	:	:	1	9	10	5	32	21	12	:	:

(1) All electronic networks; manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing excludes the manufacture of wood and wood products (Division 20).

(2) NACE average includes Division 67.

(3) PT, estimated.

(4) NO, proportion having received orders via homepage.

Source: E-commerce database, Eurostat.

Table 5.4.3: Enterprises using Internet e-commerce: proportion having used Internet e-commerce for 10% or more of total purchases/sales, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL (1)	AT	PT	FI (2)	SE	UK	NO
Internet purchases accounted for 10% or more of total purchases (3)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	13	17	17	15	:	:	11	25	38	22	22	18	:	:	:
Manufacturing (D)	:	:	7	15	13	9	:	:	3	19	25	17	20	12	:	:	:
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	7	8	7	9	:	:	4	17	22	19	13	12	:	:	:
Internet sales accounted for 10% or more of total sales (4)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	18	15	8	:	:	11	18	27	24	14	16	:	:	12
Manufacturing (D)	:	:	9	29	23	8	:	:	7	22	29	17	11	11	:	:	7
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	25	:	10	37	21	5	:	:	7	18	27	11	7	5	22	:	6

(1) All electronic networks; manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing excludes the manufacture of wood and wood products (Division 20).

(2) NACE average includes Division 67.

(3) Enterprises weighted by their purchases except LU and AT (weighted by turnover).

(4) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

5. E-COMMERCE IN SELECTED SECTORS

Table 5.4.4: Enterprises having sold via Internet: proportion of Internet sales by customer type and location, 2001 (%)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Business (B2B sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	80	51	62	:	:	:	86	74	:	75	:	:	:	66	74
Manufacturing (D)	:	:	82	79	49	:	:	:	91	91	:	70	:	:	:	90	81
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	78	61	71	:	:	:	89	99	:	72	:	:	90	84	78
Consumers (B2C sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	18	49	18	:	:	:	13	15	:	20	:	:	:	:	15
Manufacturing (D)	:	:	14	21	23	:	:	:	8	1	:	22	:	:	:	:	9
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	17	39	20	:	:	:	10	1	:	19	:	:	10	16	13
Customer type not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	2	20	100	:	:	:	0	0	:	6	:	:	:	:	11
Manufacturing (D)	:	:	4	28	100	:	:	:	0	0	:	8	:	:	:	:	9
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	5	8	100	:	:	:	0	0	:	8	:	:	:	:	9
Own country (domestic sales)																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	76	90	64	92	:	:	70	23	:	82	89	:	:	82	91
Manufacturing (D)	:	:	53	86	20	89	:	:	63	7	:	35	89	:	:	71	79
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	82	92	15	86	:	:	88	2	:	60	100	:	:	81	95
Other EU countries																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	12	6	22	6	:	:	23	69	:	11	5	:	:	:	2
Manufacturing (D)	:	:	10	11	48	8	:	:	31	89	:	50	6	:	:	18	6
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	10	6	73	9	:	:	7	98	:	16	0	:	:	14	0
Rest of the world																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	4	4	2	2	:	:	6	5	:	5	4	:	:	:	1
Manufacturing (D)	:	:	9	3	2	3	:	:	7	2	:	14	5	:	:	11	6
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	3	2	1	5	:	:	5	0	:	23	0	:	:	5	0
Customer destination not known/no response																	
NACE average (D, G, 55.1, 55.2, I, K)	:	:	8	13	0	:	:	:	0	0	:	2	3	:	:	:	7
Manufacturing (D)	:	:	28	30	0	:	:	:	0	0	:	1	0	:	:	:	10
Manufacture related to food, beverages, tobacco, textiles, leather, wood, pulp and paper; publishing (15 to 22)	:	:	5	11	0	:	:	:	0	0	:	1	0	:	:	:	5

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

6.1 DENMARK

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
K	Business services (real estate, renting and business activities)

Like the other Nordic countries, Denmark generally displayed higher ICT penetration and e-commerce activity than the EU average, and for some indicators it reported the highest value of any Member State.

Denmark followed Sweden and Finland with the third highest computer equipment rate of enterprises (98%) in the EU in 2002, and the third highest proportion of employees using a computer (59%). These three countries were also the only ones where at least half of the employees had access to a computer connected to the Internet. In Denmark, the higher level came mainly from the distribution and business services sectors, where the share of employees with computers connected to the Internet was significantly above the EU average, while the gap was narrower in the other sectors.

Denmark was the country in the EU where access to the Internet via broadband technologies achieved the highest take-up rates. Indeed, xDSL was the technology used for connecting to the Internet by more than one-third of Internet connected enterprises (37%) while other broadband fixed connections attracted almost one in four Internet connected enterprises (23%). Although ISDN remained, as in a majority of other countries, the most common technology used for accessing the net (used by 39% of Danish enterprises connected to the Internet), it was only slightly more common than xDSL.

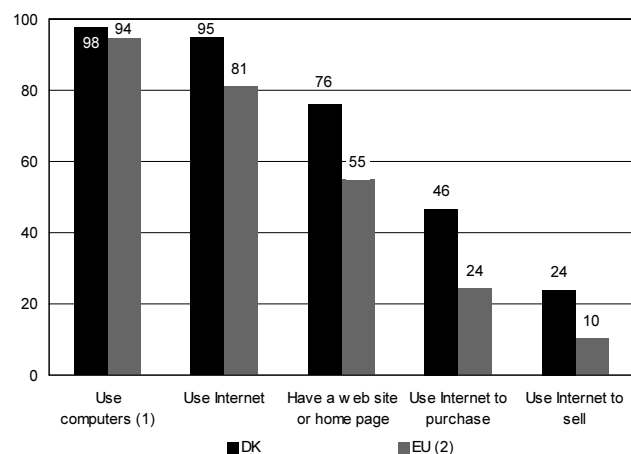
E-commerce was relatively strongly developed in Denmark, as enterprises in this country were among the most active users of e-procurement and e-sales. In fact close to half (49%) of Danish enterprises with an Internet connection had used it to purchase on-line in 2001, the second highest proportion in the EU after Sweden and approximately twice the EU average. Considering all enterprises, not just those with an Internet connection, the proportion was 46% (see figure 6.1.1). The high incidence of e-purchasing could mainly be attributed to manufacturing enterprises that were twice as active in e-procurement in Denmark (44%) compared to the EU average (22%).

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.1.1: Proportion of enterprises using ICT and Internet e-commerce, Denmark, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Furthermore, one in four Danish enterprises using the Internet reported having sold via this channel in 2001, which was the second highest proportion in the EU after the Netherlands. All sectors except accommodation services recorded a share of enterprises engaging in e-sales two to three times higher than the EU average.

Generally, fewer Danish enterprises perceived strong barriers to e-commerce compared to other EU countries. Indeed, less than 15% of Danish enterprises having sold via the Internet regarded any of the selected barriers as being of much or some importance, while in all other countries the proportions were much higher, often more than twice as high.

Table 6.1.1: Proportion of enterprises using ICT, Denmark, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	98	98	97	100	100	97	99	92	96	:	100
Proportion of employees using computers											
all computers	59	56	55	57	62	47	70	33	53	:	77
Internet connected computers	50	48	46	49	52	38	60	14	48	:	66
Used e-mail	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	83	82	81	89	93	81	83	50	78	:	91
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:
Used intranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	35	33	29	50	81	23	41	10	23	:	51
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:
Used extranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	19	18	17	22	47	12	21	9	11	:	29
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.1.2: Connection to Internet, Denmark

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	95	95	94	99	100	92	96	85	94	:	98
started (or planned) Internet use in 2002	1	1	2	1	0	2	1	7	1	:	0
do not plan to use Internet / do not know	2	2	2	0	0	3	1	0	1	:	1
answer not available	2	2	3	0	0	3	1	8	4	:	0
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	:	:	:	:	:	:	:	:	:	:	:
Modem	17	18	19	14	15	19	19	19	24	:	10
ISDN	39	40	41	34	24	46	38	35	48	:	27
xDSL	37	37	36	40	34	34	39	32	20	:	45
Other broadband < 2MBps	:	:	:	:	:	:	:	:	:	:	:
Other broadband >= 2MBps	23	21	18	35	68	17	20	2	22	:	38

Source: E-commerce database, Eurostat.

Table 6.1.3: Internet services used and provided, Denmark

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	44	43	40	55	74	39	46	28	27	:	58
Receive digital products	45	44	43	50	67	41	43	35	27	:	62
Obtain after sales services	:	:	:	:	:	:	:	:	:	:	:
Use banking or financial services	72	72	71	77	68	72	69	66	68	:	79
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	80	80	79	84	92	80	80	73	62	:	91
of which: also in foreign language (%)	:	:	:	:	:	:	:	:	:	:	:
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	96	96	96	97	96	97	95	95	96	:	97
Facilitate access to catalogues and lists	39	38	36	43	59	35	49	56	23	:	32
Selling digital products	11	11	10	12	22	7	15	28	7	:	11
Provide after sales support	27	27	26	28	40	22	32	12	30	:	27
Provide mobile Internet services	2	2	1	2	9	1	1	0	4	:	4

Source: E-commerce database, Eurostat.

Table 6.1.4: Internet purchases, Denmark, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	49	48	45	60	80	44	49	31	31	:	67
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	7	7	6	9	8	11	7	7	5	:	4
1% or more of total purchases	48	49	50	44	35	43	45	71	48	:	55
2% or more of total purchases	32	33	35	26	21	25	30	71	33	:	41
5% or more of total purchases	25	25	28	17	14	17	22	66	29	:	33
10% or more of total purchases	13	13	16	6	5	7	13	41	7	:	17
25% or more of total purchases	5	6	7	2	1	2	5	27	3	:	9
50% or more of total purchases	4	4	5	1	0	1	3	12	3	:	7
do not know	45	44	44	47	57	46	49	22	47	:	41

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.1.5: Internet sales, Denmark

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	25	25	25	26	36	18	32	44	21	:	26
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	50	50	50	52	51	56	46	25	37	:	58
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	47	47	47	46	54	52	51	42	50	:	35
1% or more of total sales	36	36	37	32	34	32	35	48	29	:	41
2% or more of total sales	30	30	31	26	25	27	26	48	26	:	40
5% or more of total sales	21	21	22	18	21	17	18	31	23	:	30
10% or more of total sales	12	12	13	11	8	9	10	10	11	:	20
25% or more of total sales	4	4	4	3	5	4	2	0	3	:	9
50% or more of total sales	2	2	2	0	0	1	1	0	0	:	5
do not know	17	17	16	22	11	16	14	10	21	:	24

(1) Enterprises weighted by their turnover.

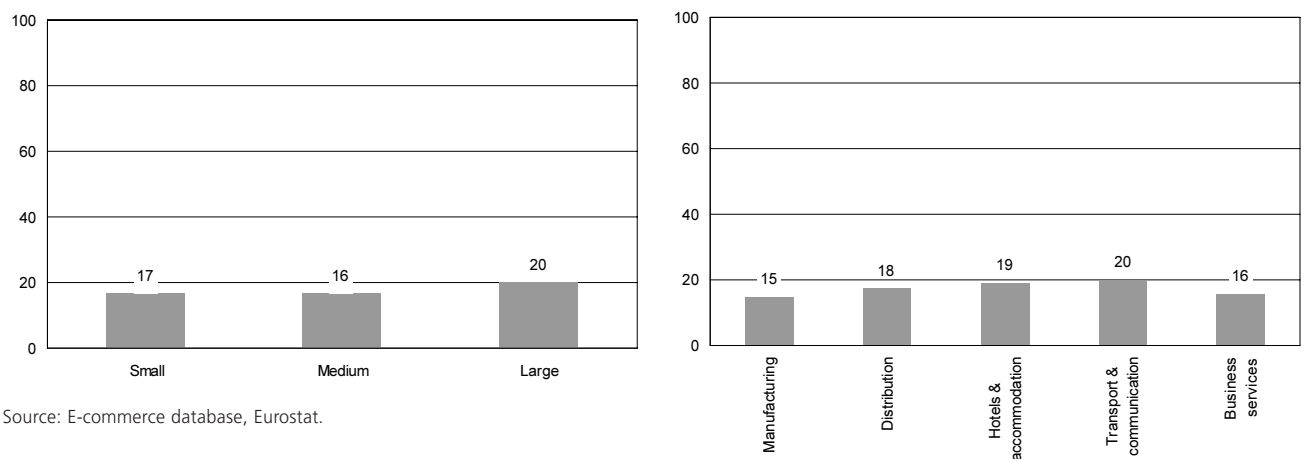
Source: E-commerce database, Eurostat.

Table 6.1.6: Internet sales: destination, Denmark, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	80	82	63	91	78	82	88	76	49	64
Consumers (B2C sales)	18	17	35	8	19	14	11	24	50	33
Do not know / no answer	2	1	2	0	3	4	1	0	1	3
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	76	80	85	77	70	53	85	72	55	78
Other EU countries	12	12	4	16	12	10	8	20	38	8
Rest of the world	4	5	4	5	2	9	3	8	4	3
Do not know / no answer	8	3	6	2	15	28	5	0	3	12

Source: E-commerce database, Eurostat.

Figure 6.1.2: Enterprises having sold via Internet: proportion having received on-line payments, Denmark, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.1.7: Barriers to e-commerce, Denmark, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	67	66	62	83	95	67	69	49	55	:	73
Customers or other enterprises not ready	53	52	49	68	71	52	60	49	51	:	45
Security problems with payments	43	43	41	50	49	40	53	30	39	:	35
Uncertainty concerning legal framework	45	44	42	55	65	44	50	18	43	:	42
Logistical problems	27	26	25	33	48	25	35	30	17	:	22
Other	:	:	:	:	:	:	:	:	:	:	:
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	14	14	14	13	16	10	16	0	14	:	16
Customers or other enterprises not ready	11	11	11	10	12	13	12	10	7	:	7
Security problems with payments	14	14	15	13	13	12	16	19	8	:	15
Uncertainty concerning legal framework	14	14	14	14	11	14	13	28	10	:	14
Logistical problems	9	9	9	6	7	9	11	19	3	:	5
Other	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.1.8: Proportion of enterprises using EDI or networks other than Internet, Denmark, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	5	4	4	7	14	3	8	1	2	:	3
Sold (1)	6	6	4	14	25	6	9	1	8	:	3

(1) Enterprises having made at least 1% of sales via such networks.

Source: E-commerce database, Eurostat.

6.2 GERMANY

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
K	Business services (real estate, renting and business activities)

Enterprises in Germany had an equipment rate in information and communication technologies close to the EU average, but used it to a greater extent for e-commerce activities.

Computers were found in 95% of German enterprises in 2002. In a manner similar to the rest of the EU, medium-sized and large enterprises were practically all computerised while 94% of small enterprises were. A breakdown by sector reveals that German enterprises were less computerised than their EU counterparts in the distribution sector, where only 92% of them used computers, among the lowest equipment rates for this sector in the EU.

Slightly more than one quarter of employees in Germany (27%) used a computer connected to the Internet, a share equal to the EU average. In fact, German enterprises reported values close to the EU average for this indicator when looking both at the breakdown by size class and by sector, except in the field of business services, where the proportion of employees using Internet connected computers was among the lowest in the EU (35%).

The pattern of use by German enterprises of their Internet connection was, to a large extent, the same as that of the EU average, both in terms of services used as a consumer and services provided. However, after-sales support was a clearly much more sought after service in this country, with particularly high rates of usage both by Internet connected enterprises obtaining this service (50%) and those providing it (45%).

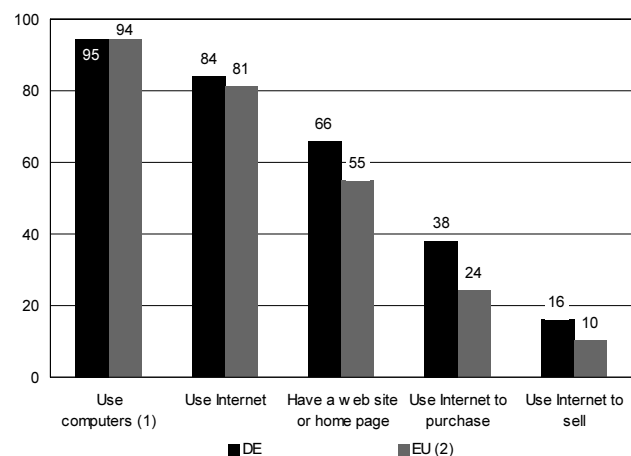
German enterprises, especially small ones, were relatively active e-commerce players. Some 45% of enterprises with an Internet connection in this country (corresponding to 38% of all enterprises: see figure 6.2.1) reported having purchased via the Internet in 2001, compared to 30% across the EU. Among small enterprises, Germany reported a particularly high recourse to e-procurement (46%). Recourse to e-procurement was above the EU average in all sectors, but to a somewhat greater extent in manufacturing and a lesser extent in business services.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.2.1: Proportion of enterprises using ICT and Internet e-commerce, Germany, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Almost one-fifth of enterprises using the Internet in Germany (19%) received orders via this channel in 2001, corresponding to 16% of all enterprises (see figure 6.2.1). This share was slightly above the EU average, but remained similar across all size classes, contrary to most other countries where large enterprises generally showed a greater propensity to sell online.

German enterprises selling via Internet were among the least geared towards export markets, as 90% of their electronic sales concerned clients located within the country. Only Spain displayed a higher proportion of domestic sales (92%), while both the United Kingdom (76%) and Italy (70%) reported significantly lower figures. Furthermore, only 13% of enterprises selling via Internet declared having received on-line payments, which was among the lowest proportion in the EU, with only Dutch enterprises recording a lower recourse to on-line payments.

Table 6.2.1: Proportion of enterprises using ICT, Germany, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	95	94	94	99	100	94	92	94	99	:	98
Proportion of employees using computers											
all computers	51	49	53	44	53	46	59	36	52	:	55
Internet connected computers	27	27	30	24	27	24	26	18	33	:	35
Used e-mail	87	87	85	97	99	85	84	87	87	:	95
used already in 2001	81	81	78	94	98	80	81	85	81	:	84
used in (or planned for) 2002	6	6	6	3	1	5	3	2	7	:	11
Do not plan to use / do not know	8	8	9	2	0	9	8	7	12	:	4
Used intranet	39	37	33	61	84	34	44	37	30	:	42
used already in 2001	31	30	26	48	73	30	29	34	25	:	39
used in (or planned for) 2002	8	7	6	13	11	5	15	3	5	:	3
Do not plan to use / do not know	56	57	61	39	16	60	48	57	70	:	56
Used extranet	16	15	13	22	45	13	17	5	10	:	23
used already in 2001	14	13	12	20	36	11	14	5	10	:	22
used in (or planned for) 2002	2	2	2	3	9	2	2	0	0	:	1
Do not plan to use / do not know	79	80	80	77	55	81	76	89	89	:	75

Source: E-commerce database, Eurostat.

Table 6.2.2: Connection to Internet, Germany

	Breakdown by size class					Breakdown by activity						
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services	
			Proportion of enterprises that: (%)									
used Internet already in 2001	84	83	82	90	98	82	83	85	85	:	87	
started (or planned) Internet use in 2002	4	5	4	7	1	6	3	2	3	:	6	
do not plan to use Internet / do not know	6	6	7	2	1	6	6	6	11	:	5	
answer not available	5	6	6	1	0	6	8	6	1	:	2	

Source: E-commerce database, Eurostat.

Table 6.2.3: Internet services used and provided, Germany

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
	Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)										
Monitor markets	41	39	36	56	69	49	29	34	47	:	43
Receive digital products	42	41	41	42	51	35	43	19	27	:	61
Obtain after sales services	50	49	50	48	56	48	48	42	53	:	55
Use banking or financial services	65	66	67	60	45	65	59	64	70	:	72
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	78	78	76	89	88	80	80	89	65	:	77
of which: also in foreign language (%)	:	:	:	:	:	:	:	:	:	:	:
	Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)										
Market products	82	81	79	90	96	88	74	86	86	:	82
Facilitate access to catalogues and lists	40	40	39	40	53	44	45	53	41	:	24
Deliver digital products	11	11	12	6	13	6	11	7	1	:	24
Provide after sales support	45	45	48	34	41	33	53	44	52	:	50
Provide mobile Internet services	6	6	6	7	9	7	3	3	10	:	9

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.2.4: Internet purchases, Germany, 2001 (%)

	Breakdown by size class				Breakdown by activity					Business services	
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication		Auxiliary financial activities
Enterprises using Internet: proportion having purchased via Internet	45	45	46	41	41	37	51	35	40	:	53
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	3	2	2	3	10	3	0	1	1	:	7
1% or more of total purchases	97	98	98	97	90	97	100	99	99	:	93
2% or more of total purchases	58	59	59	60	38	59	45	55	64	:	75
5% or more of total purchases	40	41	41	43	20	38	24	41	47	:	64
10% or more of total purchases	17	17	18	9	9	15	5	8	21	:	35
25% or more of total purchases	2	2	2	1	1	2	0	0	5	:	2
50% or more of total purchases	1	1	1	0	0	1	0	0	0	:	2
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	19	18	19	14	37	16	25	10	19	:	13

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.2.5: Internet sales, Germany

	Breakdown by size class				Breakdown by activity					Business services	
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication		Auxiliary financial activities
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	19	19	19	18	18	16	24	59	19	:	9
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	81	81	81	82	82	84	76	40	81	:	91
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	1	1	1	1	9	2	1	0	0	:	0
1% or more of total sales	99	99	99	99	91	98	99	100	100	:	100
2% or more of total sales	65	65	64	75	50	72	62	71	67	:	46
5% or more of total sales	44	45	42	58	21	56	36	57	39	:	29
10% or more of total sales	18	18	20	12	6	29	4	35	19	:	18
25% or more of total sales	1	1	1	1	2	0	0	2	1	:	5
50% or more of total sales	1	1	1	1	2	0	0	0	1	:	4
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	4	4	3	5	13	8	0	3	7	:	6

(1) Enterprises weighted by their turnover.

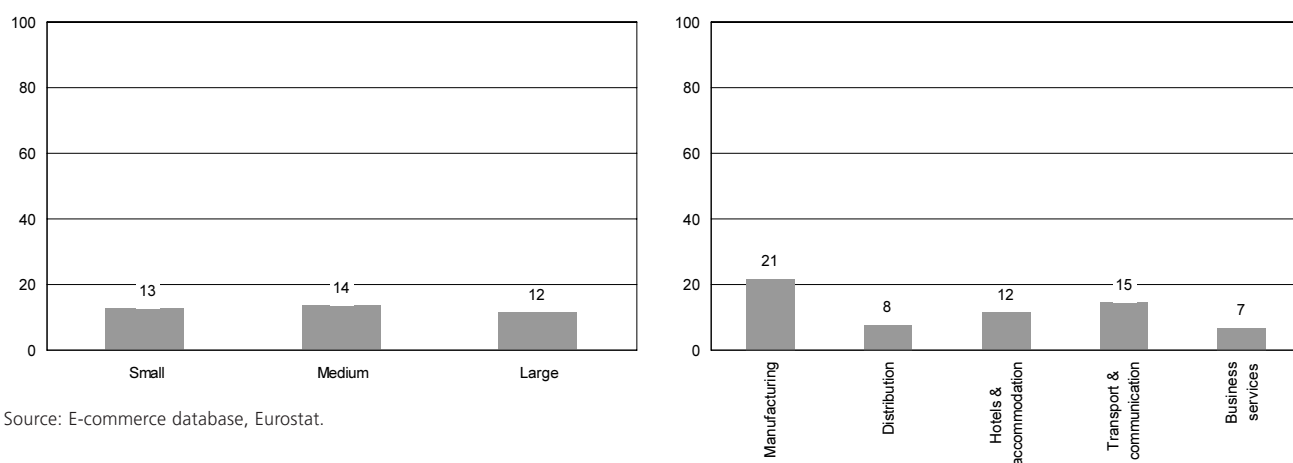
Source: E-commerce database, Eurostat.

Table 6.2.6: Internet sales: destination, Germany, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	51	56	46	65	48	79	39	47	45	59
Consumers (B2C sales)	49	44	54	35	52	21	61	53	55	41
Do not know / no answer	0	0	0	0	0	0	0	0	0	0
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	90	83	86	81	94	86	92	74	93	88
Other EU countries	6	6	7	5	6	11	2	14	6	6
Rest of the world	4	11	7	15	1	3	7	13	1	6
Do not know / no answer	0	0	0	0	0	0	0	0	0	0

Source: E-commerce database, Eurostat.

Figure 6.2.2: Enterprises having sold via Internet: proportion having received on-line payments, Germany, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.2.7: Proportion of enterprises using EDI or networks other than Internet, Germany, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	3	3	3	3	8	2	4	2	10	:	1
Sold	2	2	2	2	8	2	3	3	0	:	1

Source: E-commerce database, Eurostat.

6.3 GREECE

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

For most indicators Greece reported the lowest values compared to other countries, although Internet sales were noticeably quite well developed. It recorded for example the second lowest IT penetration in enterprises in the EU, with only 88% of Greek enterprises using computers. This low figure is wholly accounted for by the weak equipment rate within small enterprises (87%), while medium-sized and large ones were at EU equipment levels, practically all of them being computerised (99%). From a sectoral perspective the greatest gap compared to the other EU countries was in the sector of hotels and accommodation services, where only 81% of enterprises in Greece used a computer against 95% for the EU as a whole. Furthermore, Greek manufacturing enterprises were also significantly behind their EU counterparts with an equipment rate of only 85% (93% in the EU).

Only 23% of Greek employees used Internet connected computers, a share below the EU average that was nevertheless higher than some of the other southern Member States, including Italy (21%), Spain and Portugal (both 19%). In fact, the low proportion of employees using Internet connected computers in Greece was strongly influenced by the particularly low figure recorded in the sector of hotels and accommodation services (9%), while access rates in all other sectors were much closer to the EU average.

However, the average speed at which Greek enterprises were connecting to the net was considerably lower than their EU counterparts, as Greece reported the lowest take-up rates of broadband Internet access. DSL technologies attracted only 1% of enterprises in this country, ten times lower than in most other Member States, while other types of broadband connections were present in 3% of enterprises, while the comparable rate was often two to five times higher elsewhere in the EU.

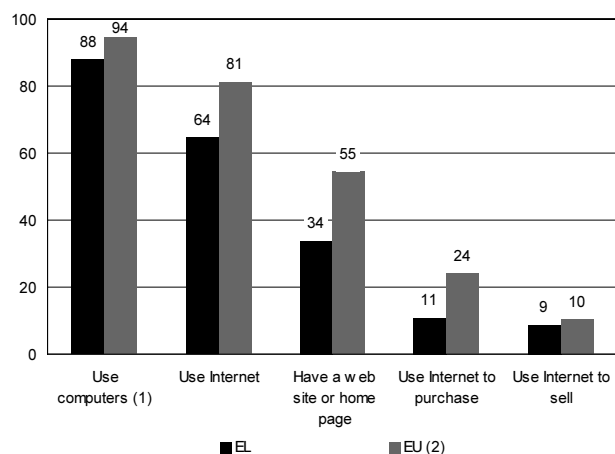
The survey sheds light on a mixed e-commerce scene in Greece, with on the one hand a low recourse to e-procurement, compensated on the other hand by an adoption of e-sales higher than average. Indeed, only 17% of enterprises having an Internet connection (corresponding to 11% of all enterprises) reported having purchased goods or services on

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.3.1: Proportion of enterprises using ICT and Internet e-commerce, Greece, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

the Internet in 2001, almost half the EU average and the third lowest rate in the EU. Both a breakdown by size class and by activity revealed similar low figures compared to the other countries. In terms of e-sales, in contrast, 14% of Greek enterprises using the Internet declared having sold through this channel, which was one percentage point higher than the EU average. Enterprises in the sectors of hotels and accommodation services (59%) and transport and communication services (24%), boasted e-sales rates clearly above the EU average, although still not among the highest values in the EU.

Unsurprisingly, the most cited barrier to e-commerce for enterprises selling via Internet in Greece was the lack of readiness of customers to use this distribution channel. In contrast, barriers relating to logistics appeared as of lesser importance than elsewhere in the EU.

Table 6.3.1: Proportion of enterprises using ICT, Greece, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	88	88	87	99	99	85	91	81	95	100	95
Proportion of employees using computers											
all computers	43	37	35	45	54	35	44	30	68	99	78
Internet connected computers	23	20	19	25	27	20	25	9	30	71	35
Used e-mail	74	74	73	95	96	72	73	73	76	63	93
used already in 2001	65	64	63	91	95	63	64	50	74	63	87
used in (or planned for) 2002	9	9	9	4	1	9	9	23	2	0	6
Do not plan to use / do not know	12	12	13	3	3	11	15	7	16	50	2
Used intranet	26	25	24	57	78	23	27	24	30	63	42
used already in 2001	20	19	18	48	66	19	18	14	29	63	37
used in (or planned for) 2002	6	6	6	8	12	4	9	10	2	0	5
Do not plan to use / do not know	41	42	42	27	13	38	44	49	51	50	35
Used extranet	7	7	6	25	50	5	8	6	11	0	20
used already in 2001	5	4	4	18	35	3	4	4	8	0	19
used in (or planned for) 2002	2	2	2	7	15	2	4	3	3	0	1
Do not plan to use / do not know	53	53	54	50	33	50	56	59	63	63	46

Source: E-commerce database, Eurostat.

Table 6.3.2: Connection to Internet, Greece

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	64	64	63	91	96	62	66	47	76	63	86
started (or planned) Internet use in 2002	11	11	11	5	1	12	9	24	2	0	5
do not plan to use Internet / do not know	12	12	12	3	3	11	15	7	15	0	5
answer not available	13	13	13	2	1	15	10	22	6	38	5
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	6	6	6	6	9	6	5	0	7	0	11
Modem	54	54	55	47	37	54	55	61	55	0	41
ISDN	56	56	56	65	57	59	54	58	53	80	50
xDSL	1	1	1	2	4	1	3	0	2	0	0
Other broadband < 2MBps	6	6	5	20	36	4	7	1	11	0	17
Other broadband >= 2MBps	3	2	2	6	17	2	3	0	6	20	5

Source: E-commerce database, Eurostat.

Table 6.3.3: Internet services used and provided, Greece

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	77	77	76	84	91	75	78	80	83	100	75
Receive digital products	15	15	15	19	25	14	13	5	16	20	34
Obtain after sales services	15	15	14	24	25	13	15	22	14	20	21
Use banking or financial services	60	60	60	60	56	61	60	68	50	100	62
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	52	52	51	68	74	50	53	90	51	20	46
of which: also in foreign language (%)	69	69	68	75	78	72	58	89	80	0	75
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	97	97	97	98	96	96	97	95	100	100	99
Facilitate access to catalogues and lists	43	43	43	47	48	45	39	58	31	0	53
Deliver digital products	7	7	7	6	7	4	6	11	7	0	23
Provide after sales support	11	11	11	14	12	7	16	5	10	100	18
Provide mobile Internet services	6	6	6	6	4	6	5	11	4	0	5

Source: E-commerce database, Eurostat.

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Table 6.3.4: Internet purchases, Greece, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	17	16	16	20	27	14	16	14	21	0	31
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	:	:	:	:	:	:	:	:	:	:	:
1% or more of total purchases	63	65	66	55	22	61	66	53	74	:	56
2% or more of total purchases	36	37	38	28	8	35	31	16	57	:	42
5% or more of total purchases	27	27	28	19	8	21	28	11	42	:	33
10% or more of total purchases	17	18	19	10	3	13	15	8	25	:	32
25% or more of total purchases	4	4	4	6	3	2	9	5	0	:	1
50% or more of total purchases	3	3	3	4	0	0	9	5	0	:	0
do not know	37	35	34	46	75	38	38	47	27	:	35
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	25	25	24	28	31	12	28	21	32	:	46

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.3.5: Internet sales, Greece

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	14	14	14	13	17	11	9	59	24	0	12
started selling in 2000 or earlier	7	7	7	7	10	4	5	37	14	0	12
started selling in 2001	6	6	6	7	7	7	4	22	10	0	0
Did not sell via Internet	84	84	84	83	79	86	88	41	69	100	84
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	:	:	:	:	:	:	:	:	:	:	:
1% or more of total sales	67	67	68	58	64	59	84	79	50	:	53
2% or more of total sales	36	36	37	27	36	28	35	60	28	:	33
5% or more of total sales	23	23	24	12	18	23	10	41	14	:	33
10% or more of total sales	15	15	15	8	9	23	0	16	14	:	18
25% or more of total sales	6	6	6	4	5	13	0	1	7	:	2
50% or more of total sales	5	5	5	0	0	10	0	0	7	:	0
do not know	40	40	40	48	41	45	27	29	63	:	46
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	12	12	12	15	18	3	25	11	1	:	46

(1) Enterprises weighted by their turnover.

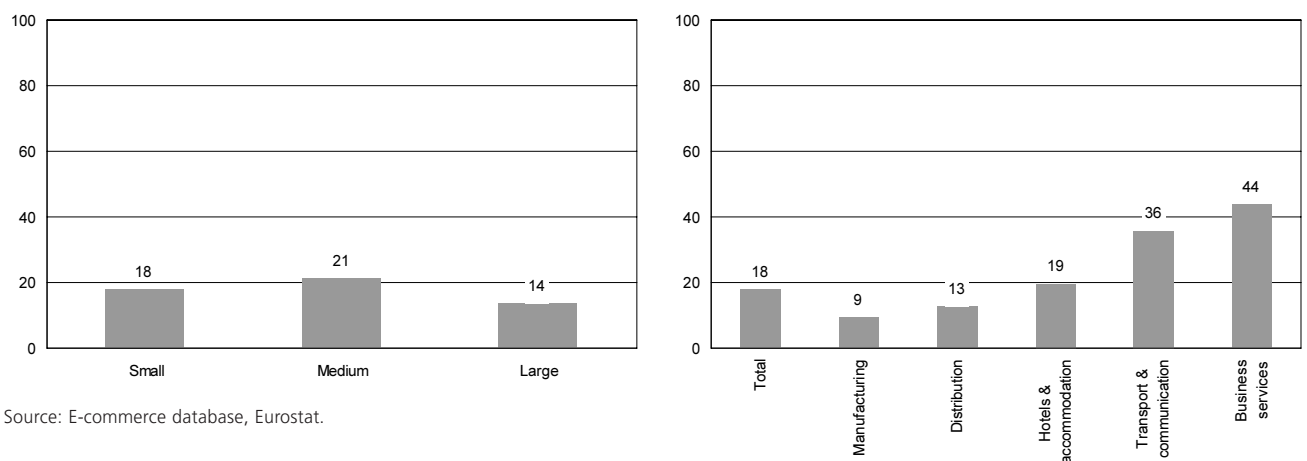
Source: E-commerce database, Eurostat.

Table 6.3.6: Internet sales: destination, Greece, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	62	49	51	36	73	49	40	12	26	86
Consumers (B2C sales)	18	25	24	26	12	23	19	18	56	9
Do not know / no answer	20	26	24	38	15	28	41	71	17	5
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	64	26	19	60	97	20	92	14	34	99
Other EU countries	22	45	51	14	2	48	1	21	63	1
Rest of the world	2	3	2	5	1	2	6	11	3	0
Do not know / no answer	13	27	28	21	1	30	1	54	0	0

Source: E-commerce database, Eurostat.

Figure 6.3.2: Enterprises having sold via Internet: proportion having received on-line payments, Greece, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.3.7: Barriers to e-commerce, Greece, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	34	34	33	48	58	35	39	10	34	50	26
Customers or other enterprises not ready	47	47	46	62	63	47	50	35	51	63	46
Security problems with payments	43	43	43	56	66	45	44	20	50	63	43
Uncertainty concerning legal framework	41	40	39	58	63	40	44	16	49	63	42
Logistical problems	24	24	24	31	41	23	27	1	36	63	31
Other	2	2	2	2	6	2	2	0	2	0	2
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	44	44	44	38	55	49	31	45	52	:	39
Customers or other enterprises not ready	81	81	80	102	86	82	80	88	79	:	65
Security problems with payments	73	73	72	81	91	70	76	64	84	:	84
Uncertainty concerning legal framework	75	75	74	83	82	69	76	74	78	:	95
Logistical problems	43	44	44	46	32	50	27	51	36	:	53
Other	5	5	5	6	5	7	1	1	14	:	0

Source: E-commerce database, Eurostat.

Table 6.3.8: Proportion of enterprises using EDI or networks other than Internet, Greece, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	0	0	0	2	9	0	1	0	0	0	1
Sold	1	1	1	3	6	1	1	0	0	0	0

Source: E-commerce database, Eurostat.

6.4 SPAIN

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

While Spanish enterprises were well equipped with information and communication technologies, they seem not to use it for Internet e-commerce as take-up was the lowest in the EU.

The computer equipment rate of enterprises in Spain was equal to 95%, one percentage point above the EU average. However, while 83% of enterprises had an Internet connection, only 19% of their employees used Internet connected computers, the lowest share in the EU. The gap was particularly significant among large enterprises, where only 19% of employees used Internet connected computers, compared to 28% in the EU. This access deficit extended over all sectors, and was particularly marked in business services where Spain (24%) displayed the lowest proportion of employees using Internet connected computers of any EU Member State.

Close to one-quarter (23%) of Spanish enterprises were running an intranet in 2001, the second lowest share in the EU, but not much below the EU average of 29%. Again, business services enterprises, joined here by manufacturing enterprises, were clearly less likely to have intranets than their EU counterparts.

In addition, Spanish enterprises connecting to the Internet favoured narrow band technology for their access, as most of them (51%) were using an analogue modem. ISDN attracted 37% of enterprises, while other broadband connections (other than DSL) achieved a take-up rate of 6% (34% in large enterprises), among the lowest rates in the EU.

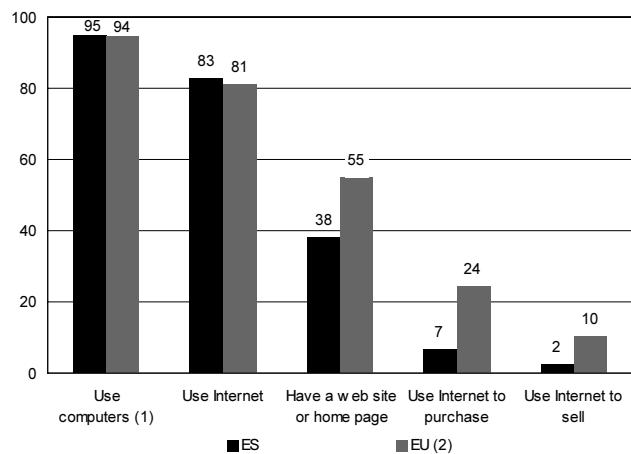
Unsurprisingly in the light of the above, Spanish enterprises displayed the lowest presence on the web compared to their EU counterparts, as only 46% of those using the Internet reported having a web site or a home page. Even among large enterprises, only 74% had a presence on the web, which was as much as eleven percentage points below the EU average. As a consequence, Spanish enterprises' e-commerce activity was the most subdued among the Member States, with 8% of enterprises with Internet access having recourse to Internet e-

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.4.1: Proportion of enterprises using ICT and Internet e-commerce, Spain, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

procurement and 3% engaging in Internet e-sales (corresponding to 7% and 2% of all enterprises, respectively - see figure 6.4.1). In terms of both Internet purchasing and sales Spain reported the smallest proportion of enterprises using Internet e-commerce for all size classes and for most sectors.

The most cited barriers to e-commerce for Spanish enterprises not selling via the Internet was, apart from their products not being suitable for Internet sales, the lack of readiness of customers, ahead of security concerns. More generally, it is worth noting that Spanish enterprises seemed the most concerned about barriers to e-commerce as they generally recorded among the highest rates for any of the selected barriers when compared to their EU counterparts.

Table 6.4.1: Proportion of enterprises using ICT, Spain, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	95	95	94	99	100	92	98	98	96	100	95
Proportion of employees using computers											
all computers	34	32	31	34	37	29	42	22	38	89	33
Internet connected computers	19	20	19	20	19	16	18	11	26	75	24
Used e-mail	81	81	79	94	99	78	85	90	84	:	80
used already in 2001	78	78	75	92	98	75	83	87	79	98	77
used in (or planned for) 2002	3	3	3	1	0	3	2	4	4	:	2
Do not plan to use / do not know	19	19	21	6	1	22	15	10	16	:	20
Used intranet	26	24	21	43	73	20	29	26	28	73	31
used already in 2001	23	22	18	40	68	18	26	22	25	72	28
used in (or planned for) 2002	3	3	3	3	6	3	2	3	3	1	3
Do not plan to use / do not know	74	76	79	57	27	80	71	74	72	27	69
Used extranet	11	10	9	19	39	8	12	11	14	32	15
used already in 2001	9	8	7	16	33	6	11	8	11	26	13
used in (or planned for) 2002	2	2	2	3	6	2	2	3	3	7	1
Do not plan to use / do not know	89	90	91	81	62	92	88	89	86	68	85

Source: E-commerce database, Eurostat.

Table 6.4.2: Connection to Internet, Spain

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	83	82	80	94	98	79	88	89	84	98	81
started (or planned) Internet use in 2002	2	3	3	1	:	3	2	3	4	:	2
do not plan to use Internet / do not know	10	10	11	3	:	11	8	8	10	:	12
answer not available	5	5	6	2	:	7	3	0	2	:	5
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	3	3	2	6	15	3	3	1	4	2	4
Modem	51	51	53	42	41	54	49	46	53	35	47
ISDN	37	37	35	45	46	35	40	32	41	32	36
xDSL	:	:	:	:	:	:	:	:	:	:	:
Other broadband < 2MBps	:	:	:	:	:	:	:	:	:	:	:
Other broadband >= 2MBps	6	5	3	12	34	4	6	4	8	33	7

Source: E-commerce database, Eurostat.

Table 6.4.3: Internet services used and provided, Spain

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	54	53	52	59	73	56	54	65	46	77	47
Receive digital products	21	21	19	28	46	22	18	17	18	39	28
Obtain after sales services	23	22	20	31	45	20	25	23	23	32	26
Use banking or financial services	78	78	77	83	82	78	82	62	81	82	73
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	46	45	42	62	74	47	43	71	46	61	45
of which: also in foreign language (%)	42	41	37	54	61	50	30	78	40	17	32
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	54	55	56	49	50	51	50	82	58	41	61
Facilitate access to catalogues and lists	60	60	59	62	62	65	65	79	44	53	41
Deliver digital products	6	6	6	8	10	5	5	3	4	6	14
Provide after sales support	18	17	17	18	23	11	22	7	28	30	23
Provide mobile Internet services	2	2	2	2	6	1	1	1	4	12	6

Source: E-commerce database, Eurostat.

Table 6.4.4: Internet purchases, Spain, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	8	8	7	10	15	7	9	3	7	10	9
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	65	65	62	73	75	78	58	57	63	86	53
1% or more of total purchases	35	35	38	27	25	22	42	43	37	14	47
2% or more of total purchases	29	29	31	24	20	17	37	39	21	14	38
5% or more of total purchases	21	21	22	18	11	13	26	16	15	14	28
10% or more of total purchases	15	15	17	11	6	9	20	4	12	14	19
25% or more of total purchases	9	9	11	5	4	6	10	4	8	0	14
50% or more of total purchases	6	7	8	2	2	1	9	0	5	0	12
do not know	0	0	0	0	0	0	0	0	0	0	0
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	36	35	34	42	37	32	30	65	54	32	45

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.4.5: Internet sales, Spain

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	3	3	2	4	7	2	3	21	2	10	2
started selling in 2000 or earlier	1	1	1	3	4	1	1	13	1	10	1
started selling in 2001	2	1	2	1	3	1	2	9	1	0	1
Did not sell via Internet	97	97	98	96	93	98	97	79	98	90	98
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	55	55	57	48	64	52	59	46	74	18	68
1% or more of total sales	45	45	43	52	36	48	41	54	26	82	32
2% or more of total sales	30	31	30	32	27	37	28	30	24	82	20
5% or more of total sales	18	18	17	23	16	17	16	18	14	82	19
10% or more of total sales	8	8	7	10	8	8	3	6	9	0	18
25% or more of total sales	2	2	1	3	2	2	1	2	4	0	2
50% or more of total sales	1	1	0	2	2	0	1	1	4	0	1
do not know	0	0	0	0	0	0	0	0	0	0	0
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	13	13	10	20	22	13	10	19	18	0	12

(1) Enterprises weighted by their turnover.

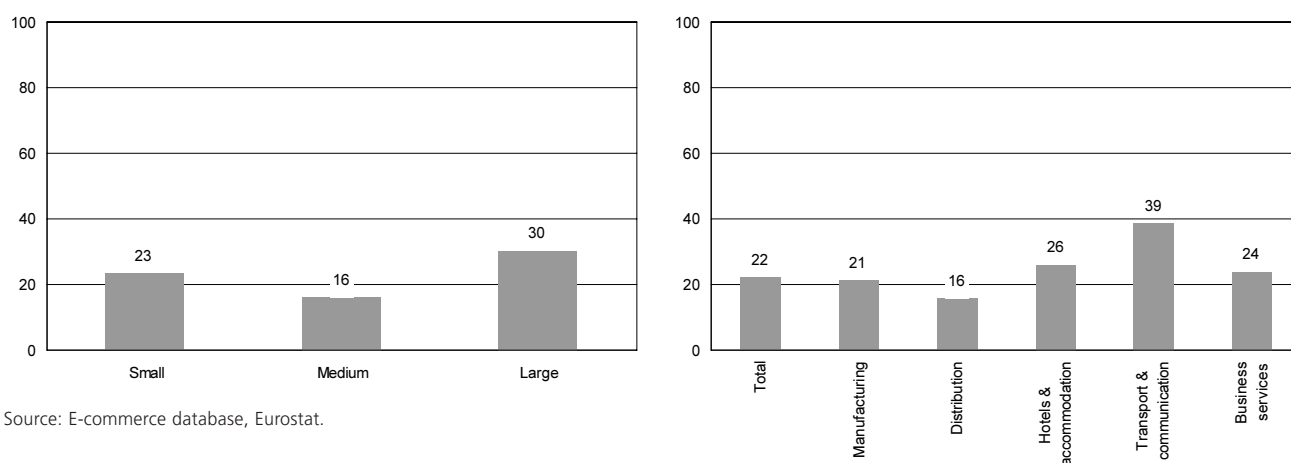
Source: E-commerce database, Eurostat.

Table 6.4.6: Internet sales: destination, Spain, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
			small	medium						
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	92	88	83	90	93	89	93	59	99	95
Other EU countries	6	7	7	8	5	8	5	29	1	5
Rest of the world	2	4	10	2	2	3	2	12	0	0
Do not know / no answer	0	0	0	0	0	0	0	0	0	0

Source: E-commerce database, Eurostat.

Figure 6.4.2: Enterprises having sold via Internet: proportion having received on-line payments, Spain, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.4.7: Barriers to e-commerce, Spain, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
			small	medium							
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	79	79	79	79	75	77	80	52	79	78	84
Customers or other enterprises not ready	66	67	67	66	59	66	76	50	60	73	57
Security problems with payments	58	57	57	62	59	57	62	53	55	73	53
Uncertainty concerning legal framework	55	55	55	59	54	54	60	50	56	64	51
Logistical problems	46	46	46	49	47	45	52	32	45	59	42
Other	4	4	4	3	2	6	2	2	4	9	3

Source: E-commerce database, Eurostat.

Table 6.4.8: Proportion of enterprises using EDI or networks other than Internet, Spain, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
			small	medium							
Purchased	1	1	0	1	5	0	1	0	0	0	0
Sold	1	1	1	2	10	2	1	1	0	0	0

Source: E-commerce database, Eurostat.

6.5 IRELAND

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
K	Business services (real estate, renting and business activities)

E-commerce was well developed in Ireland, particularly in transport and communication services, supported by a high penetration of information and communication technologies within enterprises.

While 95% of Irish enterprises used computers, 83% of them had a connection to the Internet; this was few percentage points above the EU average. Overall, 26% of employees used an Internet connected computer. When analysing this indicator by sector however, it appears that these figures hide contrasting situations. On the one hand, distribution and hotel and accommodation services reported the lowest employee use of Internet connected computers in the EU, which were on the other hand nearly balanced out by a much higher usage in transport and communication services and, to a greater extent, in business services.

Analogue modems were used to access the Internet by 51% of Internet connected enterprises in Ireland in 2001, making it the most common way to access the Internet (ISDN data not available). In contrast, broadband technologies displayed a relatively low take-up rate, particularly DSL.

The survey results reveal that Irish enterprises tended to engage actively in Internet e-commerce. Indeed, while equipment rates were generally comparable to the EU average, the share of enterprises engaging in e-commerce, both as buyers and as sellers, was markedly above average. Some 46% of enterprises using the Internet (corresponding to 38% of all enterprises - see figure 6.5.1) had recourse to e-procurement in 2001, compared with an EU average of 30%. Similarly, 26% of Internet connected enterprises had received orders via Internet (or 21% of all enterprises), which was twice the proportion in the EU as a whole.

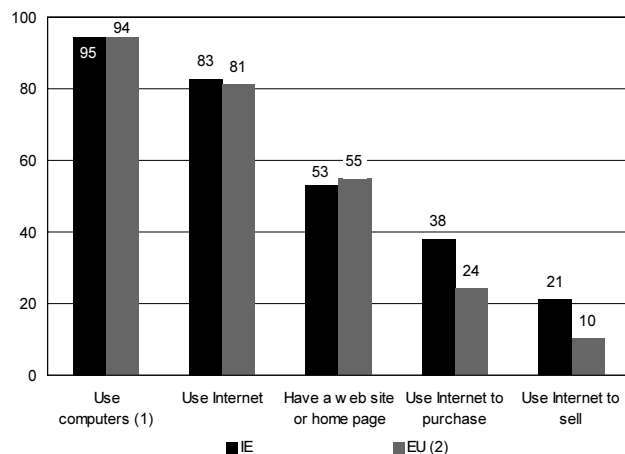
The higher incidence of Internet e-commerce in Ireland was evident across all size classes, and the gap between Ireland and the EU average fairly constant. In contrast, an analysis by activity shows clear divergences. Irish transport and communication enterprises are strong users of Internet e-commerce,

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.5.1: Proportion of enterprises using ICT and Internet e-commerce, Ireland, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

both for e-procurement (52% of Internet connected enterprises) and e-sales (34%), with share approximately two and two and a half times above the EU average respectively. Similarly, enterprises in the hotels and accommodation services sector in Ireland were particularly active in Internet sales, 72% of those with an Internet connection having received orders via the Internet, the highest proportion in the EU within this sector. Enterprises in the distribution sector displayed e-commerce take-up rates closer to the EU average.

Most of the Irish e-commerce activity was with clients outside of Ireland. In fact only 10% of Internet sales were domestic sales, by far the lowest proportion compared to the corresponding figure recorded in the other Member States.

Table 6.5.1: Proportion of enterprises using ICT, Ireland, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	95	95	94	99	98	:	93	93	94	:	95
Proportion of employees using computers											
all computers	50	49	47	50	53	:	47	19	51	:	80
Internet connected computers	26	25	24	26	27	:	16	7	36	:	48
Used e-mail	85	85	82	96	94	:	78	86	82	:	90
used already in 2001	72	72	68	89	93	:	62	70	74	:	81
used in (or planned for) 2002	13	13	14	7	1	:	16	16	9	:	9
Do not plan to use / do not know	9	9	10	2	0	:	13	6	11	:	5
Used intranet	39	37	34	57	77	:	31	25	42	:	51
used already in 2001	31	30	26	48	67	:	23	19	35	:	45
used in (or planned for) 2002	8	7	7	9	10	:	8	6	6	:	7
Do not plan to use / do not know	38	38	41	25	10	:	46	40	37	:	28
Used extranet	15	14	12	25	42	:	12	9	19	:	25
used already in 2001	10	9	8	18	32	:	8	4	13	:	17
used in (or planned for) 2002	5	5	5	7	10	:	4	5	6	:	8
Do not plan to use / do not know	52	52	53	46	37	:	58	43	50	:	45

Source: E-commerce database, Eurostat.

Table 6.5.2: Connection to Internet, Ireland

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	83	82	80	94	96	:	75	88	83	:	88
started (or planned) Internet use in 2002	1	1	1	1	0	:	2	2	0	:	1
do not plan to use Internet / do not know	6	6	7	2	0	:	8	4	8	:	3
answer not available	10	11	12	2	4	:	15	6	9	:	9
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	7	6	6	8	17	:	7	4	9	:	9
Modem	51	51	54	39	35	:	56	73	43	:	40
ISDN	:	:	:	:	:	:	:	:	:	:	:
xDSL	6	6	6	6	6	:	5	1	8	:	10
Other broadband < 2MBps	9	8	5	18	46	:	5	1	9	:	16
Other broadband >= 2MBps	5	5	3	11	26	:	3	0	9	:	8

Source: E-commerce database, Eurostat.

Table 6.5.3: Internet services used and provided, Ireland

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	40	39	38	45	44	:	39	66	41	:	37
Receive digital products	30	30	28	35	42	:	23	18	22	:	40
Obtain after sales services	22	21	20	26	39	:	19	17	23	:	26
Use banking or financial services	69	69	68	74	69	:	70	57	66	:	68
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	64	63	61	75	80	:	56	92	68	:	68
of which: also in foreign language (%)	11	10	8	16	37	:	6	6	12	:	14
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	90	90	90	90	80	:	89	99	92	:	87
Facilitate access to catalogues and lists	45	45	44	46	41	:	53	41	44	:	35
Deliver digital products	12	12	12	11	14	:	7	4	8	:	22
Provide after sales support	18	18	18	17	18	:	18	9	25	:	23
Provide mobile Internet services	7	6	5	9	20	:	4	7	15	:	10

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.5.4: Internet purchases, Ireland, 2001 (%)

	Breakdown by size class				Breakdown by activity						
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	46	45	44	52	62	:	38	31	52	:	58
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	:	:	:	:	:	:	:	:	:	:	:
1% or more of total purchases	52	52	53	52	51	:	52	40	48	:	50
2% or more of total purchases	28	28	29	27	22	:	26	26	24	:	29
5% or more of total purchases	19	19	19	19	20	:	18	19	14	:	24
10% or more of total purchases	10	10	10	9	12	:	9	12	4	:	14
25% or more of total purchases	3	3	3	2	0	:	3	4	1	:	4
50% or more of total purchases	2	2	2	1	0	:	3	1	0	:	3
do not know	48	48	48	46	55	:	45	79	58	:	49
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	22	22	22	23	35	:	28	17	21	:	22

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.5.5: Internet sales, Ireland

	Breakdown by size class				Breakdown by activity						
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	26	26	25	27	33	:	23	72	34	:	18
started selling in 2000 or earlier	20	20	19	21	23	:	16	66	29	:	14
started selling in 2001	6	6	6	6	10	:	7	6	5	:	4
Did not sell via Internet	76	76	77	70	63	:	82	27	65	:	82
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	:	:	:	:	:	:	:	:	:	:	:
1% or more of total sales	53	53	55	48	47	:	57	51	54	:	38
2% or more of total sales	38	38	39	35	19	:	31	47	37	:	36
5% or more of total sales	28	28	29	27	15	:	18	39	35	:	30
10% or more of total sales	17	17	18	16	9	:	10	27	20	:	20
25% or more of total sales	6	6	7	3	4	:	4	6	6	:	9
50% or more of total sales	3	3	3	1	2	:	2	1	1	:	6
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	13	12	11	16	15	:	13	11	19	:	16

(1) Enterprises weighted by their turnover.

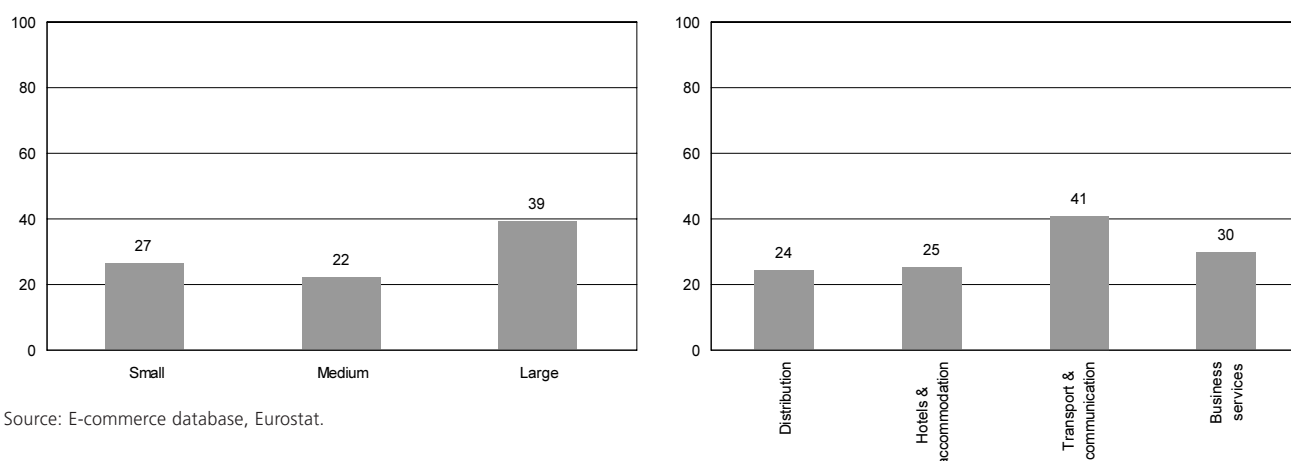
Source: E-commerce database, Eurostat.

Table 6.5.6: Internet sales: destination, Ireland, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	72	17	14	19	78	:	11	3	0	9
Consumers (B2C sales)	13	24	18	30	12	:	2	8	62	38
Do not know / no answer	15	59	67	51	10	:	87	89	38	53
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	10	37	60	15	7	:	73	19	15	58
Other EU countries	66	18	9	27	71	:	3	3	48	23
Rest of the world	16	23	11	33	15	:	1	6	0	14
Do not know / no answer	9	22	20	25	7	:	23	71	37	5

Source: E-commerce database, Eurostat.

Figure 6.5.2: Enterprises having sold via Internet: proportion having received on-line payments, Ireland, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.5.7: Barriers to e-commerce, Ireland, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	51	51	49	62	56	:	45	20	48	:	59
Customers or other enterprises not ready	45	45	43	52	49	:	48	20	43	:	36
Security problems with payments	37	37	36	43	37	:	37	26	43	:	32
Uncertainty concerning legal framework	34	34	32	43	37	:	32	21	35	:	31
Logistical problems	32	32	31	36	34	:	37	16	32	:	24
Other	3	3	3	4	9	:	3	2	3	:	3
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	42	42	40	48	51	:	46	21	35	:	42
Customers or other enterprises not ready	58	57	56	63	79	:	67	31	63	:	55
Security problems with payments	56	55	54	61	69	:	55	57	59	:	46
Uncertainty concerning legal framework	46	46	44	51	61	:	45	31	46	:	54
Logistical problems	39	37	36	41	62	:	44	17	36	:	31
Other	4	4	4	6	7	:	5	2	3	:	3

Source: E-commerce database, Eurostat.

Table 6.5.8: Proportion of enterprises using EDI or networks other than Internet, Ireland, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	8	7	7	9	20	:	13	6	6	:	3
Sold	9	8	6	21	34	:	9	8	15	:	3

Source: E-commerce database, Eurostat.

6.6 ITALY

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
K	Business services (real estate, renting and business activities)

The survey shows that Italian enterprises did not convert their relatively high IT equipment rate into high Internet use nor high Internet e-commerce.

The share of enterprises using computers in Italy followed closely the EU average in all size classes and most sectors. Transport and communication services enterprises, however, displayed among the lowest equipment rate for this sector within the EU, with only 86% using a computer against an EU average of 95%.

Internet was used in three-quarters (74%) of Italian enterprises. This relatively low rate of Internet use by enterprises converted into a 21% share of employees using Internet connected computers, the third lowest share within the EU, with only Spain and Portugal (19% both) reporting lower figures. The gap in terms of employee use of Internet connected computers was not limited to small and medium enterprises since only 23% of employees working in large enterprises had an Internet access, five percentage points below the EU average. An analysis by sector showed lower shares in most sectors, with the notable exception of business services where 40% of Italian employees used Internet connected computers, three percentage points above the EU average.

ISDN was the preferred channel used to connect to the Internet, used by 59% of Internet connected enterprises, while 39% used analogue modems. Among broadband technologies DSL displayed a relatively high take-up rate of 18%, although the use of other broadband technologies was particularly low (1%).

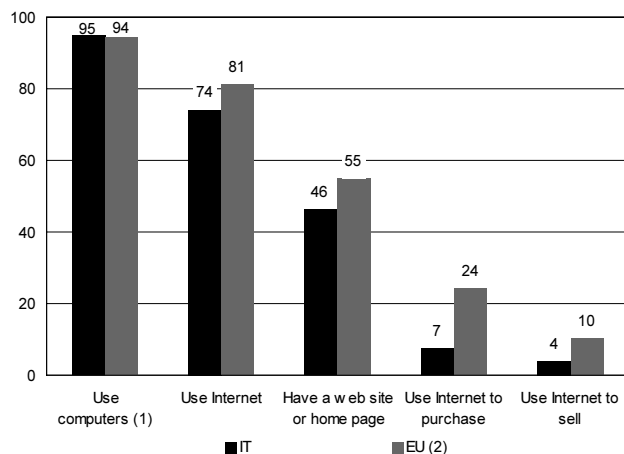
Among the various Internet applications in terms of services used and provided, Italian enterprises stood out from those in the other Member States with the lowest recourse to after-sales service via Internet both by enterprises looking for this service (15%) and those providing it (7%). Market monitoring and banking and financial services also reported particularly low usage rates.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.6.1: Proportion of enterprises using ICT and Internet e-commerce, Italy, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

More generally, enterprises in Italy were among the least active in the EU's Internet e-commerce activity. Only 10% of those using the Internet (corresponding to 7% of all enterprises - see figure 6.6.1) reported having purchased goods and services via the Internet in 2001, against 30% in the EU, while 5% (or 4% of all enterprises) declared having received orders via this channel, also nearly three times less than the EU average (13%). For both indicators, Italy often had one of the lowest levels of activity in Internet e-commerce of the EU Member States, across regardless of the size class or sector studied, with generally only Spain reporting lower values.

Table 6.6.1: Proportion of enterprises using ICT, Italy, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	95	95	94	99	100	95	98	96	86	:	95
Proportion of employees using computers											
all computers	42	37	35	41	50	35	50	25	44	:	62
Internet connected computers	21	19	19	21	23	17	21	16	20	:	40
Used e-mail	79	79	77	94	98	79	81	86	70	:	82
used already in 2001	70	70	67	88	95	69	72	77	60	:	75
used in (or planned for) 2002	9	9	10	6	3	9	9	9	10	:	7
Do not plan to use / do not know	16	16	17	5	1	16	16	10	16	:	13
Used intranet	32	32	29	55	80	29	37	28	30	:	44
used already in 2001	27	26	23	47	70	24	30	20	25	:	37
used in (or planned for) 2002	6	6	5	8	9	5	7	7	5	:	7
Do not plan to use / do not know	62	63	65	44	20	65	61	69	56	:	52
Used extranet	17	16	15	29	50	15	18	13	15	:	23
used already in 2001	13	12	11	22	40	11	14	10	12	:	18
used in (or planned for) 2002	4	4	4	7	10	4	4	3	4	:	4
Do not plan to use / do not know	78	79	80	70	50	79	79	83	71	:	72

Source: E-commerce database, Eurostat.

Table 6.6.2: Connection to Internet, Italy

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	74	74	72	89	95	73	76	82	65	:	79
started (or planned) Internet use in 2002	7	7	7	5	3	7	7	7	8	:	5
do not plan to use Internet / do not know	13	14	15	4	2	14	14	8	13	:	11
answer not available	5	5	6	1	0	5	2	4	14	:	5
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	3	2	2	4	12	2	3	2	3	:	4
Modem	39	40	41	31	28	41	39	42	40	:	30
ISDN	59	60	60	58	42	61	60	58	57	:	53
xDSL	18	18	16	30	39	13	23	18	22	:	34
Other broadband < 2MBps	4	3	2	8	31	3	3	1	5	:	8
Other broadband >= 2MBps	1	1	1	2	12	1	1	0	3	:	3

Source: E-commerce database, Eurostat.

Table 6.6.3: Internet services used and provided, Italy

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	38	38	37	43	61	39	37	47	31	:	36
Receive digital products	33	33	32	38	49	32	34	30	26	:	44
Obtain after sales services	15	15	14	18	25	12	21	9	23	:	16
Use banking or financial services	52	52	51	54	52	52	53	39	54	:	50
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	62	62	59	77	82	64	60	90	52	:	54
of which: also in foreign language (%)	59	58	56	71	74	68	36	93	52	:	37
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	88	88	88	87	84	89	89	88	82	:	80
Facilitate access to catalogues and lists	43	43	43	44	47	44	46	69	27	:	29
Deliver digital products	5	5	5	5	9	4	3	2	4	:	17
Provide after sales support	7	7	6	10	17	6	9	3	11	:	11
Provide mobile Internet services	3	3	3	5	7	2	3	3	8	:	7

Source: E-commerce database, Eurostat.

Table 6.6.4: Internet purchases, Italy, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	10	10	9	12	15	8	11	9	6	:	18
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	62	61	58	78	79	71	53	39	73	:	52
1% or more of total purchases	38	39	42	22	21	29	47	61	27	:	48
2% or more of total purchases	28	28	31	13	11	16	43	37	15	:	38
5% or more of total purchases	21	21	24	10	5	11	38	9	14	:	28
10% or more of total purchases	11	11	13	5	4	3	27	9	6	:	14
25% or more of total purchases	7	8	9	2	3	1	20	5	0	:	10
50% or more of total purchases	2	2	2	1	1	0	7	3	0	:	3
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	7	7	8	7	9	3	13	7	11	:	12

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.6.5: Internet sales, Italy

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	5	5	5	4	7	4	5	36	3	:	4
started selling in 2000 or earlier	3	3	3	3	4	2	3	29	2	:	3
started selling in 2001	2	2	2	2	3	2	2	7	2	:	1
Did not sell via Internet	93	93	93	94	89	95	94	60	95	:	94
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	36	36	36	34	48	41	49	18	65	:	25
1% or more of total sales	64	64	64	66	52	59	51	82	35	:	75
2% or more of total sales	47	48	48	49	37	46	37	65	20	:	42
5% or more of total sales	24	24	22	38	22	18	16	40	19	:	24
10% or more of total sales	11	11	10	16	14	7	10	18	9	:	12
25% or more of total sales	4	3	3	7	7	4	3	5	7	:	0
50% or more of total sales	1	1	1	3	1	1	1	1	6	:	0
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	4	4	3	5	10	3	5	5	7	:	4

(1) Enterprises weighted by their turnover.

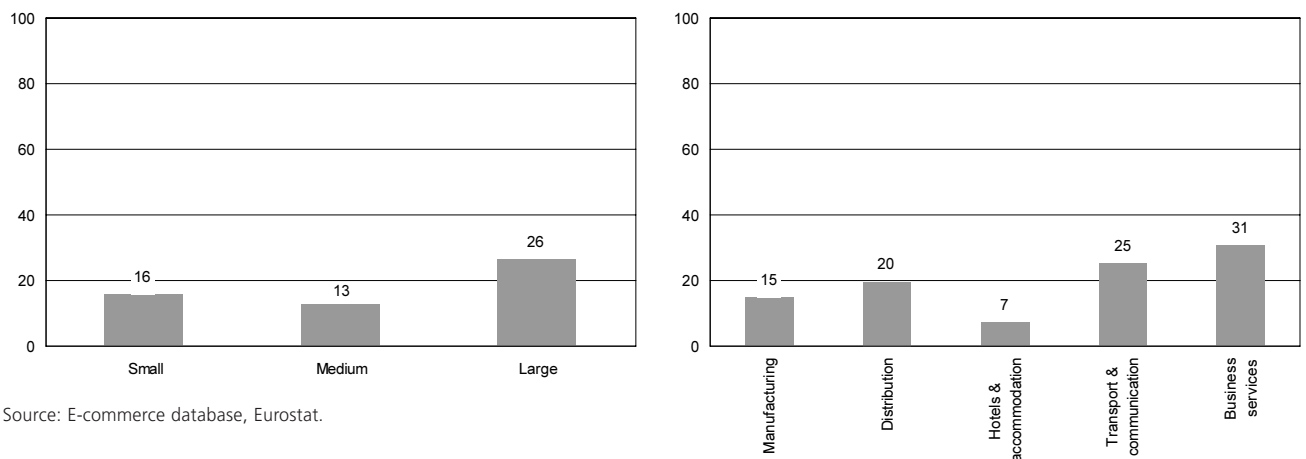
Source: E-commerce database, Eurostat.

Table 6.6.6: Internet sales: destination, Italy, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & Transport &		Business services
			small	medium				accom- modation	communi- cation	
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	86	83	68	91	90	91	87	17	72	60
Consumers (B2C sales)	13	16	30	8	10	8	11	83	27	34
Do not know / no answer	1	1	2	1	0	1	2	0	1	6
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	70	81	65	90	59	63	99	31	89	85
Other EU countries	23	12	23	7	35	31	1	37	8	6
Rest of the world	6	6	12	3	6	7	1	31	3	10
Do not know / no answer	0	0	0	0	0	0	0	0	0	0

Source: E-commerce database, Eurostat.

Figure 6.6.2: Enterprises having sold via Internet: proportion having received on-line payments, Italy, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.6.7: Barriers to e-commerce, Italy, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & Transport &		Auxiliary financial activities	Business services
			small	medium				accom- modation	communi- cation		
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	60	60	59	65	57	62	59	38	53	:	60
Customers or other enterprises not ready	60	60	59	65	57	60	68	43	48	:	51
Security problems with payments	59	59	59	63	55	61	63	52	51	:	47
Uncertainty concerning legal framework	55	55	55	60	55	57	59	47	44	:	47
Logistical problems	43	43	42	46	38	43	49	30	35	:	34
Other	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.6.8: Proportion of enterprises using EDI or networks other than Internet, Italy, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & Transport &		Auxiliary financial activities	Business services
			small	medium				accom- modation	communi- cation		
Purchased	1	1	1	2	5	1	3	0	1	:	1
Sold	1	1	1	4	13	1	1	0	1	:	0

Source: E-commerce database, Eurostat.

6.7 LUXEMBOURG

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

IT penetration and e-commerce activity in Luxembourg closely followed the EU average, although with a slightly higher recourse to e-sales, but lower e-procurement. This was mainly owing to the high involvement of small and medium enterprises, while large enterprises were generally less engaged in this field compared to the other Member States.

While Luxembourg displayed among the highest computer penetration rates in enterprises (97%), it recorded at the same time the lowest equipment rate of large enterprises, though admittedly this was still 97% (against 99% in the EU). Some 79% of enterprises had access to the Internet, and through this connection 26% of all employees used Internet connected computers, figures that were in both cases comparable to the EU average. A smaller proportion of employees in large Luxembourg enterprises used Internet connected computers than on average in the EU, and also less than in small and medium-sized Luxembourg enterprises. A breakdown by sector reveals that manufacturing and transport and communications enterprises in Luxembourg both reported the lowest rates within the EU of employee use of Internet connected computers.

Among enterprises using the Internet, ISDN was by a large margin the most popular technology used (68%), although broadband connections boasted relatively high take-up rates, with DSL attracting 17% of enterprises.

Looking at the various Internet applications used, 54% of enterprises using the Internet in Luxembourg were accessing banking and financial services, less than in most other Member States. In contrast, as 62% said they received digital products via Internet, among the highest proportions for this service in any EU country.

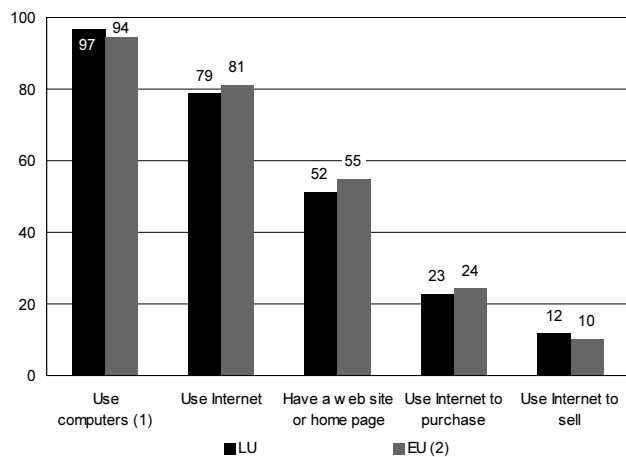
E-commerce activity in Luxembourg was comparable to the EU average. Internet purchasing concerned 29% of Internet connected enterprises (23% of all enterprises - see figure 6.7.1), only one percentage point less than in the EU. Manufacturing enterprises were relatively the most keen to purchase via Internet (30% of Internet connected enterprises against 22% in the EU), while Internet connected enterprises in transport and communications (16%) were among the least active users of Internet purchasing. As with ICT usage in general, large enterprises were notably less active than their EU

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.7.1: Proportion of enterprises using ICT and Internet e-commerce, Luxembourg, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

counterparts in this field, with only 23% of Internet connected enterprises purchasing via this channel, fifteen percentage points below the EU average for this size class. Turning to Internet sales, 15% of enterprises using the Internet declared having sold via this channel, the highest level of engagement being recorded by medium-sized enterprises (18%). Among large enterprises, in contrast, only 13% had implemented Internet sales, compared to 17% in the EU.

Table 6.7.1: Proportion of enterprises using ICT, Luxembourg, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	97	97	96	99	97	95	96	88	97	100	99
Proportion of employees using computers											
all computers	46	53	54	53	38	36	49	39	37	95	53
Internet connected computers	26	30	33	27	21	14	21	24	18	60	40
Used e-mail	81	80	77	92	96	76	74	79	81	89	92
used already in 2001	72	72	69	83	96	68	64	76	71	89	87
used in (or planned for) 2002	8	8	8	8	0	9	10	3	10	0	5
Do not plan to use / do not know	16	17	19	7	1	19	22	9	17	11	7
Used intranet	50	49	44	69	88	41	45	35	38	74	69
used already in 2001	40	38	34	55	78	33	35	18	29	67	55
used in (or planned for) 2002	11	11	10	14	10	9	10	17	9	7	13
Do not plan to use / do not know	47	48	52	30	9	54	51	53	59	26	31
Used extranet	39	38	34	55	61	38	35	24	29	53	52
used already in 2001	31	30	28	43	52	27	29	20	23	44	42
used in (or planned for) 2002	8	8	7	13	9	11	6	5	6	9	10
Do not plan to use / do not know	58	58	62	43	36	58	61	64	68	47	48

Source: E-commerce database, Eurostat.

Table 6.7.2: Connection to Internet, Luxembourg

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	79	78	77	83	96	74	71	83	77	96	91
started (or planned) Internet use in 2002	8	8	8	8	0	9	10	0	9	1	4
do not plan to use Internet / do not know	10	10	11	8	1	12	15	5	11	3	4
answer not available	3	3	4	1	3	5	4	12	3	0	1
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	9	8	8	10	20	10	6	11	12	12	8
Modem	34	33	34	30	45	36	35	51	33	29	30
ISDN	68	68	71	56	59	73	74	69	71	58	57
xDSL	17	17	17	17	13	11	15	25	17	15	21
Other broadband < 2MBps	15	14	10	28	50	14	12	0	15	22	20
Other broadband >= 2MBps	7	7	6	14	9	7	3	0	7	20	11

Source: E-commerce database, Eurostat.

Table 6.7.3: Internet services used and provided, Luxembourg

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	55	55	53	61	67	57	58	64	50	72	49
Receive digital products	62	62	62	63	61	63	58	69	57	54	69
Obtain after sales services	31	30	29	36	42	29	38	16	21	36	28
Use banking or financial services	54	54	55	53	48	51	56	44	53	65	53
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	65	65	62	75	73	64	65	89	52	69	70
of which: also in foreign language (%)	55	54	53	60	68	53	40	78	62	76	63
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	69	69	68	73	57	66	71	90	74	76	61
Facilitate access to catalogues and lists	51	51	49	58	49	48	65	63	47	44	37
Deliver digital products	20	21	20	22	9	19	16	4	16	7	32
Provide after sales support	23	23	22	25	19	22	30	4	27	12	18
Provide mobile Internet services	5	5	4	7	6	7	4	0	11	7	3

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.7.4: Internet purchases, Luxembourg, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	29	29	29	31	23	30	28	24	16	24	37
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	11	10	10	10	33	12	9	15	33	5	8
1% or more of total purchases	80	81	81	79	60	73	86	62	61	85	83
2% or more of total purchases	56	57	59	48	33	57	58	23	53	55	58
5% or more of total purchases	45	45	46	43	33	47	45	23	47	40	46
10% or more of total purchases	24	25	25	22	13	19	31	23	25	20	21
25% or more of total purchases	11	11	11	10	13	6	15	15	11	15	8
50% or more of total purchases	6	6	5	6	13	0	9	15	6	0	6
do not know	9	9	8	11	7	16	5	23	6	10	9
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	35	36	33	49	7	27	47	15	33	40	29

(1) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

Table 6.7.5: Internet sales, Luxembourg

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	15	15	14	18	13	18	17	65	13	4	8
started selling in 2000 or earlier	7	8	7	11	3	5	9	42	8	1	4
started selling in 2001	7	7	8	7	9	13	8	24	5	2	4
Did not sell via Internet	84	84	85	82	88	81	82	29	87	96	92
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	16	14	11	24	75	7	22	3	27	67	14
1% or more of total sales	73	74	78	62	25	85	65	83	60	0	83
2% or more of total sales	50	52	54	45	0	54	39	69	33	0	74
5% or more of total sales	41	42	43	40	0	48	25	67	27	0	63
10% or more of total sales	18	18	20	15	0	22	9	31	7	0	34
25% or more of total sales	5	5	7	0	0	4	3	0	7	0	14
50% or more of total sales	2	2	3	0	0	0	1	0	7	0	6
do not know	11	12	11	15	0	9	13	14	13	33	3
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	10	9	7	13	38	9	11	6	7	0	14

(1) Enterprises weighted by their turnover.

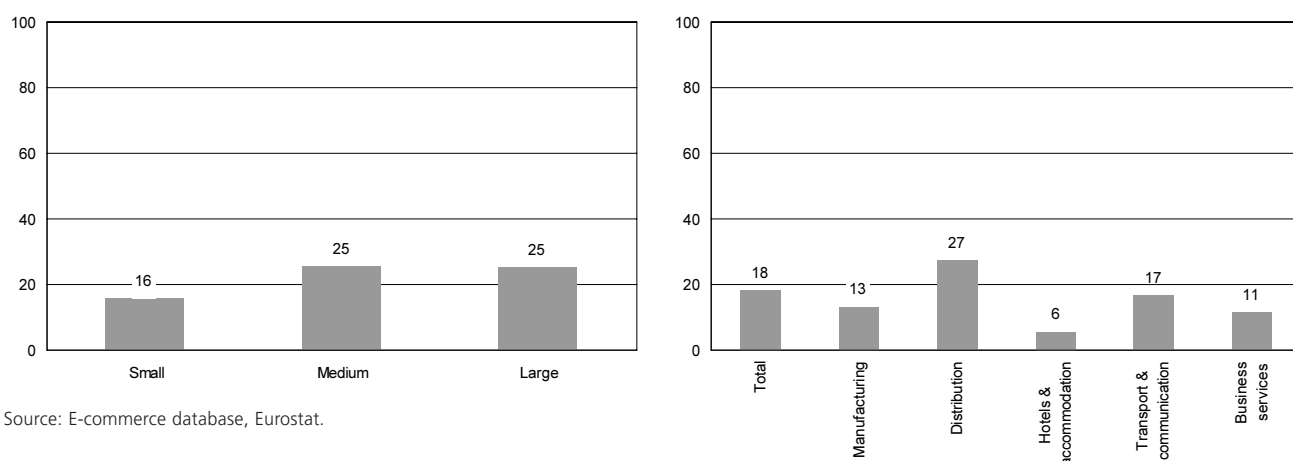
Source: E-commerce database, Eurostat.

Table 6.7.6: Internet sales: destination, Luxembourg, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which		Large	Manuf- turing	Distribution	Hotels & Transport &		Business services
			small	medium				accom- modation	communi- cation	
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	75	75	55	80	48	91	58	42	54	65
Consumers (B2C sales)	15	15	26	12	5	1	31	49	33	8
Do not know / no answer	11	10	18	8	48	9	12	9	13	27
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	23	24	36	21	5	7	52	6	39	25
Other EU countries	69	69	39	76	76	89	40	60	54	58
Rest of the world	5	5	11	4	19	2	3	33	0	16
Do not know / no answer	3	3	15	0	0	1	6	1	7	1

Source: E-commerce database, Eurostat.

Figure 6.7.2: Enterprises having sold via Internet: proportion having received on-line payments, Luxembourg, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.7.7: Barriers to e-commerce, Luxembourg, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manuf- turing	Distribution	Hotels & Transport &		Auxiliary financial activities	Business services
			small	medium				accom- modation	communi- cation		
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	13	13	12	21	14	12	12	7	13	13	17
Customers or other enterprises not ready	13	13	12	17	24	10	13	17	13	15	14
Security problems with payments	14	13	13	16	22	12	13	23	15	16	14
Uncertainty concerning legal framework	13	13	11	20	25	13	11	13	15	15	13
Logistical problems	10	10	8	16	8	9	9	13	10	8	11
Other	1	1	1	0	2	1	1	0	0	1	1
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	52	52	56	40	50	46	65	31	43	67	54
Customers or other enterprises not ready	59	59	58	62	75	48	78	36	60	67	46
Security problems with payments	63	62	63	56	100	57	73	44	57	67	69
Uncertainty concerning legal framework	61	61	61	58	75	54	75	31	70	67	57
Logistical problems	50	49	48	51	75	48	60	31	37	67	54
Other	3	2	1	5	25	2	2	0	13	0	0

Source: E-commerce database, Eurostat.

Table 6.7.8: Proportion of enterprises using EDI or networks other than Internet, Luxembourg, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manuf- turing	Distribution	Hotels & Transport &		Auxiliary financial activities	Business services
			small	medium				accom- modation	communi- cation		
Purchased	8	8	8	9	13	4	12	5	9	1	6
Sold	6	5	4	9	31	9	5	5	9	3	4

Source: E-commerce database, Eurostat.

6.8 THE NETHERLANDS

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
H	Hotels and restaurants
I	Transport, storage and communication
J	Financial intermediation
K	Business services (real estate, renting and business activities)

E-commerce was particularly well developed in the Netherlands when compared to the other Member States, particularly in the field of Internet sales.

At 94%, the share of enterprises using computers in the Netherlands was equal to the EU average. It should however be noted that medium-sized enterprises reported the lowest computer usage rate in the EU (96%) while large enterprises were also below average (97%) by this measure.

Internet was present in 85% of enterprises in the Netherlands, which was one point above the EU average. This was mainly owing to the high connection rate of small enterprises, of which 84% had an Internet connection compared to 79% on average in the EU. Medium-sized and large enterprises in contrast reported connection rates below the EU average.

What clearly differentiated Dutch enterprises from those in the rest of the EU was the high use of intranets. These were found in some 80% of enterprises in this country, more than two and a half times the EU average and by far the largest share proportion in the EU.

Turning to the technology used by enterprises to connect to the Internet, ISDN was by far the preferred channel, as it was used by 57% of enterprises. Analogue modems were used by only 29% of enterprises, among the lowest rates in the EU. Broadband technologies had been implemented by 12% of Internet connected enterprises in the case of DSL but less than 10% for other broadband, whether less than 2MBps (8%) or greater than or equal to 2 MBps (5%).

Among the various services used via their Internet connections, Dutch enterprises showed a particularly high recourse to banking and financial services (78%) and market monitoring (63%).

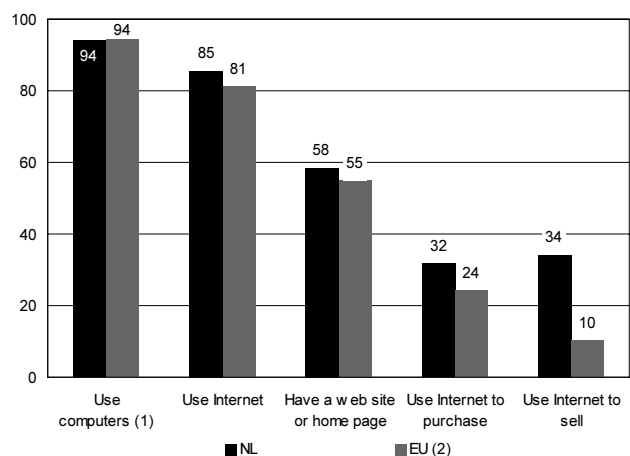
More generally, development of Internet e-commerce was quite widespread in the Netherlands, particularly on the selling side. It should be noted that data on e-commerce for the Netherlands covers not only Internet e-commerce, but, unlike the data presented for other countries, also includes trading using other networks such as EDI.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 199 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 199 persons employed
Large	Enterprises with 200 or more persons employed

Figure 6.8.1: Proportion of enterprises using ICT and Internet e-commerce, the Netherlands, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Some 37% of enterprises connecting to the Internet (corresponding to 32% of all enterprises -see figure 6.8.1) had used e-commerce to buy goods and services. This activity was particularly common among large enterprises (54%), and from a sectoral perspective was high in the manufacturing and hotels and accommodation sectors compared to the EU average.

As many as 40% of Internet connected Dutch enterprises (corresponding to 34% of all Dutch enterprises) made e-commerce sales in 2001. Only 7% of enterprises making e-commerce sales had received on-line payments in 2001, which was by far the lowest proportion in the EU.

Table 6.8.1: Proportion of enterprises using ICT, the Netherlands, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & restaurants	Transport & communi- cation	Financial intermedia- tion	Business services
			small	medium							
Used computers	94	94	94	96	97	97	96	82	93	90	93
Used e-mail	87	86	85	94	95	91	86	70	82	82	89
used already in 2001	84	83	82	91	94	89	85	64	77	81	86
used in (or planned for) 2002	3	3	3	3	1	2	2	6	4	1	3
Do not plan to use / do not know	13	14	15	6	5	9	14	30	18	18	11
Used intranet (1)	80	80	78	:	:	85	:	51	71	85	84
used already in 2001	80	79	77	92	96	84	83	48	70	86	84
used in (or planned for) 2002	0	0	1	:	:	1	:	2	1	-1	0
Do not plan to use / do not know	20	20	22	:	:	15	:	49	29	15	16
Used extranet (2)	26	25	22	38	58	21	29	12	19	41	32
used already in 2001	24	23	21	34	53	19	27	9	17	37	29
used in (or planned for) 2002	2	2	2	4	6	2	2	3	1	4	3
Do not plan to use / do not know	74	75	78	62	42	79	71	88	81	59	68

(1) Enterprises with computers connected in a network within the enterprise (for example a LAN).

(2) Enterprises with an internet protocol based closed network.

Source: E-commerce database, Eurostat.

Table 6.8.2: Connection to Internet, the Netherlands

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & restaurants	Transport & communi- cation	Financial intermedia- tion	Business services
			small	medium							
Proportion of enterprises that: (%)											
used Internet already in 2001	85	85	84	91	95	89	86	67	79	85	88
started (or planned) Internet use in 2002	3	3	3	2	1	3	2	5	5	2	3
do not plan to use Internet / do not know	12	12	13	6	4	8	12	28	16	13	9
answer not available	0	0	0	0	0	0	0	0	0	0	0
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%) (1)											
Mobile	:	:	:	:	:	:	:	:	:	:	:
Modem	29	29	30	22	18	27	34	31	36	19	21
ISDN	57	58	59	53	38	64	53	52	57	56	58
xDSL	12	12	11	15	15	7	11	7	9	19	19
Other broadband < 2MBps	8	7	5	15	31	6	9	3	4	14	8
Other broadband >= 2MBps	5	4	4	9	24	4	5	1	7	10	7

(1) Excluding cable and some other type of connections.

Source: E-commerce database, Eurostat.

Table 6.8.3: Internet services used and provided, the Netherlands

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which		Large	Manufac- turing	Distribution	Hotels & restaurants	Transport & communi- cation	Financial intermedia- tion	Business services
			small	medium							
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	63	63	61	73	84	71	58	55	54	64	69
Receive digital products	27	27	26	29	41	22	27	23	22	32	36
Obtain after sales services	30	30	28	39	48	29	31	21	25	31	35
Use banking or financial services	78	78	78	78	76	79	79	76	77	70	77
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	68	67	65	78	86	66	63	79	63	75	76
of which: also in foreign language (%)	:	:	:	:	:	:	:	:	:	:	:
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	88	88	88	90	86	87	90	95	89	82	86
Facilitate access to catalogues and lists	40	41	43	31	30	28	50	89	41	36	30
Deliver digital products	20	19	21	14	26	13	23	11	23	27	23
Provide after sales support	30	29	30	24	34	22	38	17	29	30	30
Provide mobile Internet services	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.8.4: Internet purchases (including also all other electronic networks), the Netherlands, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & restaurants	Transport & communi- cation	Financial intermedia- tion	Business services
Enterprises using Internet: proportion having purchased via Internet	37	37	35	44	54	33	40	34	35	39	40
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	27	27	26	30	31	32	28	23	20	35	24
1% or more of total purchases	73	73	74	70	69	68	72	77	80	65	76
2% or more of total purchases	61	61	63	53	55	54	66	62	62	36	63
5% or more of total purchases	51	51	53	43	43	41	60	50	46	27	51
10% or more of total purchases	37	38	40	27	27	25	51	38	39	15	31
25% or more of total purchases	22	23	25	14	14	10	41	18	15	6	11
50% or more of total purchases	15	15	16	10	10	5	28	13	9	4	7
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	20	20	19	22	27	13	23	13	27	24	22

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

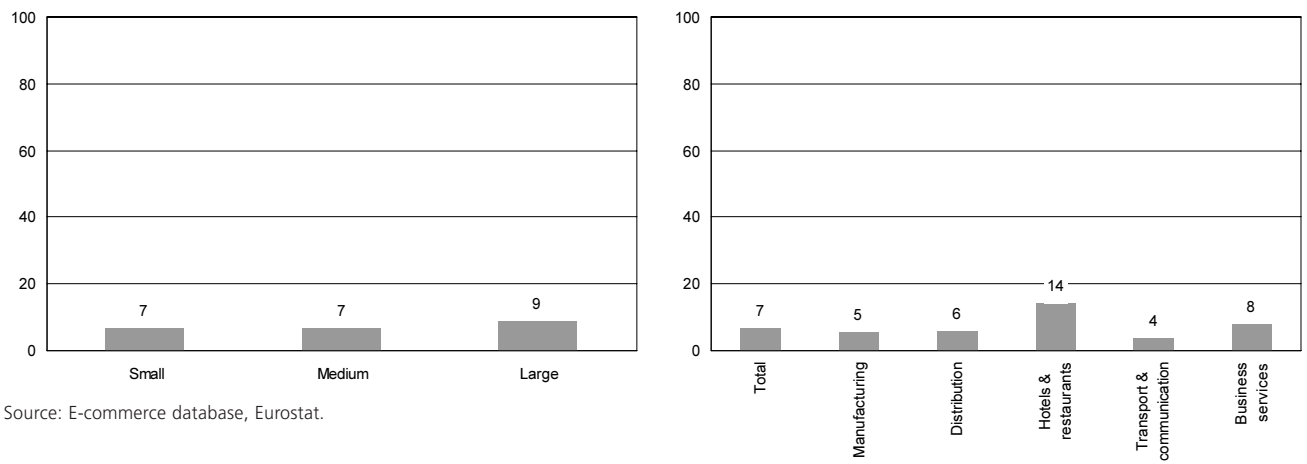
Table 6.8.5: Internet sales (including also all other electronic networks), the Netherlands

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & restaurants	Transport & communi- cation	Financial intermedia- tion	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	40	40	39	41	47	40	41	46	59	37	31
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	25	25	25	24	25	26	24	22	28	29	23
1% or more of total sales	75	75	75	76	75	74	76	78	72	71	77
2% or more of total sales	61	61	61	60	63	61	62	60	60	39	64
5% or more of total sales	46	46	45	48	52	45	44	50	45	29	52
10% or more of total sales	27	26	25	33	38	29	23	26	31	17	30
25% or more of total sales	11	10	10	15	24	14	10	3	10	10	14
50% or more of total sales	5	4	4	8	17	5	4	1	3	8	9
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	13	13	12	16	24	7	15	6	15	10	19

(1) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

Figure 6.8.2: Enterprises having sold via Internet (including also all other electronic networks): proportion having received on-line payments, the Netherlands, 2001 (%)



Source: E-commerce database, Eurostat.

6.9 AUSTRIA

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

Austrian enterprises have widely adopted information and communication technologies and a large proportion of them have embraced e-commerce.

Enterprises were equipped with computers in Austria (93%) to a slightly less extent than the EU average (94%). This small difference with respect to the EU average was mainly due to the lower equipment rate among small enterprises, 92% in Austria against 94% in the EU. Furthermore, transport and communication enterprises reported the lowest equipment rate in the EU for this sector, with only 84% using a computer against 95% for their EU counterparts.

Some 85% of enterprises in Austria had an Internet connection, with 29% of employees using Internet connected computers, the highest share in the EU outside of the Nordic countries. This result was mainly due to the high share in small and medium-sized enterprises, among which 31% of employees using Internet connected computers.

Although 65% of Internet connected enterprises in Austria used an ISDN line as their means of connection, a large proportion had a broadband connection. DSL was particularly popular, as it was present in 23% of enterprises connecting to the Internet, the third highest take-up rate in the EU after Denmark and Finland.

Internet e-commerce was well developed in Austria, both for procurement and sales. Some 37% of enterprises using the Internet (corresponding to 32% of all enterprises - see figure 6.9.1) had used this channel to purchase goods and services in 2001, which was seven points above the EU average. The difference compared to other countries was particularly marked in manufacturing (38% in Austria compared to an EU average of 22%) and transport and communications (39% compared to 27%).

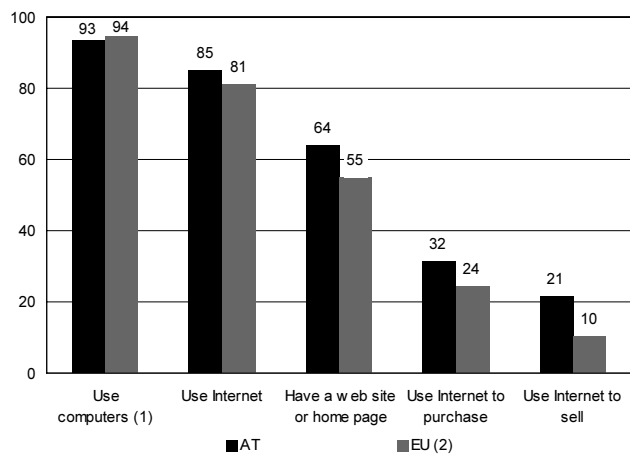
As regards Internet sales, the proportion of enterprises using the Internet that had received orders via Internet was almost twice as high in Austria (25%) as the average in the EU (13%). Internet sales activity was developed across all size classes, notably among small enterprises who had a higher rate of Internet sales than medium-sized enterprises. This engagement in Internet sales was also widespread in terms of activity, with particularly strong activity, relative to the EU average, in Austria's manufacturing and transport and communications sectors.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.9.1: Proportion of enterprises using ICT and Internet e-commerce, Austria, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Most of the sales made via Internet in Austria were destined for the domestic market (82%). A breakdown by sector however shows a very diverse picture with the manufacturing and hotels and accommodation sectors more export oriented.

In terms of receiving on-line payments for sales, Austrian enterprises were not dissimilar from other EU countries, with the exception of the hotels and accommodation sector where 27% had received on-line payment, a greater proportion than in any other Member State.

Table 6.9.1: Proportion of enterprises using ICT, Austria, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	93	93	92	99	100	93	93	95	84	100	99
Proportion of employees using computers											
all computers	51	50	48	52	52	46	60	27	45	86	65
Internet connected computers	29	31	30	31	27	25	28	15	27	59	49
Used e-mail	90	90	89	98	100	89	90	94	81	100	96
used already in 2001	85	85	83	97	99	86	83	88	75	100	94
used in (or planned for) 2002	5	5	6	1	1	4	8	5	6	0	1
Do not plan to use / do not know	3	3	3	1	0	4	3	2	3	0	3
Used intranet	43	42	37	63	88	39	45	38	33	53	55
used already in 2001	37	35	32	54	77	33	37	35	28	53	49
used in (or planned for) 2002	6	6	5	9	11	6	8	3	5	0	6
Do not plan to use / do not know	50	52	55	36	12	54	48	57	51	47	44
Used extranet	17	16	14	30	51	13	20	9	13	14	28
used already in 2001	14	13	11	22	38	9	15	6	11	14	24
used in (or planned for) 2002	4	4	3	8	13	3	5	3	2	0	4
Do not plan to use / do not know	76	77	78	69	49	80	73	86	71	86	70

Source: E-commerce database, Eurostat.

Table 6.9.2: Connection to Internet, Austria

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	85	84	82	96	100	84	83	88	73	100	94
started (or planned) Internet use in 2002	4	4	5	1	0	3	6	4	4	0	1
do not plan to use Internet / do not know	4	4	5	2	0	6	4	2	6	0	3
answer not available	7	7	8	1	0	7	7	5	16	0	1
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	20	19	19	21	30	20	22	19	24	24	15
Modem	25	25	25	25	33	27	26	30	27	38	18
ISDN	65	66	68	56	45	68	68	70	60	55	55
xDSL	23	23	23	23	21	18	25	21	16	7	30
Other broadband < 2MBps	13	12	9	25	44	14	12	5	14	62	17
Other broadband >= 2MBps	11	10	7	23	44	8	11	6	16	45	18

Source: E-commerce database, Eurostat.

Table 6.9.3: Internet services used and provided, Austria

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	66	65	63	74	84	63	72	61	71	62	59
Receive digital products	26	25	24	31	43	26	21	24	25	7	36
Obtain after sales services	16	15	14	20	36	12	19	16	11	7	18
Use banking or financial services	68	68	67	72	73	72	68	53	60	100	71
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	75	75	72	86	91	74	72	98	70	69	72
of which: also in foreign language (%)	39	38	34	52	68	45	27	61	33	45	38
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	88	88	88	87	85	89	88	88	92	55	82
Facilitate access to catalogues and lists	47	47	46	51	55	44	56	62	46	45	27
Deliver digital products	7	6	6	6	10	5	6	3	6	0	14
Provide after sales support	12	11	10	15	27	7	20	5	9	34	12
Provide mobile Internet services	4	4	4	4	6	3	3	5	4	0	6

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.9.4: Internet purchases, Austria, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	37	36	35	42	56	38	33	32	39	22	45
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	17	16	15	21	26	24	16	12	20	67	9
1% or more of total purchases	78	78	80	74	67	69	80	84	72	33	86
2% or more of total purchases	58	59	62	48	43	52	56	64	45	0	70
5% or more of total purchases	44	45	48	34	27	37	41	55	30	0	56
10% or more of total purchases	22	22	25	13	12	17	21	19	11	0	33
25% or more of total purchases	5	5	6	2	4	3	9	0	8	0	3
50% or more of total purchases	3	3	4	0	2	1	8	0	0	0	2
do not know	5	5	5	5	8	6	4	4	8	0	5
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	13	12	11	17	27	8	17	9	18	0	13

(1) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

Table 6.9.5: Internet sales, Austria

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	25	25	26	22	29	16	25	70	25	24	15
started selling in 2000 or earlier	16	16	17	13	21	9	13	56	18	0	10
started selling in 2001	9	9	9	9	8	7	12	14	7	24	5
Did not sell via Internet	74	75	74	78	71	84	75	29	73	76	85
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	16	15	15	19	27	23	28	2	21	0	5
1% or more of total sales	70	70	72	62	61	63	63	80	61	100	79
2% or more of total sales	58	58	60	47	44	48	46	76	55	100	60
5% or more of total sales	41	42	44	29	27	36	27	60	37	0	46
10% or more of total sales	24	25	26	17	11	17	10	42	26	0	25
25% or more of total sales	8	8	8	9	5	7	4	16	5	0	4
50% or more of total sales	3	3	3	4	2	2	3	4	0	0	1
do not know	14	14	14	18	12	15	9	18	19	0	17
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	11	11	10	12	18	7	9	15	9	0	12

(1) Enterprises weighted by their turnover.

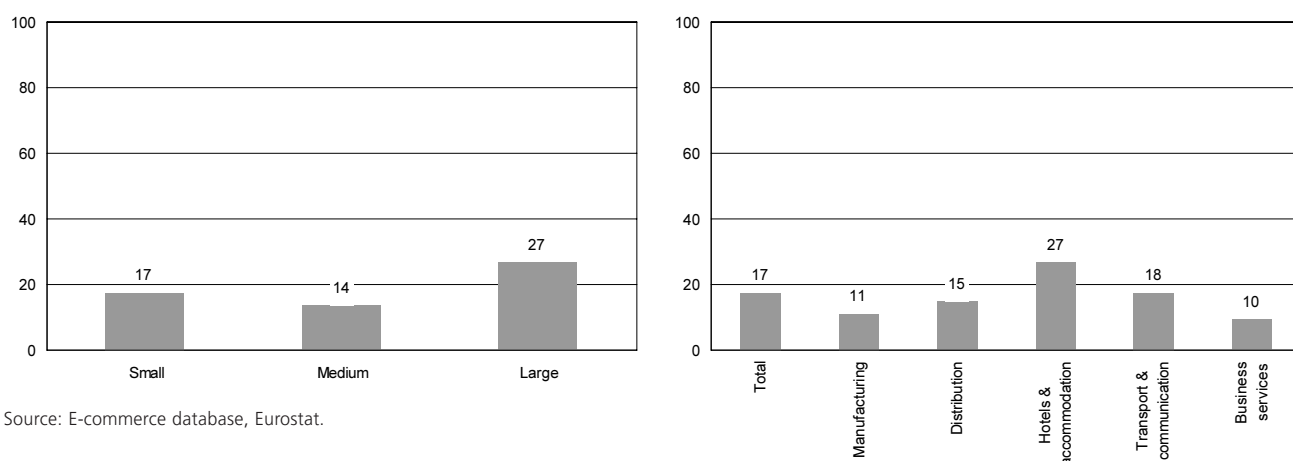
Source: E-commerce database, Eurostat.

Table 6.9.6: Internet sales: destination, Austria, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	75	78	88	43	66	70	85	11	54	70
Consumers (B2C sales)	20	16	6	52	30	22	11	52	41	27
Do not know / no answer	6	6	6	5	5	8	3	37	5	3
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	82	86	90	70	72	35	95	28	88	64
Other EU countries	11	10	6	25	15	50	2	53	3	25
Rest of the world	5	3	3	4	8	14	2	17	5	7
Do not know / no answer	2	1	1	1	4	1	1	2	4	4

Source: E-commerce database, Eurostat.

Figure 6.9.2: Enterprises having sold via Internet: proportion having received on-line payments, Austria, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.9.7: Barriers to e-commerce, Austria, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	55	54	51	71	74	58	53	40	43	59	62
Customers or other enterprises not ready	48	48	45	61	68	54	47	33	39	19	50
Security problems with payments	60	60	58	70	70	60	63	50	45	59	63
Uncertainty concerning legal framework	57	56	54	67	68	58	58	43	44	59	61
Logistical problems	36	35	34	44	53	39	35	22	28	50	40
Other	7	6	6	7	11	7	6	6	5	0	8
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	63	62	61	72	79	66	57	60	69	100	80
Customers or other enterprises not ready	58	58	55	69	76	56	55	56	72	100	69
Security problems with payments	72	72	72	71	78	76	66	74	86	100	68
Uncertainty concerning legal framework	66	65	66	65	71	66	58	67	70	100	79
Logistical problems	43	41	41	44	69	47	48	33	59	100	33
Other	7	7	7	8	13	7	6	5	17	0	10

Source: E-commerce database, Eurostat.

Table 6.9.8: Proportion of enterprises using EDI or networks other than Internet, Austria, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	5	4	4	7	25	3	9	1	2	0	2
Sold	4	3	2	8	24	4	6	0	3	0	1

Source: E-commerce database, Eurostat.

6.10 PORTUGAL

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

Portuguese enterprises generally have low ICT equipment rates, particularly in small enterprises, although a large proportion have adopted broadband Internet access. With the exception of the distribution sector, Internet sales are quite strongly developed.

The proportion of enterprises in Portugal that used computers at the beginning of 2002 was 84%, just over 10 percentage points below the EU average, the largest difference of any EU Member State. As already noted in chapter 3 (see table 3.1, page 20), Portugal is one of the very few Member States that recorded a fall between the beginning of 2001 and the beginning of 2002 in the proportion of enterprises using computers. The low proportion is mainly due to small enterprises, which at 81% have the lowest proportion using computers of any Member State, and this by several percentage points. An analysis by sector shows that it is essentially the manufacturing sector (79%) where the use of computers is low as in all other sectors 90% or more of enterprises use computers.

In a similar fashion, the proportion of Portuguese enterprises with Internet access (69%) is below the EU average (81%), and again this is primarily due to a low penetration in small enterprises (64%).

The low value of these two key indicators, use of computers and Internet, contribute to the particularly low proportion of employees using computers: Portugal, alongside its neighbour Spain, recorded the lowest proportions of employees using computers (34%) and using Internet connected computers (19%) of any EU Member State. In contrast to the indicators concerning computers and Internet use in enterprises, these indicators on employees showed little difference between those working in small and medium sized enterprises, but higher usage rates were recorded among employees of large enterprises.

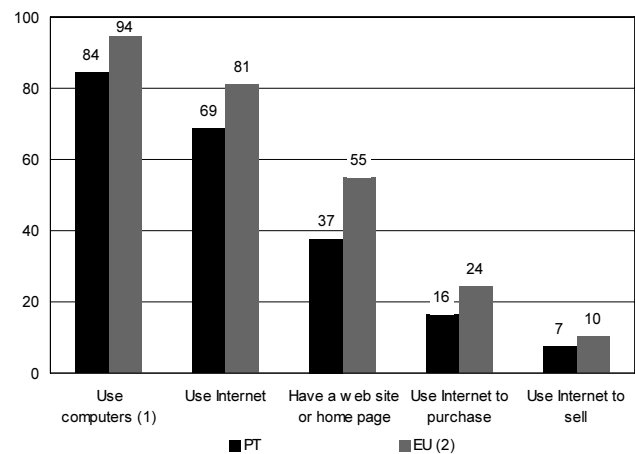
Among the Portuguese enterprises that do have Internet access, there is an interesting mix of technologies used for Internet access. Although the use of analogue modems is the highest (alongside the United Kingdom) and use of ISDN the lowest, both DSL and other broadband technologies are used by a higher proportion of Internet connected enterprises in Portugal than in several other Member States.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.10.1: Proportion of enterprises using ICT and Internet e-commerce, Portugal, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Only the Portuguese manufacturing and hotels and accommodation sectors showed a level in of Internet purchasing above the EU average. Overall 24% of Internet connected enterprises purchased via the Internet in 2001 (equivalent to 16% of all enterprises), compared to 30% in the EU as a whole. In terms of Internet sales, the gap between the level of activity in Portugal (11% of Internet connected enterprises, 7% of all enterprises) was only 2-3 percentage points below the EU average. In fact, compared to the EU average, Internet connected enterprises in Portugal were more likely to sell via the Internet in all sectors except for distribution.

Table 6.10.1: Proportion of enterprises using ICT, Portugal, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	84	84	81	97	99	79	90	100	97	100	92
Proportion of employees using computers											
all computers	34	32	31	32	39	25	44	34	54	83	43
Internet connected computers	19	18	18	18	21	14	20	23	29	59	32
Used e-mail	76	76	72	95	99	69	84	100	89	100	84
used already in 2001	66	66	61	90	98	60	71	100	84	100	76
used in (or planned for) 2002	10	10	11	5	2	9	13	0	6	0	8
Do not plan to use / do not know	24	24	28	5	1	31	16	0	11	0	16
Used intranet	41	40	37	59	80	37	42	94	51	89	50
used already in 2001	34	33	30	48	72	30	33	90	43	84	39
used in (or planned for) 2002	8	8	7	11	8	7	9	4	8	5	11
Do not plan to use / do not know	59	60	63	41	20	63	58	6	49	11	50
Used extranet	18	17	15	26	47	15	20	5	25	26	29
used already in 2001	14	13	12	21	38	12	16	2	20	26	22
used in (or planned for) 2002	4	4	3	5	9	3	4	3	6	0	7
Do not plan to use / do not know	82	83	85	74	53	85	80	95	75	74	71

Source: E-commerce database, Eurostat.

Table 6.10.2: Connection to Internet, Portugal

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	69	68	64	91	98	64	72	100	84	100	78
started (or planned) Internet use in 2002	7	7	8	3	1	5	10	0	5	0	9
do not plan to use Internet / do not know	8	9	10	3	1	10	8	0	8	0	5
answer not available	16	16	19	3	1	21	10	0	3	0	8
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	5	5	5	7	11	5	3	25	9	0	5
Modem	56	57	60	46	35	58	59	68	38	13	45
ISDN	34	34	29	51	46	36	31	59	32	30	29
xDSL	17	17	18	15	20	14	18	29	25	52	23
Other broadband < 2MBps	:	:	:	:	:	:	:	:	:	:	:
Other broadband >= 2MBps	12	10	9	16	44	8	11	1	27	31	25

Source: E-commerce database, Eurostat.

Table 6.10.3: Internet services used and provided, Portugal

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	43	42	42	45	52	43	41	45	52	44	41
Receive digital products	18	17	15	25	31	18	15	7	17	0	28
Obtain after sales services	14	14	12	20	31	14	14	2	12	23	24
Use banking or financial services	71	70	67	80	82	70	73	48	69	100	71
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	55	54	52	60	71	57	48	69	59	36	57
of which: also in foreign language (%)	:	:	:	:	:	:	:	:	:	:	:
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	58	57	57	58	68	53	61	98	60	60	58
Facilitate access to catalogues and lists	58	57	57	58	68	53	61	98	60	60	58
Deliver digital products	5	5	5	4	4	6	1	0	2	0	12
Provide after sales support	16	16	17	12	23	13	21	1	17	37	23
Provide mobile Internet services	2	2	3	1	6	2	3	1	3	37	3

Source: E-commerce database, Eurostat.

Table 6.10.4: Internet purchases, Portugal, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	24	24	23	26	30	23	23	34	24	5	26
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (1)											
less than 1% of total purchases	0	0	0	0	0	0	0	0	0	0	0
1% or more of total purchases	69	70	67	78	55	62	72	99	72	100	81
2% or more of total purchases	41	41	42	38	26	35	48	16	57	100	47
5% or more of total purchases	30	30	32	24	17	23	40	10	37	100	37
10% or more of total purchases	22	23	24	18	10	20	25	7	28	0	24
25% or more of total purchases	6	7	6	7	4	5	8	5	13	0	7
50% or more of total purchases	5	5	5	5	2	2	8	5	12	0	6
do not know	31	30	33	22	45	38	28	1	29	0	19
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	27	27	26	29	34	25	32	13	19	100	28

(1) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.10.5: Internet sales, Portugal

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet (1)	11	10	10	11	27	10	7	60	14	18	10
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (2)											
less than 1% of total sales	0	0	0	0	0	0	0	0	0	0	0
1% or more of total sales	61	63	70	43	33	58	41	93	79	27	56
2% or more of total sales	33	35	33	38	12	21	26	51	76	27	45
5% or more of total sales	27	29	29	28	8	21	17	48	41	0	37
10% or more of total sales	14	15	14	20	4	11	16	3	40	0	28
25% or more of total sales	6	7	5	13	1	4	10	3	15	0	7
50% or more of total sales	2	2	2	3	1	0	5	3	0	0	7
do not know	39	37	30	57	67	42	59	7	21	73	44
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	29	30	31	24	19	30	26	46	6	0	17

(1) Estimated.

(2) Enterprises weighted by their turnover.

Source: E-commerce database, Eurostat.

Table 6.10.6: Internet sales: destination, Portugal, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	89	87	76	92	92	89	98	29	69	98
Other EU countries	5	4	7	3	6	6	0	47	9	0
Rest of the world	4	5	13	2	0	5	2	9	6	0
Do not know / no answer	3	3	3	3	2	0	0	15	16	2

Source: E-commerce database, Eurostat.

Table 6.10.7: Barriers to e-commerce, Portugal, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	32	32	29	45	47	28	35	71	38	96	37
Customers or other enterprises not ready	31	30	29	40	41	27	36	71	30	30	30
Security problems with payments	29	29	27	37	39	27	31	75	32	32	30
Uncertainty concerning legal framework	30	30	29	37	40	30	30	75	29	32	27
Logistical problems	25	25	23	37	35	23	29	70	21	30	26
Other	:	:	:	:	:	:	:	:	:	:	:
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	67	68	76	44	52	63	72	88	35	100	62
Customers or other enterprises not ready	74	74	72	83	75	74	85	54	78	100	80
Security problems with payments	64	64	70	47	65	62	76	52	60	73	71
Uncertainty concerning legal framework	54	53	57	43	57	44	72	51	47	100	69
Logistical problems	61	61	62	58	65	57	74	47	76	73	68
Other	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.10.8: Proportion of enterprises using EDI or networks other than Internet, Portugal, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	2	2	2	3	5	1	4	0	4	0	2
Sold	2	2	1	4	9	2	2	28	3	0	0

Source: E-commerce database, Eurostat.

6.11 FINLAND

NACE activities presented in this sub-chapter

activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67, K	Auxiliary financial intermediation, business services (real estate, renting and business activities)

Finland, like the other Nordic countries in the survey, reported high levels of ICT usage and also Internet e-commerce, particularly e-purchasing.

Practically every Finnish enterprise, regardless of size or sector used computers, the 99% rate of computerisation in Finnish enterprises being the same as in Swedish enterprises, and the highest in the EU.

Just over half of employees in Finland used a computer connected to the Internet, a share close to double the EU average, but comparable with the proportions in the other Nordic countries in the survey. The difference between Finland and the EU average for this indicator was greatest for enterprises in the hotel and accommodation sector where 37% of employees in Finnish enterprises used Internet connected computers compared to the EU average of 17%.

Overall, 96% of Finnish enterprises have a connection to the Internet, the highest of any Member State, just ahead of the other Nordic EU Member States. This high rate was found in all size classes, the lowest rate of Internet access being 95% in small enterprises. Across sectors the rate did not vary a great deal, the transport and communication sector recording the lowest rate of Internet access at 93% and the business service sector recording an almost complete (99%) Internet connection rate.

Internet access in Finnish enterprises is most commonly through ISDN (35% of Internet connected enterprises) or DSL (31%), the latter being the second highest rate among the Member States, behind Denmark. From a sectoral perspective, DSL was common throughout Finland, but was particularly popular in the hotels and accommodation sector where 44% of enterprises used this method.

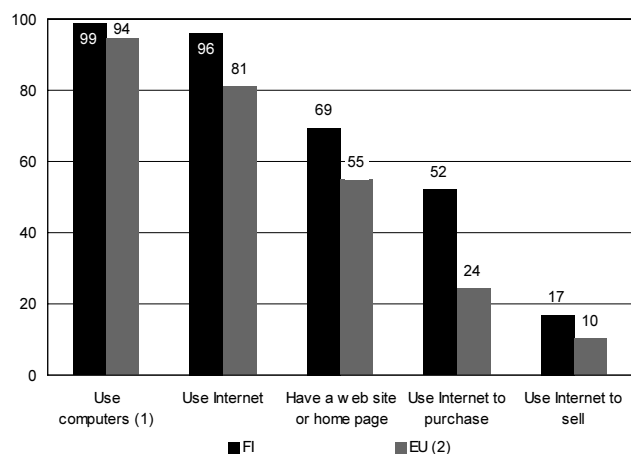
Receiving digital products was a particularly common use of the Internet in Finland, with 60% of Internet connected enterprises using this service compared to an EU average of 36%. Equally, on-line banking and financial services were popular, used by 85% of Internet connected enterprises, notably higher than any other Member State.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.11.1: Proportion of enterprises using ICT and Internet e-commerce, Finland, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Like the Swedish enterprises, Finnish enterprises were frequently users of the Internet for e-purchasing, well above the EU average, but the proportion using the Internet for sales was less clearly greater than the EU average. Overall 54% of Internet connected enterprises purchased via the Internet in 2001 (equivalent to 52% of all enterprises - see figure 6.11.1) and 17% sold via the Internet. In terms of Internet purchasing it was in the medium-sized enterprise size class that Finland recorded the greatest gap with respect to the EU, with 62% of medium-sized Internet connected enterprises purchasing via the Internet in Finland, compared to the EU average of just over half that proportion (32%). In terms of Internet sales the most striking difference between Finland and most other EU Member States was the high proportion of Internet connected enterprises in the Finnish business services sector that sold via Internet (21%); this was more than double the EU average and lower only than the proportions recorded in Denmark and the Netherlands, and also lower than in Norway. It should however be noted that the Finnish figures for the business services sector also include auxiliary financial activities.

Table 6.11.1: Proportion of enterprises using ICT, Finland, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services (1)
Used computers	99	99	98	100	100	98	99	98	99	:	100
Proportion of employees using computers (2)											
all computers	65	61	60	62	69	58	78	49	66	:	75
Internet connected computers	51	50	49	51	52	44	56	37	52	:	71
Used e-mail	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	95	95	94	99	100	95	93	97	91	:	99
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:
Used intranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	36	33	29	53	80	34	33	30	24	:	49
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:
Used extranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	16	14	11	27	44	12	18	6	10	:	25
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:

(1) Including auxiliary financial activities.

(2) Excluding part of NACE Group 74.5.

Source: E-commerce database, Eurostat.

Table 6.11.2: Connection to Internet, Finland

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services (1)
Proportion of enterprises that: (%)											
used Internet already in 2001	96	96	95	99	100	96	95	97	93	:	99
started (or planned) Internet use in 2002	1	1	1	0	0	0	2	0	1	:	1
do not plan to use Internet / do not know	:	:	:	:	:	:	:	:	:	:	:
answer not available	3	3	3	3	3	3	3	3	3	:	3
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	5	:	:	:	:	:	:	:	:	:	:
Modem	21	22	24	10	10	19	23	32	31	:	15
ISDN	35	36	38	27	15	37	41	35	29	:	26
xDSL	31	31	31	33	20	31	30	44	25	:	34
Other broadband < 2MBps	:	:	:	:	:	:	:	:	:	:	:
Other broadband >= 2MBps	15	13	10	27	53	12	12	6	16	:	24

(1) Including auxiliary financial activities.

Source: E-commerce database, Eurostat.

Table 6.11.3: Internet services used and provided, Finland

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services (1)
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	61	59	55	75	88	61	58	72	51	:	67
Receive digital products	60	59	57	68	77	57	59	64	52	:	70
Obtain after sales services	36	34	33	40	53	31	35	55	30	:	44
Use banking or financial services	85	85	86	82	80	82	84	94	81	:	90
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	72	71	68	88	91	73	68	93	63	:	79
of which: also in foreign language (%)	53	50	46	67	81	62	35	82	41	:	59
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	86	86	85	89	86	88	81	100	83	:	88
Facilitate access to catalogues and lists	42	41	39	47	52	37	46	85	46	:	38
Deliver digital products	11	11	11	11	15	7	7	6	10	:	23
Provide after sales support	31	31	29	36	39	24	35	42	30	:	37
Provide mobile Internet services	5	4	4	5	7	3	3	5	5	:	9

(1) Including auxiliary financial activities.

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.11.4: Internet purchases, Finland, 2001 (%)

	Breakdown by size class					Breakdown by activity					Business services (1)
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	
Enterprises using Internet: proportion having purchased via Internet	54	53	52	62	70	51	56	67	40	:	64
Enterprises having purchased via Internet in 2001: proportion whose Internet purchases were: (%) (2)											
less than 1% of total purchases	25	24	24	25	27	28	18	20	22	:	28
1% or more of total purchases	54	55	56	50	51	49	54	72	59	:	58
2% or more of total purchases	44	45	47	39	36	39	47	65	42	:	47
5% or more of total purchases	32	33	34	26	25	26	37	52	28	:	34
10% or more of total purchases	18	18	19	15	12	12	22	49	14	:	19
25% or more of total purchases	6	7	7	6	3	4	9	17	3	:	7
50% or more of total purchases	4	5	5	2	2	3	7	9	3	:	4
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	30	29	28	32	36	25	28	48	24	:	39

(1) Including auxiliary financial activities.

(2) Enterprises weighted by their purchases.

Source: E-commerce database, Eurostat.

Table 6.11.5: Internet sales, Finland

	Breakdown by size class					Breakdown by activity					Business services (1)
	Total	SME	of which small	of which medium	Large	Manufacturing	Distribution	Hotels & accommodation	Transport & communication	Auxiliary financial activities	
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	17	17	16	21	27	12	17	71	21	:	21
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	64	64	62	73	65	73	60	24	49	:	65
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (2)											
less than 1% of total sales	18	17	16	23	30	31	20	15	17	:	7
1% or more of total sales	60	60	61	55	60	58	57	82	58	:	60
2% or more of total sales	45	46	47	43	36	38	41	73	46	:	48
5% or more of total sales	30	31	30	32	21	23	26	64	22	:	35
10% or more of total sales	16	16	16	18	13	11	15	35	17	:	16
25% or more of total sales	5	6	5	7	2	2	4	14	2	:	9
50% or more of total sales	2	2	1	4	0	1	2	4	2	:	2
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	15	14	13	20	19	14	15	17	9	:	17

(1) Including auxiliary financial activities.

(2) Enterprises weighted by their turnover.

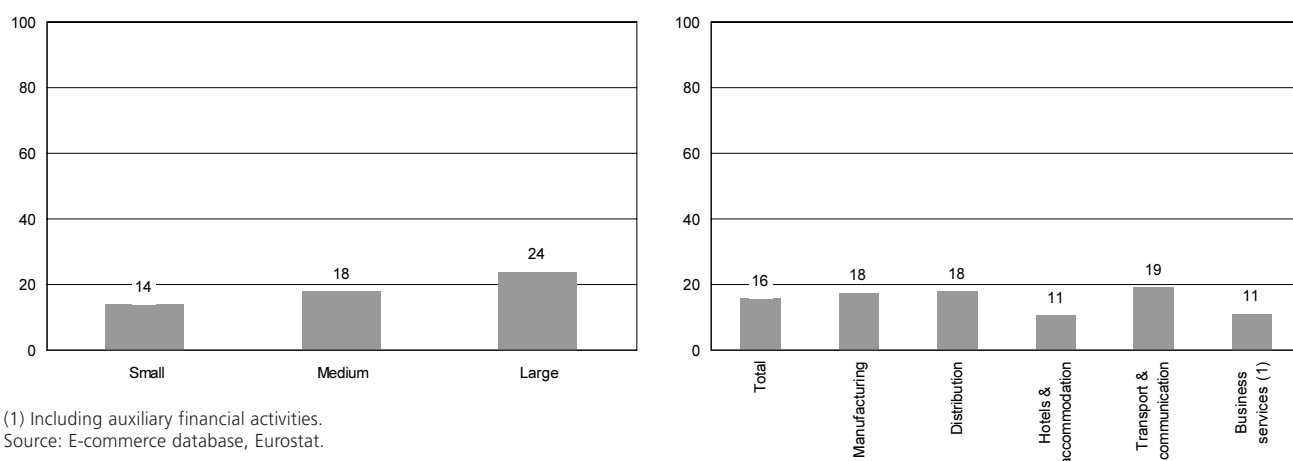
Source: E-commerce database, Eurostat.

Table 6.11.6: Internet sales: destination, Finland, 2001

	Breakdown by size class				Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	86	:	:	:	:	:	:	:	:	:
Consumers (B2C sales)	14	:	:	:	:	:	:	:	:	:
Do not know / no answer	0	:	:	:	:	:	:	:	:	:
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	87	:	:	:	:	:	:	:	:	:
Other EU countries	8	:	:	:	:	:	:	:	:	:
Rest of the world	5	:	:	:	:	:	:	:	:	:
Do not know / no answer	0	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Figure 6.11.2: Enterprises having sold via Internet: proportion having received on-line payments, Finland, 2001 (%)



(1) Including auxiliary financial activities.

Source: E-commerce database, Eurostat.

Table 6.11.7: Barriers to e-commerce, Finland, beginning 2002 (%)

	Total	of which			Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services (1)
		SME	small	medium						
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)										
Products not suitable for Internet sales	63	62	59	74	78	64	64	63	51	63
Customers or other enterprises not ready	55	54	52	65	71	56	61	62	42	52
Security problems with payments	38	37	36	47	49	40	47	38	30	26
Uncertainty concerning legal framework	40	40	38	49	51	40	49	40	29	34
Logistical problems	41	40	38	52	59	45	52	42	28	23
Other	:	:	:	:	:	:	:	:	:	:
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)										
Products not suitable for Internet sales	61	61	61	64	58	:	:	:	:	:
Customers or other enterprises not ready	74	74	75	69	80	:	:	:	:	:
Security problems with payments	53	53	54	47	51	:	:	:	:	:
Uncertainty concerning legal framework	50	51	52	46	40	:	:	:	:	:
Logistical problems	46	45	45	44	54	:	:	:	:	:
Other	:	:	:	:	:	:	:	:	:	:

(1) Including auxiliary financial activities.

Source: E-commerce database, Eurostat.

Table 6.11.8: Proportion of enterprises using EDI or networks other than Internet, Finland, 2001 (%)

	Total	Breakdown by size class			Manufac- turing	Distribution	Breakdown by activity			Auxiliary financial activities	Business services (1)
		SME	of which small	of which medium			Large	Hotels & accom- modation	Transport & communi- cation		
Purchased	6	5	4	9	21	3	12	2	3	:	3
Sold	7	5	3	16	33	9	8	2	5	:	4

(1) Including auxiliary financial activities.

Source: E-commerce database, Eurostat.

6.12 SWEDEN

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

Like all Nordic countries the penetration rate of information and communication technologies in Swedish enterprises generally exceeded the EU average.

Almost every enterprise (99%) in Sweden was equipped with computers by the beginning of 2002, so that Sweden had, along with Finland, the highest penetration rate of computers of all EU Member States. An analysis by activity indicates that, unlike in Finland, not all sectors had these extremely high penetration rates of computers, with the transport and communication sector (94%) noticeably less equipped than the others.

In line with the high figures for computer penetration the use of the Internet in Swedish enterprises was also high (95%) compared with the EU average (81%). Again conforming to a pattern common to Nordic countries, the results for Sweden show that this indicator is not greatly influenced by size effects. Even among small enterprises the proportion using Internet is particularly high (94%), marginally less than the highest rate for small enterprises in the EU, 95% in Finland.

One aspect of ICT usage where Swedish enterprises follow a different path to enterprises in the other Nordic countries is the means of access to the Internet, with high usage of analogue modems and low usage of DSL; usage of ISDN, as well as broadband access (other than DSL) is nevertheless relatively high.

Leaving aside the atypical results for the United Kingdom, Swedish Internet connected enterprises were the most likely in the EU to have a web presence, both overall and in each of the three size classes studied; this was also the case in each of the main activity sectors except for business services.

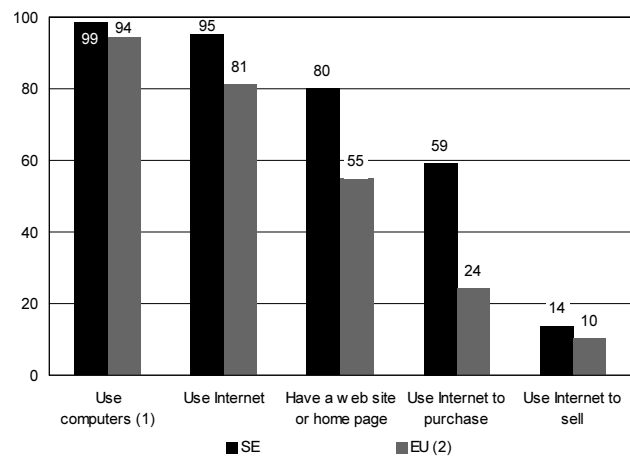
Swedish enterprises are often active in Internet e-commerce, especially in purchasing: 62% of Swedish enterprises using the Internet (corresponding to 59% of all enterprises - see figure 6.12.1) reported having purchased via the Internet in 2001, compared to 30% across the EU. Swedish enterprises are somewhat less active concerning Internet sales. Among enterprises connected to the Internet 14% sold via the Internet in 2001, one percentage point higher than the EU average. This narrow difference compared to the EU average is common to small and medium-sized enterprises, whereas large Swedish enterprises connected to the Internet have a notably higher incidence of Internet sales (27%) than the EU average (17%).

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.12.1: Proportion of enterprises using ICT and Internet e-commerce, Sweden, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Swedish enterprises selling via the Internet recorded the highest proportion of any EU Member State receiving on-line payments, averaging 30% and ranging from 29% of SMEs to 34% of large enterprises; only large Irish enterprises (39%) recorded a higher proportion of on-line payments.

Table 6.12.1: Proportion of enterprises using ICT, Sweden, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	99	99	98	100	100	99	99	99	94	98	100
Proportion of employees using computers											
all computers	72	71	70	72	74	67	78	58	72	92	81
Internet connected computers	51	52	53	51	51	41	51	37	52	89	75
Used e-mail	91	91	91	88	96	93	:	96	87	:	95
used already in 2001	87	87	87	86	95	89	83	90	81	89	92
used in (or planned for) 2002	4	4	4	1	1	4	:	6	6	:	3
Do not plan to use / do not know	8	8	8	11	3	6	12	3	11	8	5
Used intranet	52	50	46	74	91	42	55	47	35	78	68
used already in 2001	44	43	38	66	82	35	44	41	27	64	62
used in (or planned for) 2002	8	8	8	8	9	6	11	7	8	14	6
Do not plan to use / do not know	39	40	43	22	8	47	34	45	48	19	28
Used extranet	27	25	23	38	66	19	27	19	17	43	41
used already in 2001	18	17	15	29	53	12	16	15	12	25	33
used in (or planned for) 2002	8	8	8	9	13	7	11	4	4	18	8
Do not plan to use / do not know	59	60	62	52	31	66	57	68	62	47	50

Source: E-commerce database, Eurostat.

Table 6.12.2: Connection to Internet, Sweden

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	95	95	94	99	100	96	95	97	90	98	97
started (or planned) Internet use in 2002	2	2	3	1	:	2	4	1	1	0	2
do not plan to use Internet / do not know	1	1	1	0	0	1	1	0	3	0	1
answer not available	1	2	2	0	0	1	1	1	6	2	0
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	12	12	11	12	21	9	14	5	10	11	16
Modem	49	49	51	41	36	50	51	59	57	26	40
ISDN	51	51	51	52	41	50	58	63	40	24	47
xDSL	13	13	13	13	18	11	11	11	10	15	19
Other broadband < 2MBps	22	22	19	35	45	18	22	14	16	40	32
Other broadband >= 2MBps	21	20	18	31	59	14	15	20	17	40	40

Source: E-commerce database, Eurostat.

Table 6.12.3: Internet services used and provided, Sweden

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Analysis of competitors	53	52	51	58	72	51	50	58	36	65	64
Receive digital products	65	65	63	72	88	66	61	51	50	76	78
Obtain after sales services	70	70	69	76	87	74	64	74	60	76	77
Financial transactions	75	76	77	68	49	69	75	75	78	63	81
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	84	84	82	92	97	83	82	99	74	94	90
of which: also in foreign language (%)	40	39	37	48	68	41	33	61	28	54	50
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	97	97	97	98	96	97	96	98	96	94	98
Provide customers with database access	43	42	42	45	63	35	57	29	31	43	42
Deliver digital products	4	4	4	3	11	5	:	2	3	4	8
Provide after sales support	35	34	34	38	47	27	43	23	24	41	40
Provide mobile Internet services	5	5	4	6	15	3	3	1	6	7	10

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.12.4: Internet purchases, Sweden, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	62	62	60	72	83	59	59	51	48	64	78
Enterprises having purchased via Internet: proportion having purchased via specialised B2B Internet market places	22	22	21	23	36	15	27	17	19	28	27

(1) Enterprises weighted by their purchases.
Source: E-commerce database, Eurostat.

Table 6.12.5: Internet sales, Sweden

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet started selling in 2000 or earlier	14	14	13	18	27	9	17	49	16	22	13
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	70	70	69	74	70	74	64	50	59	72	77
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (1)											
less than 1% of total sales	6	5	6	4	9	:	:	0	10	:	:
1% or more of total sales	92	93	94	88	80	87	91	95	90	71	98
2% or more of total sales	64	65	63	71	56	51	52	86	81	42	81
5% or more of total sales	49	49	49	52	41	36	36	66	57	42	72
10% or more of total sales	31	31	30	37	24	:	31	52	32	35	32
25% or more of total sales	13	13	9	27	9	:	15	5	14	23	22
50% or more of total sales	5	5	4	9	4	0	:	2	10	23	11
do not know	:	:	:	:	:	:	:	:	:	:	:
Enterprises having sold via Internet: proportion having sold via a presence on specialised B2B Internet market places, 2001 (%)	12	11	10	13	32	:	13	11	6	13	17

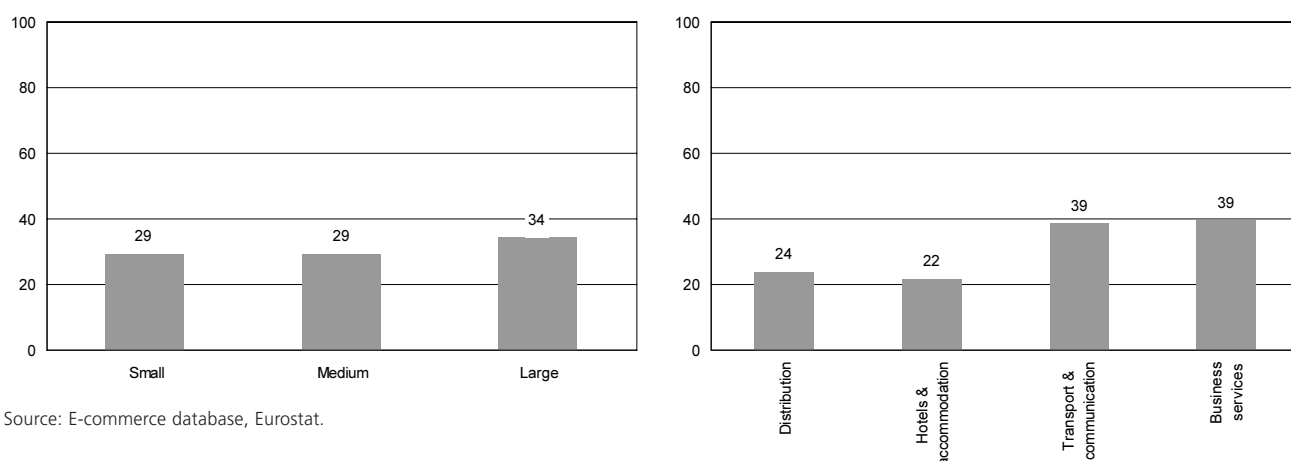
(1) Enterprises weighted by their turnover.
Source: E-commerce database, Eurostat.

Table 6.12.6: Internet sales: destination, Sweden, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	79	75	76	75	81	:	:	66	:	:
Consumers (B2C sales)	21	25	24	25	19	:	:	34	:	:
Do not know / no answer	0	0	0	0	0	:	:	0	:	:
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	78	:	:	:	:	:	:	:	:	:
Other EU countries	12	:	:	:	:	:	:	:	:	:
Rest of the world	9	:	:	:	:	:	:	:	:	:
Do not know / no answer	0	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Figure 6.12.2: Enterprises having sold via Internet: proportion having received on-line payments, Sweden, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.12.7: Barriers to e-commerce, Sweden, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	72	71	70	79	81	77	66	52	65	85	75
Potential group of customers is too small	61	61	60	65	63	67	64	37	53	44	53
Security problems with payments	24	24	25	18	14	23	32	21	:	20	17
Uncertainty concerning legal framework	45	45	45	47	44	49	49	37	35	39	41
Logistical problems	32	32	32	34	37	34	41	25	18	11	26
Other	:	:	:	:	:	:	:	:	:	:	:
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	43	41	41	42	60	64	:	34	53	:	56
Potential group of customers is too small	52	51	49	59	62	73	41	41	61	:	48
Security problems with payments	52	52	52	49	60	60	:	44	:	52	46
Uncertainty concerning legal framework	43	42	42	44	53	54	:	45	55	58	41
Logistical problems	26	26	24	34	30	:	25	21	:	26	25
Other	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.12.8: Proportion of enterprises using EDI, Sweden, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	8	7	7	9	33	7	12	5	5	4	6
Sold	8	7	6	15	40	13	9	1	5	:	4

Source: E-commerce database, Eurostat.

6.13 THE UNITED KINGDOM

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

The United Kingdom has a relatively low use of ICT, mainly due to low rates in some service sectors, particularly the hotels and accommodation sector. Nevertheless it has an active use of Internet e-commerce and also a very developed use of EDI.

The survey results show that the proportion of British enterprises using computers is comparable only with Greece and Portugal among the Member States. While all large enterprises used computers, as did nearly all medium-sized enterprises (98%), only 86% of small enterprises used computers, a proportion lower than in any Member State except Portugal. The British situation is due mainly to the low level of computerisation in the hotels and accommodation sector where only 65% of British enterprises use computers compared to 81% in Greece (the next lowest country) and 95% on average in the EU. The United Kingdom also has the third lowest rate of computerisation among EU Member States in the transport and communication sector, with 91% of British enterprises in this sector using computers compared to an EU average of 95%.

The gap in ICT usage between the United Kingdom and most other EU Member States indicated by the survey results is even more evident in terms of Internet access. While 81% of EU enterprises accessed the Internet, only 54% of British ones did, 10 percentage points less than in Greece (64%) which had the next lowest Internet access rate. The gap in Internet access between the United Kingdom and the EU was most noticeable for small enterprises where the British access rate of 49% in 2001 was 30 percentage points below the EU average and 14 percentage points below the Greek proportion (63%). Again the low British figure results from a very low figure for the hotels and accommodation sector which was less than one-third of the EU average. Only in the manufacturing sector was the British rate of Internet access not the lowest among the Member States, and even in this case it was only 1 percentage point higher than in Greece.

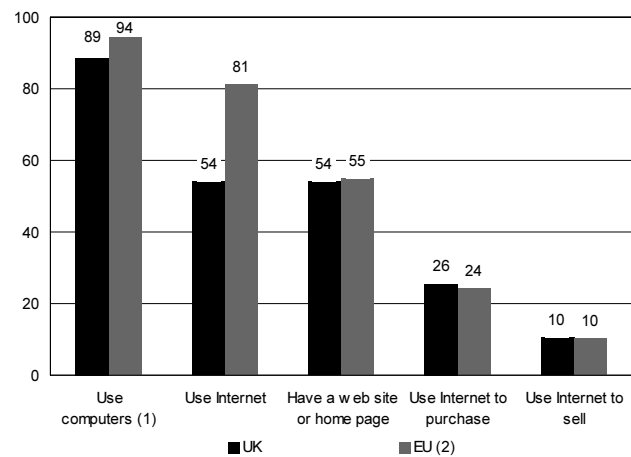
The proportion of Internet connected enterprises having made purchases via the Internet was 47% in the United Kingdom, 17 percentage points higher than the EU average. This rate was particularly high among small enterprises. A sectoral analysis shows a very high rate of Internet purchasing among Internet connected enterprises in the transport and communication sector (64%), relative to the EU average (27%). On the other hand the rate of Internet purchasing in the hotels and accommoda-

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.13.1: Proportion of enterprises using ICT and Internet e-commerce, the United Kingdom, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

tion sector was exceptionally low, just 5% of Internet connected enterprises in this sector, compared to an EU average of 24%.

A high proportion of Internet connected, British enterprises also made Internet sales in 2001, although there were a number of EU Member States with a higher proportion. Again it was in the small enterprise size class that the difference between the EU average (13%) and the United Kingdom's figure (20%) was highest. Although the proportion of Internet connected enterprises making Internet sales in the British hotels and accommodation sector (20%) was comparable to other sectors in the United Kingdom, it was again much lower than the EU average (49%) and in fact the lowest among the EU Member States; in all other sectors the United Kingdom's figure was higher than the EU average.

The proportion of enterprises using EDI (or other non-Internet networks) for e-commerce in the United Kingdom was considerably higher than in any other Member State. Some 22% of British enterprises had used networks other than the Internet for purchases and 21% for sales during 2001, compared to 3% and 2% across the EU as a whole. This relatively high usage was common to most sectors although there was a significantly lower rate of use in the hotels and accommodation sector.

Table 6.13.1: Proportion of enterprises using ICT, the United Kingdom, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	89	88	86	98	100	95	86	65	91	98	95
Used e-mail	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	73	72	68	92	99	85	65	29	72	94	87
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:
Used intranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	26	24	21	42	65	29	20	9	27	45	34
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:
Used extranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	7	7	6	11	25	7	7	0	6	8	12
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.13.2: Connection to Internet, the United Kingdom

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	54	53	49	75	86	63	45	28	51	69	66
started (or planned) Internet use in 2002	:	:	:	:	:	:	:	:	:	:	:
do not plan to use Internet / do not know	:	:	:	:	:	:	:	:	:	:	:
answer not available	:	:	:	:	:	:	:	:	:	:	:
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	:	:	:	:	:	:	:	:	:	:	:
Modem	56	59	65	36	15	60	78	54	58	21	39
ISDN	:	:	:	:	:	:	:	:	:	:	:
xDSL	16	16	15	19	27	14	12	3	20	28	23
Other broadband < 2MBps	:	:	:	:	:	:	:	:	:	:	:
Other broadband >= 2MBps	13	12	10	17	37	8	8	13	14	25	21

Source: E-commerce database, Eurostat.

Table 6.13.3: Internet services used and provided, the United Kingdom

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	100	100	100	100	100	100	100	100	100	100	99

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.13.4: Internet purchases, the United Kingdom, 2001 (%)

	Breakdown by size class				Breakdown by activity						
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion having purchased via Internet	47	47	49	42	45	35	43	5	64	53	67

Source: E-commerce database, Eurostat.

Table 6.13.5: Internet sales, the United Kingdom

	Breakdown by size class				Breakdown by activity						
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet	19	19	20	16	22	22	23	20	26	19	12
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.13.6: Proportion of enterprises using EDI or networks other than Internet, the United Kingdom, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	22	22	21	25	33	25	28	5	22	36	21
Sold	21	21	18	33	41	33	21	9	22	16	16

Source: E-commerce database, Eurostat.

6.14 NORWAY

NACE activities presented in this sub-chapter

NACE activities	
D	Manufacturing
G	Distribution
55.1, 55.2	Hotels and accommodation
I	Transport, storage and communication
67	Activities auxiliary to financial intermediation
K	Business services (real estate, renting and business activities)

Norwegian enterprises had an equipment rate in information and communication technologies slightly above the EU average, but used it to a greater extent for Internet sales (no information available on Internet purchases).

Computers were found in 95% of Norwegian enterprises in 2002. In a manner similar to the EU Member States, medium-sized and large enterprises were practically all computerised while 95% of small enterprises were, a proportion that was higher than all EU Member States except the Nordic ones or Luxembourg. A breakdown by sector reveals that Norwegian enterprises were notably less computerised than their EU counterparts in the transport and communication sector, where only 90% of them used computers, lower than all of the Member States except Austria and Italy.

Just over half of employees in Norway used a computer connected to the Internet, a share close to double the EU average and comparable with the proportions in the Nordic EU Member States. The difference between Norway and the EU average for this indicator was greater for large enterprises than for small ones.

Internet access in Norwegian enterprises is much more likely to be made through DSL or other broadband connections than in most of the Member States: only Denmark, Finland and Austria of the EU Member States have a higher proportion of Internet connected enterprises using DSL and none have a higher proportion using other broadband networks (fixed connection \geq 2Mbps).

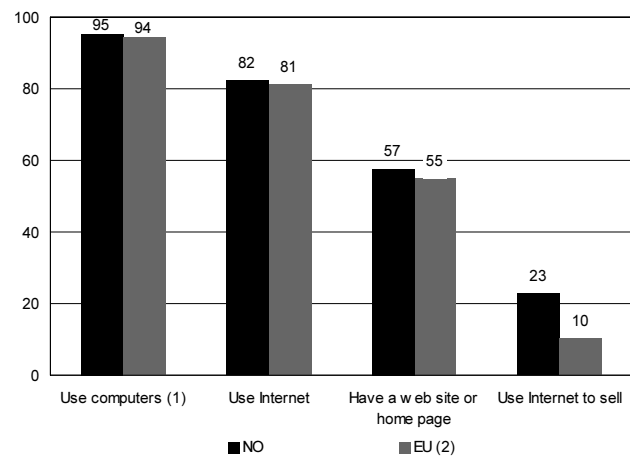
Norwegian enterprises were very active Internet sellers. More than one-quarter (27%) of enterprises with an Internet connection in this country (corresponding to 23% of all enterprises: see figure 6.14.1) reported having sold via the Internet in 2001, compared to 13% on average in the EU. The proportion of Norwegian Internet connected enterprises making Internet sales was above the EU average in all sectors, but most notably in business services and manufacturing where the proportion was two to three times higher.

Size classes covered in this sub-chapter

Data in this sub-chapter cover enterprises with 10 persons employed or more, using the following breakdown

Total	Enterprises with 10 or more persons employed
SME	Enterprises with 10 to 249 persons employed
Small	Enterprises with 10 to 49 persons employed
Medium	Enterprises with 50 to 249 persons employed
Large	Enterprises with 250 or more persons employed

Figure 6.14.1: Proportion of enterprises using ICT and Internet e-commerce, Norway, 2001 (%)



(1) Beginning 2002.

(2) Excluding BE, FR, NL and UK.

Source: E-commerce database, Eurostat.

Norwegian enterprises selling via Internet were focused on their national market with 91% of their Internet remaining in Norway, a proportion only exceeded among the Member States by Spain. This was particularly true of medium-sized enterprises for whom 96% of Internet sales were national.

Table 6.14.1: Proportion of enterprises using ICT, Norway, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Used computers	95	95	95	99	99	97	94	98	90	98	98
Proportion of employees using computers											
all computers	60	59	58	59	63	51	62	39	57	88	79
Internet connected computers	51	46	43	50	56	43	42	34	49	88	79
Used intranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	28	27	23	48	78	20	27	29	25	67	44
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	72	73	77	52	22	80	73	71	75	33	56
Used extranet	:	:	:	:	:	:	:	:	:	:	:
used already in 2001	13	13	12	20	38	9	11	9	11	41	26
used in (or planned for) 2002	:	:	:	:	:	:	:	:	:	:	:
Do not plan to use / do not know	87	87	88	80	62	91	89	91	89	59	74

Source: E-commerce database, Eurostat.

Table 6.14.2: Connection to Internet, Norway

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Proportion of enterprises that: (%)											
used Internet already in 2001	82	82	80	95	96	92	73	92	79	98	92
started (or planned) Internet use in 2002	4	4	4	1	1	1	6	4	5	0	0
do not plan to use Internet / do not know	14	14	16	4	3	7	21	3	16	2	8
answer not available	0	0	0	0	0	0	0	0	0	0	0
Enterprises using Internet: proportion using selected types of Internet access, 2001 (%)											
Mobile	:	:	:	:	:	:	:	:	:	:	:
Modem	7	7	8	3	3	9	8	23	4	0	2
ISDN	60	61	66	37	17	70	67	53	52	0	39
xDSL (1)	22	22	19	36	33	20	21	16	22	34	29
Other broadband < 2MBps	:	:	:	:	:	:	:	:	:	:	:
Other broadband >= 2MBps (2)	25	24	23	32	56	19	22	18	28	66	40

(1) Fixed connection with transmission capacity below 2 Mbps.

(2) Fixed connection with transmission capacity of at least 2 Mbps.

Source: E-commerce database, Eurostat.

Table 6.14.3: Internet services used and provided, Norway

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet: proportion using selected Internet services (as a consumer), 2001 (%)											
Monitor markets	52	52	50	60	70	51	49	66	47	100	57
Receive digital products	58	58	57	61	65	54	57	50	49	42	72
Obtain after sales services	:	:	:	:	:	:	:	:	:	:	:
Use banking or financial services	73	74	75	69	65	70	76	73	71	80	73
Enterprises using Internet: proportion having a web site or home page, 2001 (%)	70	69	67	80	87	69	61	78	66	63	87
of which: also in foreign language (%)	38	37	33	52	56	41	22	72	52	67	43
Enterprises with a web presence: proportion providing selected Internet services, 2001 (%)											
Market products	93	93	93	95	92	94	91	93	94	56	96
Facilitate access to catalogues and lists	43	43	43	42	45	40	54	46	51	12	30
Deliver digital products	14	14	13	15	19	9	19	17	11	5	14
Provide after sales support	30	29	29	29	37	27	33	30	34	39	26
Provide mobile Internet services	3	3	3	4	8	3	3	1	4	3	4

Source: E-commerce database, Eurostat.

6. E-COMMERCE IN THE MEMBER STATES AND NORWAY

Table 6.14.4: Internet sales, Norway

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises using Internet in 2001 (%)											
Proportion having sold via Internet (1)	27	27	27	29	33	24	28	61	23	8	27
started selling in 2000 or earlier	:	:	:	:	:	:	:	:	:	:	:
started selling in 2001	:	:	:	:	:	:	:	:	:	:	:
Did not sell via Internet	41	41	40	42	42	45	35	15	42	25	50
Enterprises having sold via Internet in 2001: proportion whose Internet sales were: (%) (2)											
less than 1% of total sales	4	4	5	1	2	3	4	0	4	:	8
1% or more of total sales	51	51	51	50	53	55	53	57	63	:	38
2% or more of total sales	36	35	35	36	41	33	37	44	41	:	32
5% or more of total sales	25	25	25	27	28	24	25	30	35	:	24
10% or more of total sales	12	12	12	12	18	7	16	10	11	:	13
25% or more of total sales	4	4	4	4	2	4	5	3	5	:	2
50% or more of total sales	2	2	2	2	1	0	5	0	1	:	0
do not know	36	36	35	36	39	37	32	40	26	:	43

(1) Enterprises weighted by their turnover.

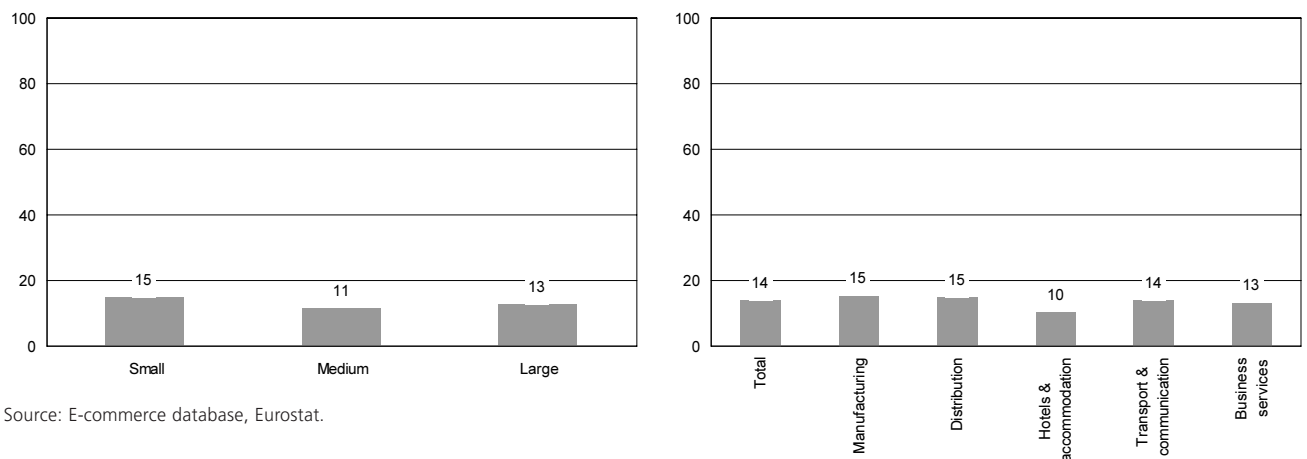
Source: E-commerce database, Eurostat.

Table 6.14.5: Internet sales: destination, Norway, 2001

	Breakdown by size class					Breakdown by activity				
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Business services
Proportion of Internet sales by customer type (%)										
Business (B2B sales)	74	80	36	89	54	81	82	26	34	64
Consumers (B2C sales)	15	10	35	4	32	9	7	24	54	30
Do not know / no answer	11	10	29	7	14	9	11	50	12	6
Proportion of Internet sales by customer location (%)										
Own country (domestic sales)	91	92	70	96	87	79	94	32	86	86
EU countries	2	1	2	1	3	6	0	11	4	5
Rest of the world	1	1	1	1	0	6	0	4	1	6
Do not know / no answer	7	6	28	2	10	10	5	52	10	4

Source: E-commerce database, Eurostat.

Figure 6.14.2: Enterprises having sold via Internet: proportion having received on-line payments, Norway, 2001 (%)



Source: E-commerce database, Eurostat.

Table 6.14.6: Barriers to e-commerce, Norway, beginning 2002 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Enterprises not selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	50	49	47	63	67	56	45	35	44	96	55
Customers or other enterprises not ready	41	41	40	51	50	49	38	22	37	52	43
Security problems with payments	37	37	36	43	39	39	36	39	35	32	38
Uncertainty concerning legal framework	39	39	38	44	44	43	37	34	41	35	36
Logistical problems	28	28	28	31	35	29	32	31	17	2	23
Other	:	:	:	:	:	:	:	:	:	:	:
Enterprises selling via Internet: proportion regarding selected barriers as of much or some importance (%)											
Products not suitable for Internet sales	54	53	53	54	56	56	56	30	61	62	53
Customers or other enterprises not ready	40	39	39	41	45	43	43	23	40	24	36
Security problems with payments	46	46	45	48	59	44	50	51	63	76	33
Uncertainty concerning legal framework	44	44	44	44	56	36	46	52	70	76	39
Logistical problems	28	28	29	26	27	17	38	19	31	38	25
Other	:	:	:	:	:	:	:	:	:	:	:

Source: E-commerce database, Eurostat.

Table 6.14.7: Proportion of enterprises using EDI or networks other than Internet, Norway, 2001 (%)

	Breakdown by size class					Breakdown by activity					
	Total	SME	of which small	of which medium	Large	Manufac- turing	Distribution	Hotels & accom- modation	Transport & communi- cation	Auxiliary financial activities	Business services
Purchased	6	6	5	8	14	4	10	1	4	0	2
Sold	5	5	4	10	18	5	7	1	5	3	3

Source: E-commerce database, Eurostat.

7. GENERAL INFORMATION

7. GENERAL INFORMATION

Table 7.1: Business population: number of enterprises, 2000 (1)

NACE	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
D	1 735 550	37 538	20 470	231 789	:	229 289	251 478	4 777	560 882	977	45 450	25 050	76 932	26 190	52 854	167 569	10 376
15-22	783 577	18 552	7 218	93 944	:	111 657	130 551	1 912	253 635	475	17 830	11 154	39 816	10 716	21 705	62 129	4 743
23-25	73 296	1 621	1 088	9 953	:	10 525	9 220	:	20 433	43	1 985	936	1 909	1 022	2 412	11 257	464
26-28	379 636	7 881	4 943	58 333	:	52 117	39 333	939	127 396	245	8 860	4 529	19 320	5 543	11 931	37 486	1 740
29-37	499 041	9 484	7 221	69 559	:	54 990	72 374	:	159 418	214	16 775	8 431	15 887	8 909	16 806	56 697	3 429
G	:	:	:	450 233	:	787 430	622 325	25 451	1 321 564	6 719	164 270	62 254	230 523	49 016	117 990	405 025	56 971
50	:	:	:	61 419	:	72 294	80 580	4 573	159 247	865	23 350	7 805	29 636	9 137	18 883	71 569	8 651
51	:	:	:	111 402	:	184 292	162 849	4 190	420 957	3 022	55 190	19 408	50 348	16 264	41 680	118 084	17 929
52	:	:	:	277 412	:	530 844	378 896	16 688	741 360	2 832	85 730	35 041	150 539	23 615	57 427	215 372	30 391
55.1, 55.2	:	41 273	13 481	:	:	260 528	204 151	12 545	250 209	2 486	39 745	38 133	60 221	10 562	20 784	116 140	9 481
I	789 920	15 544	15 545	77 348	:	222 387	94 578	4 345	164 641	:	27 590	12 050	19 911	23 682	31 527	79 594	21 000
60-63	639 580	10 102	12 523	56 358	:	197 657	80 611	3 779	137 323	:	18 560	9 331	17 333	21 322	26 169	48 668	17 319
64	39 111	2 008	1 173	3 564	:	6 420	3 228	566	2 779	92	3 005	497	218	505	712	14 344	864
67	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
K	3 089 435	84 929	63 889	398 229	:	423 581	445 571	16 818	805 675	6 000	128 750	43 982	51 477	42 258	:	519 389	68 875
70, 71, 73, 74	2 740 928	77 328	57 423	375 577	:	407 311	408 618	14 791	729 148	5 261	114 730	36 215	49 278	38 362	:	390 077	62 656
72	348 510	7 601	6 466	22 654	:	16 270	36 953	2 027	76 527	739	14 020	7 768	2 199	3 896	22 078	129 312	6 219

(1) DE, IE, LU, includes provisional data.

Source: Eurostat NewCronos (theme4/sbs/enterpr/enter_ms).

Table 7.2: Business population: turnover, 2000 (billion EUR) (1)

NACE	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
D	5 394	185	72	1 425	:	389	910	98	819	8	232	109	68	104	165	778	60
15-22	1 485	53	:	293	:	124	243	32	245	2	77	:	29	36	45	232	24
23-25	1 105	56	:	272	:	76	203	:	164	2	65	:	:	13	17	162	7
26-28	749	31	9	195	:	69	110	4	143	4	27	20	10	12	22	88	12
29-37	2 055	46	24	665	:	120	354	:	267	1	63	38	17	43	81	297	17
G	5 759	248	:	1 075	:	492	953	57	679	15	371	142	110	82	177	1 198	107
50	954	47	:	143	:	76	125	13	131	3	63	21	26	13	32	213	19
51	3 185	153	:	610	:	274	528	27	344	9	239	84	56	45	100	628	59
52	1 620	48	:	321	:	141	299	16	203	3	69	37	28	23	44	357	28
55.1, 55.2	:	2	1	:	:	12	17	2	14	0	4	5	2	1	2	19	2
I	1 161	45	34	186	:	95	187	13	142	:	67	31	17	20	47	273	:
60-63	447	17	21	63	:	36	76	8	59	:	48	11	6	10	20	92	:
64	346	12	6	55	:	27	57	5	43	1	19	9	6	6	12	88	8
67	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:	:
K	1 601	49	30	315	:	127	310	15	148	3	103	30	17	17	:	402	28
70, 71, 73, 74	1 368	42	24	275	:	116	274	10	120	3	89	26	16	14	:	335	23
72	234	7	6	40	:	11	35	5	28	0	13	4	1	3	13	67	5

(1) IE, LU, includes provisional data.

Source: Eurostat NewCronos (theme4/sbs/enterpr/enter_ms).

Table 7.3: Population and the economy, 2002

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
Population (million)	381.8	10.3	5.4	82.5	11.0	40.5	61.2	3.9	58.0	0.4	16.1	8.1	10.4	5.2	8.9	59.7	4.5
Employment (million)	169.8	4.1	2.8	38.7	3.9	16.3	24.9	1.8	23.9	0.3	8.3	4.1	5.1	2.3	4.4	29.5	:
GDP at current market prices (billion EUR) (1)	9 165	261	184	2 108	141	694	1 521	129	1 258	22	445	217	129	140	255	1 660	202

(1) Including forecasts.

Source: Eurostat NewCronos (theme2/auxind/aux_perm); Eurostat NewCronos (theme2/aggs/aggs_gdp/a_gdp_c).

Table 7.4: Number of Internet hosts (1)

	EU Sum (2)	.be	.dk	.de	.gr	.es	.fr	.ie	.it	.lu	.nl	.at	.pt	.fi	.se	.uk	.no
	Internet hosts (thousands)																
1996	2 993	65	107	620	17	113	239	27	148	4	271	89	24	314	238	719	150
1997	4 652	107	169	1 132	28	196	355	40	254	5	391	108	42	487	349	988	292
1998	6 416	209	298	1 450	50	307	511	56	387	8	626	173	56	460	379	1 449	319
1999	8 489	339	338	1 635	75	470	1 233	64	302	10	959	263	78	462	523	1 739	439
2000	10 477	300	334	2 040	111	455	1 122	111	1 020	12	1 624	483	62	529	596	1 678	453
2001	12 690	352	561	2 426	143	539	789	128	680	14	2 632	326	247	887	735	2 231	305
2002	15 321	337	837	2 594	161	590	1 389	136	673	:	3 137	368	165	1 220	849	2 866	256
2003	15 930	216	803	2 477	182	738	1 632	149	603	:	3 364	281	191	1 229	918	3 147	561
	Annual growth																
2001	21	17	68	19	30	18	-30	16	-33	18	62	-33	297	68	23	33	-33
2002	21	-4	49	7	12	10	76	7	-1	:	19	13	-33	38	16	28	-16

(1) Hosts account for country code Top Level Domains (TLDs); EU sum, EU Member States: December for all years except 2003 which is August.

(2) 2002, 2003, excluding .lu.

Source: RIPE NCC.

Table 7.5: Number of secure servers per 1 million inhabitants (units)

	EU-15	BE	DK	DE	EL	ES	FR	IE	IT	LU	NL	AT	PT	FI	SE	UK	NO
July 1999	17	16	21	20	5	11	11	26	8	60	19	30	6	35	46	29	29
July 2000	38	26	54	46	8	19	22	65	14	100	34	55	12	66	91	74	61
July 2001	65	42	98	78	17	30	33	123	22	155	67	109	19	127	142	132	109
July 2002	79	43	123	97	16	33	42	151	20	220	83	117	21	143	140	171	117

Source: OECD and Netcraft (www.netcraft.com), December 2002.

8. METHODOLOGY OF THE EU STUDY ON ICT USAGE AND E-COMMERCE

8.1 SCOPE AND COVERAGE

BACKGROUND

Most of the data presented in this publication are derived from a survey on ICT usage and e-commerce undertaken by the EU Member States and Norway. Eurostat developed the model questionnaire in cooperation with Member States and OECD.

The surveys were carried out during the first half of 2002. Exceptionally, Denmark carried out the survey at the end of 2001 and France towards the end of 2002. The reference period for all variables was generally 2001 except for some of the key ICT usage questions which looked at the situation at the beginning of 2002.

POPULATION COVERAGE

In activity terms the target population was to cover the following NACE:

D - Manufacturing;
G - Distribution;
55.1, 55.2 - Hotels and accommodation;
I - Transport, storage and communication;
67 - Activities auxiliary to financial intermediation;
K - Business services (real estate, renting and business activities).

The coverage of Section F and Division 92 was optional.

The target population in enterprise size terms was enterprises with 10 or more persons employed. The coverage of smaller enterprises was optional.

TABULATIONS

Within the coverage specified above results were compiled for Eurostat by Member States and Norway for two sets of data.

1. An activity breakdown of the population of enterprises with 10 persons employed or more.

Manufacturing (Section D), sub-divided into i) Subsections DA to DE ii) Subsections DF to DH iii) Subsections DI and DJ iv) Subsections DK to DN.

Distributive trades (Section G), subdivided into Divisions 50, 51 and 52.

Hotels and accommodation (Groups 55.1 and 55.2).

Transport and communications (Section I), subdivided into i) Divisions 60 to 63 ii) Division 64.

Activities auxiliary to financial intermediation (Division 67).

Business services (Section K) sub-divided into i) Division 72 ii) Divisions 70, 71, 73 and 74.

In practice few Member States provided the optional activity breakdown (Division 22) and this publication concentrates on the compulsory ones; Division 67 was not covered by several Member States and has been excluded from many chapters of this publication in order to make the data as comparable as possible between countries.

2. A size-class breakdown of the population of enterprises in NACE Sections D, G, I and K, Groups 55.1 and 55.2 and Division 67 combined.

Small: 10 to 49 persons employed.

Medium-sized 50 to 249 persons employed.

Large 250 and more persons employed.

In general in this publication results for smaller enterprises have been combined with the results for medium-sized enterprise and presented as an SME total alongside the more detailed results.

The activity breakdown and the enterprise size class breakdowns were not cross-tabulated.

8.2 QUESTIONNAIRE

The following pages show the list of variables for the survey as foreseen by Eurostat in the model questionnaire. The list was the basis for preparing the national questionnaires in the

participating countries. In some cases the layout in the national questionnaires followed closely the layout in the list of variables.

Module A: General information about ICT systems			
A1. Does your enterprise use computers? (Filter question)	Yes	No -> end of the survey	
A2. Share of total number of employees using computers in their normal work routine (at least once a week):			
a) All computers		%	
b) Computers connected to the www (Internet)		%	
A3. Does your enterprise use or plan to use ICT in the following areas? (Multiple choice)	Year 2001	Year 2002	Do not know/do not plan to use
a) E-mail (including e-mails reached by any means)			
b) Intranet			
c) Extranet (see attached glossary for definition)			
Module B: Use of Internet (asking enterprises with ICT)			
B1. Does your enterprise use or plan to use Internet? (Filter question)	Year 2001	Year 2002	Do not know/do not plan to use
-> Go To D1			
B2. Type of external connection to the Internet in 2001? (Multiple choice)			
a) Mobile phone (optional)			Do not know
b) Modem (analogue)			
c) ISDN			
d) xDSL (ADSL, SDSL etc.)			
e) Other fixed connection < 2 MBps (optional)			
f) Other fixed connection >= 2MBps (e.g. frame relay/other broadband network service)			
B3. For what purposes does your enterprise use the Internet? (as consumer of Internet services) (Multiple choice)			
a) Market monitoring (e.g. prices)			
b) Receiving digital products			
c) Obtaining after sales services			
d) Banking and financial services			
B4. Does the enterprise have a Web site or homepage?	Yes	No -> Go to C1	
B5. Does the enterprise web site include information in foreign languages?	Yes	No	
B6. For what purposes does your enterprise use the Internet? (as provider of Internet services) (Multiple choice)			
a) Marketing the enterprise's products			
b) Facilitating access to product catalogues and price lists			
c) Delivering digital products			
d) Providing after sales support			
e) Providing mobile Internet services			
B7. Is the enterprise web site specifically designed to be accessible by disabled persons? (optional question)	Yes	No	

8. METHODOLOGY

Module C: E-commerce via Internet (asking enterprises with Internet access)					
Purchases via Internet					
C1.	Has the enterprise purchased products/services via the Internet in 2001? (Filter question)	Yes	No	Do not know	
		-> Go to C6			
C2.	What percentage of the total purchases (in monetary terms, excluding VAT), would you estimate, did the Internet purchases represent in 2001?	Yes	No	Do not know	
C3.	Has the enterprise paid on-line for any products/ services purchased on the Internet in 2001? Optional question	Yes	No	Do not know	
C4.	Has the enterprise purchased products via specialised B2B Internet market places in 2001?	Yes	No	Do not know	
C5.	Expected benefits from Internet purchases (Multiple choice) Optional question	Much imp.	Some imp.	Not important	Do not know
	a) To reduce transaction costs				
	b) To reduce prices				
	c) Increased access to, and awareness of, suppliers				
	d) To reduce inventories				
	e) To speed up business processes				

Sales via Internet					
C6.	Has the enterprise received orders via the Internet? (via a form on the web; doesn't include orders via manually typed e-mail) (Filter question)	Since before 2001	Since 2001	No	Do not know
		-> Go to C13			
C7.	What percentage of the total turnover (in monetary terms, excluding VAT) did Internet sales represent in 2001?	Yes	No	Do not know	
C8.	What percentage of all Internet sales did sales to other enterprises (B2B) and sales to end consumers (B2C) represent in 2001?	B2B %	B2C %	Do not know	
C9.	Breakdown of Internet sales in 2001 by destination (estimates in percentage, in monetary terms)	Own country %	Other EU countries ¹ %	Rest of the world %	Do not know
C10.	Has the enterprise received on-line payments for Internet sales in 2001?	Yes	No	Do not know	
C11.	Is your enterprise targeting markets in other countries via Internet sales? Optional question	Yes	No	Do not know	
C12.	Has the enterprise sold products to other enterprises via a presence on specialised B2B Internet market places in 2001?	Yes	No	Do not know	
C13.	Did your systems for accepting electronic orders or placing electronic orders link automatically with any of the following in 2001? Optional question	Yes	No		
	a) Your suppliers' business systems				
	b) Re-ordering replacement supplies				
	c) Your customers' business systems				
	d) Invoicing and payment systems				
	e) Your production or service operation				
	f) Your logistics systems (incl. Electronic delivery)				
	g) Your marketing operations				
C14.	Motivations for Internet sales (Multiple choice) Optional question	Much imp.	Some imp.	Not important	Do not know
	a) Company image considerations				
	b) To reduce business costs				
	c) To speed up business processes				
	d) To improve quality of services				
	e) To reach new customers				
	f) To launch new products / services				
	g) To keep pace with competitors				
	h) To expand the market geographically				

Module D: E-commerce via EDI or networks other than Internet. (asking enterprises with ICT)				
D1.	Did the enterprise use EDI or networks other than Internet in 2001? (Filter question)	Yes	No	Do not know
	a) for purchases			
	b) for sales			
D2.	Which technology did you use in 2001? (Multiple choice) Optional question	EDI	Minitel	Other Do not know
D3.	What percentage of the total purchases (in monetary terms) did the purchases via EDI or networks other than Internet represent in 2001? (estimate in %)	%		Do not know
D4.	What percentage of the total turnover (in monetary terms) did the sales via EDI or networks other than Internet represent in 2001? (estimate in %)	%		Do not know

Module E: Barriers on e-commerce					
E1.	Problems and barriers related to on-line sales (Multiple choice)	Much imp.	Some imp.	Not important	Do not know
	a) Products / services of enterprise not suitable for sales by the Internet				
	b) Customers or other enterprises not ready to use Internet commerce				
	c) Security problems concerning payments				
	d) Uncertainty concerning legal framework for e-commerce (e.g. contracts, terms of delivery and guarantees)				
	e) Logistical problems				
	f) Other, (please specify.....)				

Module X Background information (X1-X4) available in some countries from SBS and thus not to be included; latest available information should be provided	
X1.	Activity of the enterprise
X2.	Number of employees
X3.	Total purchases of goods and services (in value terms, excluding VAT)
X4.	Total turnover (in value terms, excluding VAT)

8.3 NATIONAL SURVEYS

The table below provides some key information about the surveys carried out. Note that while several countries had a broader activity or size coverage than that foreseen nearly all have provided tabulated results for the required population - see later for an explanation of the main exceptions.

	Sample size	Enterprise size coverage (in terms of persons employed)	NACE Standard = D, G, 55.1, 55.2, I, 67, K	Survey period
	5 000			
Belgium		10+	Standard	June 2002
Denmark	5 063	5+	D, G, 55.1, 55.2, I, 67, K	October to November 2001
Germany	29 366	1+	Standard, excluding 67	February to March 2002
Greece	3 766	10+	Standard	February to March 2002
Spain	14 000	10+	Standard, plus O	May 2002
France	12 000	10+ NACE Section D: 20+	C, D, E, G, K, 92	October 2002
Ireland	6 000	10+ NACE Divisions 20 to 37: 5+	Standard	June 2002
Italy	12 000	10+	Standard	February 2002
Luxembourg	1 000	10+	Standard	May 2002
The Netherlands	13 000	5+	A to K and M to O	May 2002
Austria	4 700	10+	Standard	March to June 2002
Portugal	10 000	10+	Standard	March to September 2002
Finland	5 000	5+	Standard	January 2002
Sweden	4 000	10+	Standard, plus O	January to March 2002
The United Kingdom	12 000	10+ (+ micro)	Standard	January 2002

TREATMENT OF ITEM NON-RESPONSE

Item non-response occurs when a survey respondent returns a questionnaire but has not answered all questions. For example, a respondent may know that Internet e-commerce is used in his/her enterprise but not know to what extent this is the case and so may answer the question about use but be a non-respondent for the question asking for the percentage of total purchases using Internet. In general, item non-response was not treated. Hence, results presented in percentage terms show the proportion of respondents to a particular question as a proportion of the relevant population, and hence levels and percentages will often be undervalued.

COMPILATION OF STANDARD COVERAGE FROM NATIONAL SURVEYS

The coverage in terms of the target population and the detailed list of questions asked by each statistical authority varied. Although several Member States conducted surveys that were wider in coverage than foreseen by the pilot survey, either in terms of a lower employment threshold or more activities, most of these compiled a special series of results corresponding to the required coverage. Where this was not done, the remaining differences in terms of the activities included and the size of enterprises surveyed are in some cases significant and this should be borne in mind when interpreting the data. The following table indicates the main differences in the coverage of the data presented in this publication:

Data presented for all activities covered by the survey - exceptions:

DK	Excludes Division 67.
DE	Excludes Division 67.
IE	Excludes Division 67.
IT	Excludes Division 67.
NL	Includes Groups 55.3 to 55.5 and Divisions 65 and 66.
FI	Results for Division 67 have been included in the results for the aggregate of Divisions 70, 71, 73 and 74. Hence this aggregate, and any broader aggregates including the aggregate of Divisions 70, 71, 73 and 74 (for example the total for Section K and the total for Sections D, G, I and K) include also Division 67.

Data presented by size class - exceptions:

NL	The size class split between medium-sized and large enterprises is 200 persons employed, not 250.
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8.4 COMPILATION OF EU-15 AGGREGATES

Whenever an EU-15 average is made, it is a weighted average of the results of a fixed set of countries. As such the results for the EU are comparable between tables and graphs and between chapters, unless otherwise footnoted. Ratios for the EU-15 aggregate have been calculated by summing the data for the relevant countries in absolute terms (count of the number of enterprises, value in euro, or count of the number of employees) and recalculating the ratio.

Generally all Member States are included in the EU-15 aggregate except for Belgium and France (for which no data is available), and the Netherlands and the United Kingdom (for which several important variables are not available).

When data are presented broken down by activity, the Irish data is also excluded from the EU aggregate, because of the lack of publishable data for manufacturing. As a result, in chapter 2 of the present publication some tables/graphs show

an EU-15 aggregate with Ireland included and some without, and hence values for the EU-15 for the same variable can vary slightly between tables/graphs.

Furthermore, any divergences from the standard activity and size coverage definitions within individual Member States that are used to compile the EU-15 total are also present in the total. For example, the EU-15 total for Section K includes Finland and hence also includes Division 67 for Finland.

NEW ROUND OF SURVEYS FOR 2003

A new round of e-commerce surveys has been carried out in the first quarter of 2003. All 15 Member States of the EU have participated in this third round of surveys as well as Norway and some of the Candidate countries. Results will become available in the second half of 2003 and it is foreseen to publish results in the first half of 2004.

8.5 LIST OF OTHER SOURCES

The data sources that have been used in this publication other than the ICT usage and e-commerce survey are:

Organisation	Web address	Sources used	Description
Eurostat	http://europa.eu.int/comm/eurostat/	NewCronos (Eurostat's reference database) themes 2 and 4	NewCronos is Eurostat's reference database.
OECD	http://www.oecd.org	Communications Outlook 2003	The 2003 Communications Outlook presents the most recent comparable data on the performance of the communications sector in OECD countries and on their policy frameworks.
Netsafe	http://www.netcraft.com	Netcraft Web Server Survey	The Netcraft Web Server Survey is a survey of Web Server software usage on Internet connected computers.
RIPE	http://www.ripe.net	The RIPE Region Hostcount	RIPE Network Coordination Centre. Provides a monthly host count.

8.6 DEFINITIONS

ABBREVIATIONS

ADSL:	asymmetric digital subscriber line. One of the DSL techniques.
B2B:	business to business transactions conducted over IP based networks and over other computer-mediated networks.
B2C:	transactions conducted between business and private consumers over IP based networks and over other computer-mediated networks.
EDI:	electronic data interchange. Data interchange in structured form (EDIFACT) between businesses.
EU:	European Union
EUR:	euro
ICT:	information and communication technology
Internet:	internet protocol based networks
IP:	internet protocol
ISDN:	integrated services digital network
IT:	information technology
NACE:	statistical classification of economic activities in the European Community
SME:	small and medium-sized enterprises
www:	World Wide Web
xDSL:	digital subscriber line. DSL technologies are designed to increase bandwidth available over standard copper telephone wires. Includes ISDSL, HDSL, SDSL, ADSL, RADSL, VDSL, DSL-Lite.
EU:	European Union
BE:	Belgium
DK:	Denmark
DE:	Germany
EL:	Greece
ES:	Spain
FR:	France
IE:	Ireland
IT:	Italy
LU:	Luxembourg
NL:	The Netherlands
AT:	Austria
PT:	Portugal
FI:	Finland
SE:	Sweden
UK:	The United Kingdom
NO:	Norway

DEFINITIONS AND CONCEPTS

Computer-mediated networks other than Internet
EDI, Minitel or interactive telephone systems

Digital products

Goods/services that can be ordered and delivered directly to a computer over the Internet, for example music, videos, games, computer software, online newspapers, consulting services.

Electronic commerce (e-commerce)

Transactions conducted over Internet Protocol-based networks and over other computer-mediated networks. The goods and services are ordered over those networks, but the payment and the ultimate delivery of the good or service may be conducted on or off-line. Orders received via telephone, facsimile and non-interactive e-mails are not counted as electronic commerce.

E-mail

Electronic transmission of messages, including text and attachments, from one computer to another located within or outside of an organisation. This includes electronic mail by Internet or other computer networks.

Extranet

A secure extension of an Intranet that allows external users to access some parts of an organisation's Intranet.

Internet

Relates to Internet Protocol based networks: www, extranet over the Internet, EDI over the Internet, Internet-enabled mobile phones.

Intranet

An internal company communications network using Internet protocol allowing communications within an organisation.

Mobile Internet services

Internet services available via a wireless terminal (Mobile phone, Personal Digital Assistant, PC device or custom terminal) and using Wireless Application Protocol (WAP) or General Packet Radio Service (GPRS). WAP is a protocol that makes it possible to adapt Internet formats to the characteristics of GSM handsets. GPRS is a packet-switched technology that makes it possible to send/receive blocks of data from/to a mobile phone.

Modem

Device that modulates outgoing digital signals from a computer or other digital device to analogue signals for a conventional copper twisted pair telephone line and demodulates the incoming analogue signal and converts it to a digital signal for the digital device.

On-line payment

An on-line payment is an integrated ordering -payment transaction.

Specialised Internet market places

Web site where several enterprises are represented, which market a specific type of good/service or aim at limited groups of customers.

Third-party web-site

Web-site with information on the enterprise that has been created with agreement of the enterprise by another enterprise.

Web access/Internet access

Access to the world-wide-web.

Web site / homepage

Location on the World Wide Web identified by a Web address. Collection of Web files on a particular subject that includes a beginning file called a home page. Information is encoded with specific languages (Hypertext mark-up language (HTML), XML, Java) readable with a Web browser, like Microsoft's Internet Explorer.

SYMBOLS

: not available

Note that all values are rounded. As a result some calculations, such as the proportion of enterprises using specified ICT plus the proportion not using it, may exceed 100%.