

Communications and media



This chapter gathers together several activities linked to communication and media activities, however, within this group a distinction has to be made between traditional activities (for example, postal services) for which growth is rather stable and other more modern activities (such as mobile telephony and electronic publishing), for which growth developments are more marked. In terms of coverage, the media sector includes both services and manufacturing activities. This is a consequence of the way NACE organises media activities, some of which are considered as manufacturing (the publishing of books or music), while others are seen as services (the production of films). This distinction is further blurred by the wide range of delivery channels for sound, images and information content providers: ranging from the traditional retail distribution network for hardcopy products (CDs, DVDs, books and other printed matter), through cinema, (terrestrial, cable and satellite) radio and television services, and the Internet.

Growing access to broadband Internet among consumers, and the increased use of mobile devices for receiving electronic content are important aspects in the development of on-demand services, as is effective management of the radio spectrum. More information on the management of the radio spectrum, and more broadly on the use of the Internet is presented in Subchapter 21.2.

The uptake of digital (radio and television) transmission as well as delivery over the Internet is intertwined with the development of digital content. This will increase flexibility, allowing content to be more easily shared across devices, facilitating more tailored products, and a greater possibility of on-demand services. Nevertheless, digital technologies also make content easier to share not just between devices but between consumers, which may play an important role in terms of its impact on intellectual property rights, an issue which has been widely debated with respect to downloading and sharing of music files. The management of digital rights is an issue faced by many of the activities covered in this chapter, and in April 2006 the European Commission adopted a revised proposal ⁽¹⁾ for a Directive of the European Parliament and of the Council to combat intellectual property offences.

⁽¹⁾ COM(2006) 168.

This chapter focuses on activities whose principal characteristic is to provide services related to the exchange of information. It includes communications and media: communications covers postal, courier and telecommunication services (NACE Division 64), while media covers the activities of publishing, printing, and the reproduction of recorded media (NACE Division 22), audio-visual activities made up of motion picture and video activities (NACE Group 92.1) and radio and television activities (NACE Group 92.2). Audio-visual activities are not covered by regular structural business statistics (SBS) and the availability of official data for this area is generally weak. Note that in previous editions of this publication computer and related activities were also included in this chapter, but in this edition they are included in Chapter 22 on business services.

NACE

- 22: publishing, printing and reproduction of recorded media;
- 22.1: publishing;
- 22.2: printing and service activities related to printing;
- 22.3: reproduction of recorded media;
- 64: post and telecommunications;
- 64.1: post and courier activities;
- 64.2: telecommunications;
- 92.1: motion picture and video activities;
- 92.2: radio and television activities.

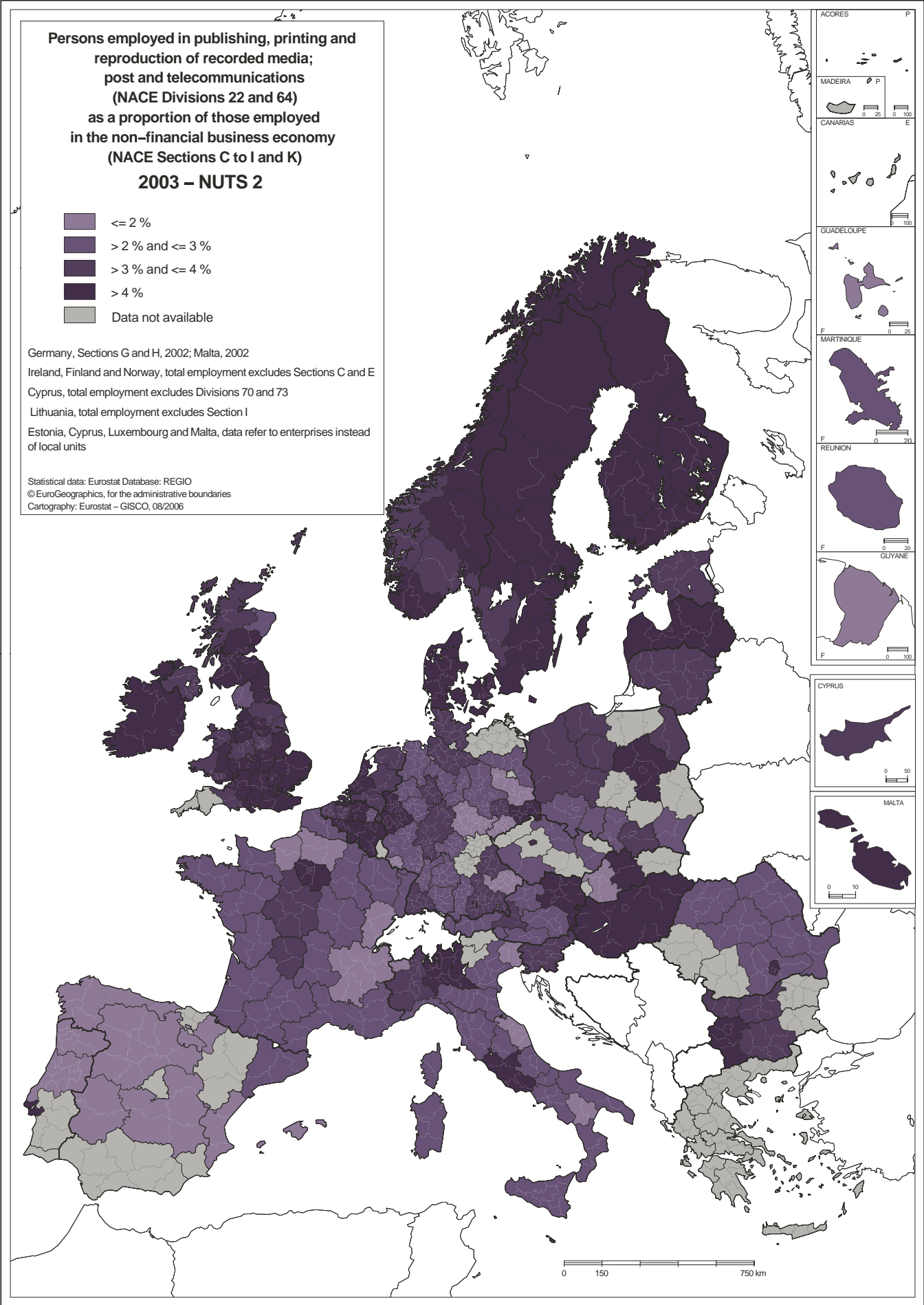


Table 21.1

Communications, publishing and printing (NACE Divisions 22 and 64)
Structural profile, EU-25, 2003

	Value added (EUR million)	Share of non-financial business economy value added (%)	Number of persons employed (thousands)	Share of non-financial business economy employment (%)
Communications, publishing and printing (1)	321 000	6.7	4 810	4.1
Post and courier activities	57 503	1.2	1 844	1.6
Telecommunications	174 283	3.6	1 144	1.0
Publishing, printing, reproduction of recorded media (1)	90 000	1.9	1 820	1.6

(1) Rounded estimates based on non-confidential data.
 Source: Eurostat (SBS)

STRUCTURAL PROFILE

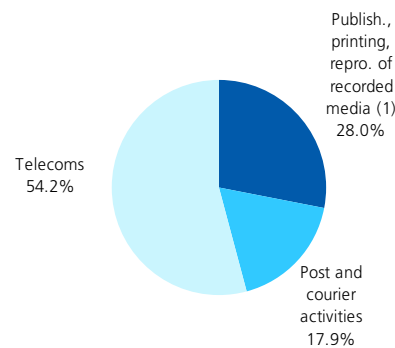
Communications, publishing and printing (NACE Divisions 22 and 64) together generated EUR 321.0 billion of value added in the EU-25 in 2003 and employed 4.8 million persons. This collection of activities accounted for 6.7 % of value added in the non-financial business economy (NACE Sections C to I and K), but just 4.1 % of employment.

Telecommunications, (NACE Group 64.2) generated the largest part of the sectoral value added in 2003, accounting for over half (54.2 %) of the total, while publishing, printing, and the reproduction of recorded media (NACE Division 22) was the second largest subsector with a 28.0 % share of value added; the smallest part of this sector was post and courier activities (NACE Group 64.1) which generated less than one fifth (17.9 %) of sectoral value added. The composition of the sector in employment terms was very different (see Figures 21.1 and 21.2), as less than one quarter (23.8 %) of the sectoral workforce was employed in telecommunications. Despite having the lowest value added share, post and courier activities had the largest workforce of the three subsectors covered, with 38.3 % of the communications, publishing and printing total, marginally higher than the share recorded for publishing, printing, and the reproduction of recorded media (37.9 %).

In 2003, the United Kingdom and Germany were the largest Member States, accounting for around one fifth of EU-25's value added and employment within the communications and media sector. Looking at the relative importance of this sector within the non-financial business economy, the most specialised Member States⁽²⁾ in 2003, in value added terms, included the three Baltic Member States (Lithuania, 2002), Malta (2002), Hungary, Slovakia and Portugal. These activities were, nevertheless, important in all Member States, as even in the least specialised Member States they accounted for more than 5 % of non-financial business economy value added.

⁽²⁾ Lithuania, Malta and Sweden, 2002; Greece, Ireland, Cyprus and Luxembourg, not available.

Figure 21.1
Communications, publishing and printing (NACE Divisions 22 and 64)
Breakdown of sectoral value added, EU-25, 2003 (%)

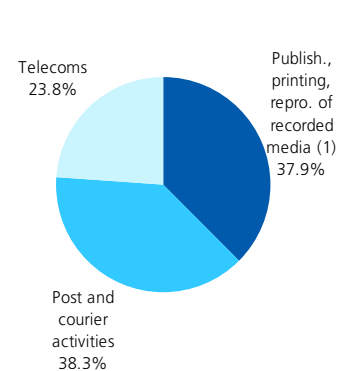


(1) Rounded estimates based on non-confidential data.
 Source: Eurostat (SBS)

The regional specialisation of these activities is shown in the map on page 356 which is based on the non-financial business economy employment share of this sector. In some countries one region is particularly specialised in these services, and this is notably the case in Köln (Germany), Île de France (France), and Stredné Slovensko (Slovakia). In contrast, several other countries, notably the Nordic countries, Belgium and the United Kingdom report that many regions are specialised in these services.

EU-25 time series for communications (NACE Division 64) are available from 1998 for employment and from 2000 for turnover, while longer time-series are available for the industrial activity of publishing, printing, and the reproduction of recorded media (NACE Division 22) - see Figure 21.3. Looking first at turnover, the two parts of communications, namely postal and courier activities (NACE Group 64.1) and telecommunications (NACE Group 64.2) developed strongly between 2000 and 2005, averaging growth of 4.7 % per annum for postal and courier activities and 6.1 % per annum for telecommunications in

Figure 21.2
Communications, publishing and printing (NACE Divisions 22 and 64)
Breakdown of sectoral employment, EU-25, 2003 (%)



(1) Rounded estimates based on non-confidential data.
 Source: Eurostat (SBS)

the EU-25. In contrast, the turnover index for publishing, printing, and the reproduction of recorded media grew on average by 1.2 % per year over the same period in the EU-25, resulting from a period of stability between 2000 and 2003, followed by more rapid annual growth of 2.9 % and 1.6 % respectively in 2004 and 2005.

In employment terms, communications (covering postal and courier activities, as well as telecommunications) and publishing, printing, and the reproduction of recorded media recorded a similar development, with a period of growth until 2000 or 2001, followed by a reduction in employment levels. Between 2000 and 2005 the employment index for publishing, printing, and the reproduction of recorded media fell by 7.5 % overall. In contrast, the employment index for communications fell more sharply, down 11.1 % overall by 2004 from its peak of 2001, although 2005 saw signs of recovery, as employment grew by 1.6 %, the first positive growth rate in four years.

Table 21.2

Communications, publishing and printing (NACE Divisions 22 and 64)
Value added and employment: ranking of the top 5 Member States, 2003

Rank	Highest value added (EUR million) (1)	Share in EU-25 value added (%) (1)	Highest number of persons employed (thousands) (2)	Share in EU-25 employment (%) (2)	Highest share of national non-financial business economy value added (%) (3)	Highest share of national non-financial business economy employment (%) (4)
1	United Kingdom (66 392.3)	20.7	Germany (987.7)	20.5	Latvia (9.6)	Denmark (6.1)
2	Germany (62 829.5)	19.6	United Kingdom (900.2)	18.7	Lithuania (9.0)	Finland (5.8)
3	France (46 101.9)	14.4	France (667.1)	13.9	Malta (8.7)	United Kingdom (5.0)
4	Italy (36 737.9)	11.4	Italy (430.4)	8.9	Hungary (8.1)	Belgium (5.0)
5	Spain (23 849.6)	7.4	Spain (324.4)	6.7	Estonia (7.9)	Sweden (5.0)

(1) Malta and Sweden, 2002; Greece and Luxembourg, not available.

(2) Sweden, provisional; Malta, 2002; Greece and Luxembourg, not available.

(3) Lithuania, Malta and Sweden, 2002; Greece, Ireland, Cyprus and Luxembourg, not available.

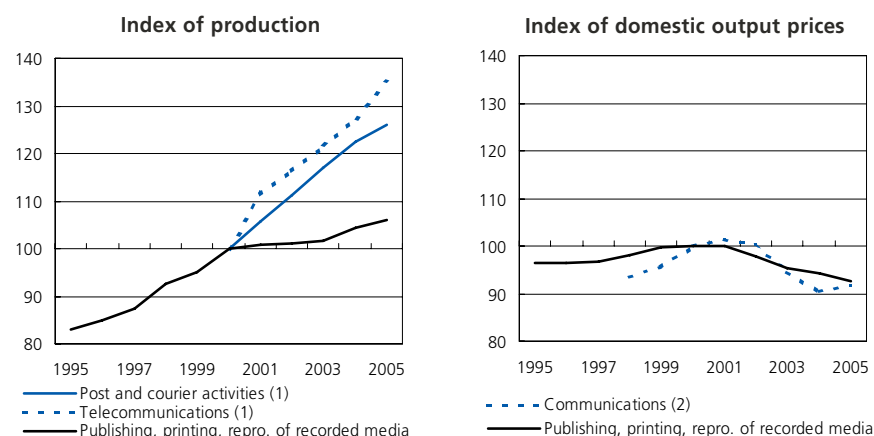
(4) Sweden, provisional; Lithuania and Malta, 2002; Greece, Ireland, Cyprus and Luxembourg, not available.

Source: Eurostat (SBS)

Large enterprises (with 250 and more persons employed) contributed the highest share of EU-25 value added in 2003 for both of the NACE divisions covered within this chapter, however, aside from this fact there was little in common between the relative size structures of the two activities - see Figure 21.4. Communications (NACE Division 64) was dominated by large enterprises, as these accounted for 92.2 % of communications value added in the EU-25. This was the highest proportion of value added accounted for by large enterprises in any non-financial business economy NACE division ⁽³⁾ in 2003. In contrast, the value added share of large enterprises in publishing, printing and the reproduction of recorded media (NACE Division 22) was 41.0 %, marginally below the non-financial business economy average of 42.7 %. Equally, the share of value added generated by micro enterprises (with less than 10 persons employed) in publishing, printing and the reproduction of recorded media was below average (13.6 %) compared with the non-financial business economy (20.5 %), and as a result both small enterprises (with between 10 and 49 persons employed), and particularly medium-sized enterprises (with between 50 and 249 persons employed) made a relatively high contribution to activity within this subsector.

⁽³⁾ NACE Divisions 12 and 16, not available.

Figure 21.3

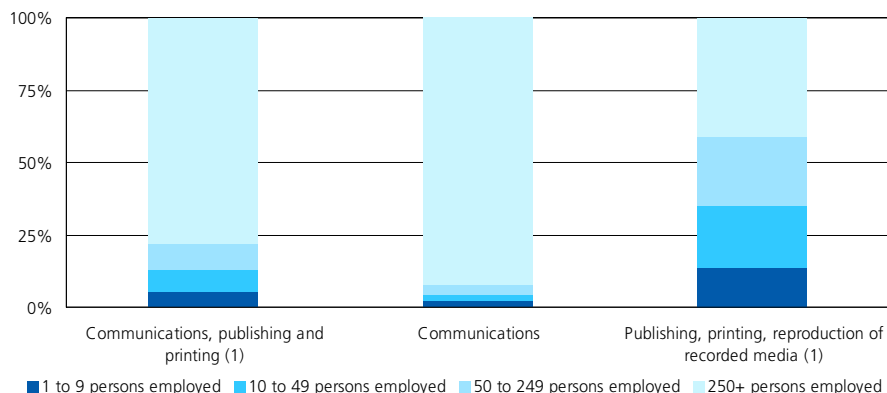
Communications, publishing and printing (NACE Divisions 22 and 64)
Evolution of main indicators, EU-25 (2000=100)


(1) Series starts in 2000.

(2) Series starts in 1998.

Source: Eurostat (STS)

Figure 21.4

Communications, publishing and printing (NACE Divisions 22 and 64)
Share of value added by enterprise size class, EU-25, 2003 (%)


(1) Rounded estimates based on non-confidential data.

Source: Eurostat (SBS)

Table 21.3
Communications, publishing and printing (NACE Divisions 22 and 64)
Labour force characteristics, 2005

	Male		Full-time		Breakdown by age (% share of total)		
	Proportion of those employed (%)	Index (non-financial business economy=100)	Proportion of those employed (%)	Index (non-financial business economy=100)	< 30 years	30-49 years	50+ years
EU-25	60.7	92.7	82.7	97.0	21.2	56.6	22.2
BE	66.6	98.0	85.4	102.4	18.5	59.4	22.1
CZ	43.4	67.9	91.6	95.3	23.0	51.1	26.0
DK	61.8	93.2	75.9	93.5	29.2	47.1	23.7
DE	58.4	91.7	70.9	88.9	18.9	56.7	24.4
EE	39.9	69.3	92.4	97.8	29.6	48.4	22.0
EL	70.8	102.3	96.4	99.9	22.3	55.3	22.3
ES	63.5	93.8	91.2	101.3	27.8	57.7	14.6
FR	53.3	81.5	86.2	97.8	14.7	62.0	23.2
IE	70.0	105.4	91.3	104.2	23.0	55.8	21.2
IT	64.5	94.5	91.8	104.0	13.2	63.6	23.1
CY	63.4	98.0	91.0	98.5	25.6	58.9	15.5
LV	40.4	70.4	87.9	92.4	25.7	55.3	19.0
LT	36.6	62.4	84.2	87.6	19.3	60.8	19.9
LU	68.9	101.3	85.6	97.0	15.8	64.1	20.1
HU	51.4	83.1	94.8	98.5	20.9	59.7	19.4
MT	68.5	90.4	95.9	105.5	42.6	38.9	:
NL	66.6	100.4	51.1	82.6	31.4	46.6	21.9
AT	62.8	100.9	81.6	100.8	23.2	60.9	15.9
PL	54.2	83.6	93.1	100.2	26.5	59.3	14.2
PT	60.0	94.2	96.3	101.5	33.9	49.5	16.5
SI	54.7	87.8	91.2	97.0	28.5	57.1	14.4
SK	44.4	70.0	95.3	97.1	29.4	54.1	16.5
FI	57.6	89.5	84.8	97.2	24.6	47.6	27.8
SE	62.0	91.0	76.6	93.1	22.2	47.6	30.2
UK	68.6	105.3	83.8	107.2	21.0	53.9	25.1

Source: Eurostat (LFS)

LABOUR FORCE CHARACTERISTICS

The workforce in the EU-25's communications, publishing and printing sector (NACE Divisions 22 and 64) had a relatively high proportion of part-time employment (17.3 %) in 2005 (see Table 21.3), higher than the non-financial business economy average (14.7 %). This high rate was mainly due to the publishing, printing and the reproduction of recorded media subsector (NACE Division 22) where part-time employment reached 19.9 %.

Looking at the age structure of the EU-25's communications, publishing and printing workforce, the relatively low share (21.2 %) of younger workers (aged less than 30) was notable. The share of younger workers was 23.4 % in the publishing, printing and the reproduction of recorded media subsector, closer to the non-financial business economy average of 24.5 %, while it was just 19.7 % in communications.

In 2005, just over three fifths (60.7 %) of the communications, publishing and printing sector's workforce were men, below the non-financial business economy average (65.5 %). This situation was observed in communications (NACE Division 64) where the share was 61.2 %, and also in publishing, printing and the reproduction of recorded media, where the proportion was slightly lower, at 59.9 %.

Table 21.4

Publishing, printing, reproduction of recorded media; post and telecommunications (NACE Divisions 22 and 64)
Cost, productivity and profitability indicators, ranking of the top 5 Member States compared to EU-25 averages, 2003

Rank	Investment in tangible goods relative to total operating costs (%) (1)	Purchases of goods and services as a share of total operating costs (%) (2)	Personnel costs as a share of total operating costs (%) (2)	Apparent labour productivity (EUR thousand) (3)	Average personnel costs (EUR thousand) (3)	Wage adjusted labour productivity (%) (3)	Gross operating rate (%) (3)
EU-25	8.4	70.5	29.5	66.8	35.3	189.0	22.6
1	Malta (39.2)	Ireland (86.2)	Cyprus (51.7)	Ireland (178.0)	Belgium (46.4)	Ireland (423.2)	Malta (46.0)
2	Cyprus (28.3)	Lithuania (80.2)	Malta (42.6)	Netherlands (90.5)	France (43.7)	Latvia (343.8)	Cyprus (45.5)
3	Latvia (21.7)	Hungary (77.6)	Denmark (34.0)	Italy (85.4)	Ireland (42.1)	Slovakia (295.7)	Latvia (39.9)
4	Slovakia (21.1)	Slovakia (77.3)	France (33.9)	Belgium (79.4)	United Kingdom (40.7)	Malta (287.8)	Czech Republic (32.0)
5	Slovenia (18.1)	Estonia (77.0)	Germany (31.3)	Austria (79.3)	Austria (40.5)	Estonia (284.5)	Ireland (31.6)

(1) Malta and Sweden, 2002; Belgium, Greece, Luxembourg and the Netherlands, not available; EU-25 is an EU average based on available data for 2002 and 2003.

(2) Malta and Sweden, 2002; Greece and Luxembourg, not available; EU-25 is an EU average based on available data for 2002 and 2003.

(3) Malta and Sweden, 2002; Greece and Luxembourg, not available; EU-25, rounded estimate based on non-confidential data.

Source: Eurostat (SBS)

COSTS, PRODUCTIVITY AND PROFITABILITY

An analysis of tangible investment and operating expenditure shows a different profile for the three subsectors covered by this chapter. The capital intensive nature of telecommunications made this subsector stand out, as gross tangible investment was equivalent to 13.3 % of gross operating expenditure in the EU ⁽⁴⁾ when averaged across those countries for which data are available, compared with less than 4 % in the other two subsectors. The labour-intensive nature of the EU's ⁽⁵⁾ post and courier activities was reflected in the 57.3 % share of personnel costs in gross operating expenditure, far higher than in the other two subsectors where this share was below 30 %.

⁽⁴⁾ EU average, 2003; Slovenia, 2002; excluding Denmark, Greece, Ireland, Malta, the Netherlands and Poland.

⁽⁵⁾ EU average, 2003; Slovenia, 2002; excluding Denmark, Greece, Ireland, Malta, the Netherlands and Poland.

The relative dynamism of the communications, publishing and printing sector was visible from some selected measures of productivity and profitability. EU-25 apparent labour productivity was EUR 66 800 per person employed overall in 2003, well above the non-financial business economy average (EUR 41 200). Behind this sectoral average there were great differences: as apparent labour productivity ranged from EUR 31 200 for post and courier activities, through EUR 49 000 in printing, publishing and the reproduction of recorded media, to EUR 152 300 for telecommunications. However, high productivity was accompanied by relatively high personnel costs in 2003, with a per employee average of EUR 26 400 for post and courier activities, EUR 35 000 for publishing, printing, and the reproduction of recorded media, and EUR 50 400 for telecommunications. Only the post and courier activities value was below the non-financial business economy average (EUR 28 400, 2002). For the communications, publishing and printing sector as a whole, wage adjusted labour productivity was 189 %, indicating that apparent labour productivity was 89 % higher than average personnel costs. Again post and courier activities recorded the lowest level among the three subsectors, with a wage adjusted labour productivity ratio of 118.1 %, compared with 142 % for publishing, printing, and the reproduction of recorded media, and 302.1 % for telecommunications.

The gross operating rate, calculated as the relationship between the gross operating surplus (value added minus personnel costs) and turnover, was 31.3 % for telecommunications, well above the 14.0 % and 10.7 % rates recorded for publishing, printing, and the reproduction of recorded media, and for post and courier activities respectively; although the latter was close to the non-financial business economy average (10.8 %, 2002).

21.1: POSTAL AND COURIER SERVICES

This subchapter covers NACE Group 64.1, which includes both national post activities (NACE Class 64.11) and other courier activities (NACE Class 64.12). National post activities include the pick-up, transport and delivery (domestic or international) of mail and parcels, and other services such as P.O. boxes or *poste restante*. Courier activities other than national post activities include mainly express courier services, where enterprises have widened their initial focus on business documents towards the transfer of packages and freight, blurring the distinction between courier and transport enterprises.

Unlike the telecommunications and audiovisual services covered in Subchapters 21.2 and 21.3, postal services are covered by the European Commission's proposal for a Directive on services in the internal market. The objective of the proposal is to achieve a genuine internal market in services by removing legal and administrative barriers to the development of service activities between Member States, facilitating the provision and use of cross-border services in the EU. At the time of writing, it is expected that this Directive will be adopted in the near future - see Chapter 22 for more information.

From the supply side, both public and private operators run postal and courier activities. Universal service providers (USPs), be they publicly or privately owned, continue to provide the majority of general letter services and in most countries they still operate as a monopoly; they have exclusive rights, balanced by the fact they have a universal service obligation. Private operators dominate the express services market, providing letter and parcel services, specifically to the business-to-business, direct mail and business-to-private segments of the market. The competitive environment in this sector has changed as there have been developments towards market liberalisation. Indeed, gradual and controlled opening of postal markets has taken place since the middle of the 1990s, with the two so-called 'Postal Directives' in 1997 and 2002 steadily opening-up the sector to competition. It is planned that in 2007 the EU's Member States will discuss opening their markets completely by 2009.

Traditional mail products are increasingly substituted by new technologies, such as electronic mail and the Internet, as well as alternatives ways of communications (for example, telephone or fax) that make information available in a fast manner. Nevertheless, the delivery of goods remains a key element for post and courier activities and is supported, for example, by increased on-line purchasing of goods.

FOCUS ON POSTAL INFRASTRUCTURE AND TRANSPORT OF POSTAL ITEMS

According to data collected by the UPU ⁽⁶⁾ from its postal administration members, there were about 99 300 permanent post offices in the EU-25 in 2004 - see Table 21.5 - a contraction of 5 % when compared with the number in 2000.

The number of letter-items for both domestic and international dispatch reached 121.3 billion letters in the EU-25 in 2004, an increase of more than 6 % when compared with 2000. Ordinary parcels for both domestic and international dispatch amounted to 1.1 billion items in 2004, of which 98.7 % were handled within the domestic market. The number of parcels dispatched fell overall by more than 5 % between 2000 and 2003, but increased in 2004 by 2.6 % compared with the previous year.

STRUCTURAL PROFILE

Post and courier activities (NACE Group 64.1) generated EUR 57.5 billion of value added in the EU-25 in 2003, which equated to 1.2 % of the non-financial business economy (NACE Sections C to I and K) total. With 1.8 million persons employed, these activities represented 1.6 % of the non-financial business economy workforce. The difference between these two shares illustrates one of the main characteristics of post and courier activities, namely that they tend to have a relatively high reliance on labour input. Table 21.7 shows the size of the two subsectors, with national post activities (NACE Class 64.11) accounting for two thirds (66.8 %) of post and courier activities value added in the EU-25 (2002), while employing a slightly lower proportion (65.9 %) of the workforce; the remainder being accounted for by courier activities other than national post activities (NACE Class 64.12).

⁽⁶⁾ UPU (Universal Post Union), more information at: <http://www.upu.int>.

Table 21.5
Postal services in the EU-25

	2000	2001	2002	2003	2004
Total number of permanent post offices (units)	104 598	103 466	103 023	101 357	99 333
of which, staffed by people from outside the administration (%)	31.0	33.9	34.9	34.7	34.8
Number of letter-post items, domestic service (millions)	110 746	112 283	113 223	114 209	118 623
Number of letter-post items, international service-dispatch (millions)	3 428	3 268	2 964	2 885	2 678
Ordinary parcels, domestic services (millions)	1 144	1 121	1 110	1 085	1 113
Ordinary parcels, international service-dispatch (millions)	14	14	14	14	14

Source: UPU, <http://www.upu.int>, Postal statistics database

Table 21.6
Postal services, 2004

	Number of permanent post offices	Number of letter post items treated by national post (millions)		
		Number of letter-post items, domestic service (1)	Number of letter-post items, international service - dispatch (2)	Number of letter-post items, international service - receipt (3)
BE	1 369	:	:	:
CZ	3 419	3 077	27	52
DK	996	1 122	:	:
DE	13 019	21 744	:	:
EE	545	54	5	5
EL	2 200	550	48	41
ES	3 291	5 178	222	140
FR	16 947	17 571	:	:
IE	1 604	509	91	99
IT	13 855	6 574	94	197
CY	1 111	46	10	12
LV	968	53	3	4
LT	955	43	5	6
LU	109	105	43	28
HU	2 824	1 057	13	15
MT	51	43	6	8
NL	3 188	5 302	:	:
AT	1 999	970	:	:
PL	10 923	1 482	47	51
PT	3 026	999	55	46
SI	557	795	8	11
SK	1 598	433	9	14
FI	1 311	830	19	43
SE	:	:	:	:
UK	14 609	21 030	449	362

(1) Denmark, excluding registered items, insured letters, newspapers, unaddressed advertising items and hybrid mail; Estonia, excluding registered items, insured letters, newspapers, advertising items and hybrid mail; France, including international services but excluding newspapers or unaddressed advertising items; Cyprus, excluding registered items; Ireland, Latvia and Poland, excluding registered items, insured letters, newspapers and advertising items; Lithuania and Luxembourg, excluding newspapers, unaddressed advertising items and hybrid mail; Hungary, excluding registered items, insured letters and newspapers; Malta, excluding registered items and advertising items; the Netherlands, addressed items only; Austria, excluding newspapers; Portugal, excluding advertising items and hybrid mail; Slovakia, excluding registered items, insured letters and newspapers; Finland, excluding newspapers and advertising items.

(2) Estonia, excluding registered items, insured letters, advertising items and hybrid mail; Spain and Finland, excluding advertising items; Ireland and Malta, excluding registered items; Cyprus, Hungary, Poland and Slovakia, excluding registered items and insured letters; Latvia, excluding registered items, insured letters and advertising items; Luxembourg, excluding unaddressed advertising items and hybrid mail.

(3) Estonia, Cyprus, Latvia, Hungary, Malta, Poland and Slovakia, excluding registered items and insured letters; Ireland, excluding registered items.

Source: UPU, <http://www.upu.int>, Postal statistics database

Among the Member States, the five largest were the same whether measured in value added or employment terms - see Table 21.8. However, relative to non-financial business economy value added, the importance of post and courier activities was most marked among the Member States with available data ⁽⁷⁾ in Luxembourg (2.3 % of non-financial business economy value added) and to a lesser extent France (1.7 %). At the other end of the spectrum, the lowest proportion of non-financial business economy value added coming from post and courier activities was observed in Spain (0.5 %), Latvia (0.6 %) and Lithuania (0.7 %, 2002).

Annual short-term statistics for post and courier activities in the EU-25 provide a picture of the development of the turnover index over the period 2000 to 2005 - see Figure 21.5. Overall growth was slightly lower than for communications (NACE Division 64) as a whole, but was uninterrupted as turnover increased during each year of the period considered, rising by as much as 5.7 % in 2001. Nevertheless, the 2.9 % growth recorded between 2004 and 2005 was the lowest annual growth rate registered during the period considered and was the second year in succession that the rate of growth diminished.

⁽⁷⁾ Lithuania and Sweden, 2002; Denmark, Greece, Ireland, Cyprus, Malta, the Netherlands, Poland and Sweden, not available.

Table 21.7

Post and courier activities (NACE Group 64.1)
Structural profile, EU-25, 2003

	Value added (EUR million)	Number of persons employed (thousands)
Post and courier activities	57 503	1 844
National post activities (1)	38 154	1 227
Courier activities other than national post activities (1)	18 975	635

(1) Value added, 2002.

Source: Eurostat (SBS)

Table 21.8

Post and courier activities (NACE Group 64.1)
Value added and employment: ranking of the top 5 Member States, 2003 (1)

Rank	Highest value added (EUR million)	Share in EU-25 value added (%)	Highest number of persons employed (thousands)	Share in EU-25 employment (%)
1	Germany (13 223.2)	23.0	Germany (414.4)	22.5
2	France (11 615.6)	20.2	France (305.4)	16.6
3	United Kingdom (10 594.4)	18.4	United Kingdom (300.1)	16.3
4	Italy (6 148.0)	10.7	Italy (161.0)	8.7
5	Spain (2 171.7)	3.8	Spain (106.3)	5.8

(1) Slovenia, 2002; Denmark, Greece, Ireland, Malta, the Netherlands and Poland, not available.

Source: Eurostat (SBS)

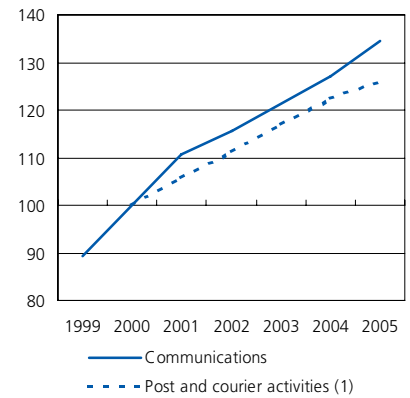
COSTS, PRODUCTIVITY AND PROFITABILITY

With EUR 31 200 of value added generated per person employed in 2003, the EU-25's post and courier services recorded a relatively low level of apparent productivity compared with most other activities, some EUR 10 000 lower than the non-financial business (NACE Sections C to I and K) economy average. Despite a relatively low level of apparent labour productivity, EU-25 average personnel costs per employee were more typical for the non-financial business economy, at EUR 26 400 per employee in 2003, just EUR 2 000 below the non-financial business economy average for 2002. As a consequence, the wage adjusted labour productivity ratio for post and courier services was 118.1 % in the EU-25, significantly below the non-financial business economy average of 143.8 % (2002).

The gross operating rate is a measure of operating profitability relating the gross operating surplus to turnover: for the EU-25's post and courier activities this rate was 10.7 % in 2003, practically the same as the non-financial business economy average for 2002 (10.8 %).

Figure 21.5

Post and courier activities (NACE Group 64.1)
Evolution of turnover, EU-25 (2000=100)



(1) Series starts in 2000.

Source: Eurostat (STS)

21.2: TELECOMMUNICATION SERVICES

Telecommunications services (NACE Group 64.2) embrace the distribution of sound, images, data and other information via cables, broadcasting, relay or satellite. These services include both the management and maintenance of networks and the provision of services using these networks, including the provision of radio and television services, but not the production of radio and television programmes (which are covered in Subchapter 21.3).

In terms of legislation, services or networks that transmit communications electronically, whether they be wireless or fixed, carrying data or voice, Internet based or circuit switched, broadcasting or personal communication, are all covered by a set of Directives that became applicable on 25 July 2003, and that have been largely implemented by the Member States. In a June 2006 Communication ⁽⁸⁾ the European Commission published its review of this framework, which is likely to lead to new legislative proposals. The review focused on spectrum management, streamlining reviews of national markets (to assess potential barriers to the internal market), strengthening consumer protection/user rights, security, and more generally keeping the legislation up-to-date. One issue emphasised in the review was the management of the radio spectrum, which refers to the attribution of certain parts of the radio spectrum to specified uses, notably for broadcasting, wireless telephony and computer networks, in order to avoid interference between devices. In September 2005 the European Commission adopted three Communications ⁽⁹⁾ on radio spectrum policy as part of the i2010 initiative (see below). Included are proposals for EU-wide rules for ultra wideband and broadband wireless access technologies as well as 'wireless barcodes' for radio frequency identification tags (RFIDs), greater flexibility in the usage rights and tradability of individual spectrum bands, and investigating further the opportunities to make licence-free radio frequencies available.

⁽⁸⁾ COM(2006) 334.

⁽⁹⁾ COM(2005) 410, COM(2005) 411, COM(2005) 461.

Table 21.9
Number of operators and service providers in telecommunications (NACE Group 64.2), 2004 (units) (1)

	Fixed network operators offering local national telecommunications (2)	Fixed network operators offering long distance national telecommunications (3)	Operators offering international telecommunications (2)	Cellular mobile operators (4)	Internet service providers (5)
BE	48	48	48	3	92
CZ	36	35	35	3	2 934
DK	44	44	46	24	49
DE	72	100	100	4	900
EE	29	29	17	5	135
EL	16	14	17	4	170
ES	69	69	69	4	672
FR	21	27	27	10	34
IE	25	25	25	3	20
IT	:	:	:	4	:
CY	7	7	20	2	15
LV	8	8	15	3	129
LT	9	9	21	8	98
LU	17	10	17	3	32
HU	42	54	56	3	100
MT	1	1	10	2	15
NL	29	33	32	5	:
AT	38	38	36	8	270
PL	89	89	89	3	108
PT	13	13	13	3	30
SI	1	1	12	4	61
SK	81	39	39	2	211
FI	44	10	10	15	120
SE	50	50	50	28	150
UK	:	:	:	:	:

(1) The data for the number of fixed network operators offering local and long distance national telecommunications cover facilities based or resale; for international telecommunications and the number of cellular mobile operators, data cover digital or analogous, facilities based or resale; data for Internet service providers cover access and backbone services.

(2) Latvia and Austria, 2003.

(3) Greece, Latvia and Austria, 2003.

(4) Italy, 2003.

(5) Spain, 2003.

Source: Eurostat (Information society statistics)

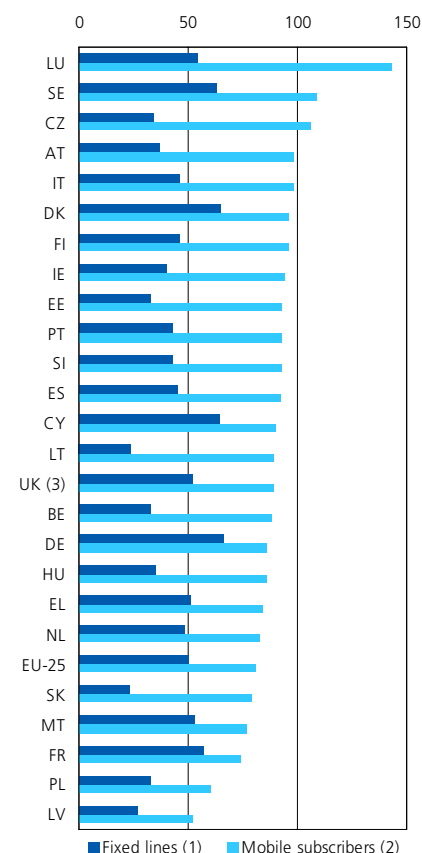
FOCUS ON MOBILE AND FIXED LINE TELEPHONY

Information on the number of operators and service providers in the Member States is presented in Table 21.9 for 2004. In some Member States, the same operators for the fixed network offer local and long distance national and international telecommunications, while in other markets some operators specialise in particular services. As regards access to networks, there were on average 50 fixed telephone lines ⁽¹⁰⁾ and 81 mobile subscriptions per 100 inhabitants in the EU-25

in 2004 – see Figure 21.6. Among the Member States, Germany had the highest density of fixed lines, as the number of lines per 100 inhabitants reached 66 in 2004, followed by Denmark, Cyprus and Sweden where the density was below 60 lines. Slovakia, Lithuania and Latvia had less than 30 fixed lines per 100 inhabitants, the lowest density among the EU-25 Member States. In all the Member States, the number of mobile subscriptions exceeded the number of fixed lines in 2004. Note that the number of mobile subscriptions needs to be interpreted with some care, as to some extent it overstates the true use of mobile telephony, as consumers may switch between operators without closing old accounts. Equally, the high number of subscriptions in

⁽¹⁰⁾ A telephone line connecting the subscriber's terminal equipment to the public switched network and having a dedicated port in the telephone exchange system. The line may be an exclusive exchange line or a shared line. This is not the same as a subscriber.

Figure 21.6
Access to networks per 100 inhabitants,
2004

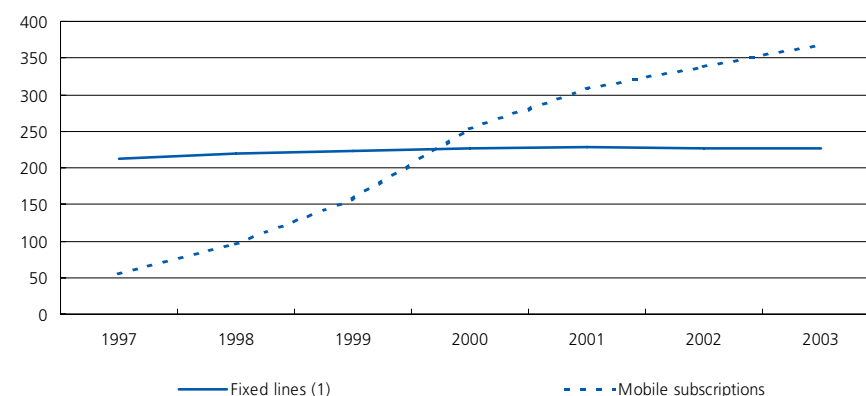


(1) EU-25, Italy and the United Kingdom, 2003.
(2) EU-25, Italy, Latvia, the Netherlands and the United Kingdom, 2003.
(3) Fixed lines, estimate.
Source: Eurostat (Information society statistics)

Luxembourg may in part be due to many (of the large number of) cross-border commuters having a subscription in Luxembourg to avoid roaming charges. Looking at the evolution of fixed line and mobile telephony (see Figure 21.7), the number of fixed lines continued to rise in the EU-25 to a peak in 2001, since when it declined to 225.7 million. In contrast, the number of mobile subscriptions developed at a rapid pace, although this growth slowed slightly after 2000.

Table 21.10 provides information on the cost of three types of fixed line calls. The difference in the cost between Member States is remarkable. For all three types of calls Cyprus recorded the lowest costs: in comparison, local calls were 2.9 times as high in Belgium, national calls 6.1 times as high in Slovakia and Hungary, and calls to the United States 7.9 times as high in Latvia. Concerning mobile phone charges, in July 2006 the European Commission announced that it would take action to reduce the cost of using mobile phones abroad (roaming charges), with the goal of capping charges by the middle of 2007.

Figure 21.7
Evolution of the number of telephone lines, EU-25 (millions)



(1) Break in series between 1998 and 1999.
Source: Eurostat (Information society statistics)

Table 21.10
Cost including VAT of a 10 minute call at
11 a.m., August 2004 (EUR)

	Local calls	National calls	International calls to USA
EU-25	0.4	0.9	2.1
BE	0.6	0.6	2.0
CZ	0.4	1.2	2.9
DK	0.4	0.4	2.4
DE	0.4	1.2	1.2
EE	0.3	0.3	2.4
EL	0.3	0.7	2.9
ES	0.3	0.9	1.5
FR	0.4	1.0	2.2
IE	0.5	0.8	1.9
IT	0.3	1.2	2.1
CY	0.2	0.2	0.8
LV	0.4	1.1	6.3
LT	0.4	0.8	4.1
LU	0.3	~	1.4
HU	0.5	1.2	2.7
MT	0.3	~	1.8
NL	0.3	0.5	0.9
AT	0.5	0.6	1.9
PL	0.3	1.1	3.3
PT	0.4	0.7	2.5
SI	0.3	0.3	1.8
SK	0.6	1.2	2.9
FI	0.2	0.9	4.8
SE	0.3	0.3	1.1
UK	0.4	0.4	2.1

Source: Eurostat (Information society statistics, Structural indicators - original source Teligen Ltd.)

FOCUS ON THE INTERNET

The European Commission developed a number of broad initiatives (such as eEurope 2005) to support the development of the information society. This work continued with the i2010 initiative, announced in June 2005, which aims to create an open and competitive market for information society and media services, stimulate research investment for information and communication technologies (ICT), and promote an inclusive European information society. The last of these three points, as well as addressing the more established socio-economic digital divide, and targeting other groups recognised as having difficulties participating fully in the information society, also looks at the territorial digital divide: in March 2006 the European Commission released its Communication ⁽¹¹⁾ 'Bridging the broadband gap' which highlighted the divide between urban and rural areas in terms of broadband access.

⁽¹¹⁾ COM(2006) 129

One recent development relating to the Internet that is of particular relevance for the EU is the introduction of the .EU country code top level domain (ccTLD). Registration for the use of this ccTLD started in December 2005 for holders of existing trademarks and public bodies, and was subsequently extended to other rights holders, before being opened to all users from April 2006.

The Internet is the backbone for the development of the information society. According to Eurostat's information society statistics, 91 % of the business economy enterprises ⁽¹²⁾ in the EU-25 had access to the Internet at the start of 2005 – see Figure 21.8. Turning to Internet use by the workforce, 35 % of those employed used the Internet in their normal work routine by the start of 2005 – see Figure 21.9.

STRUCTURAL PROFILE

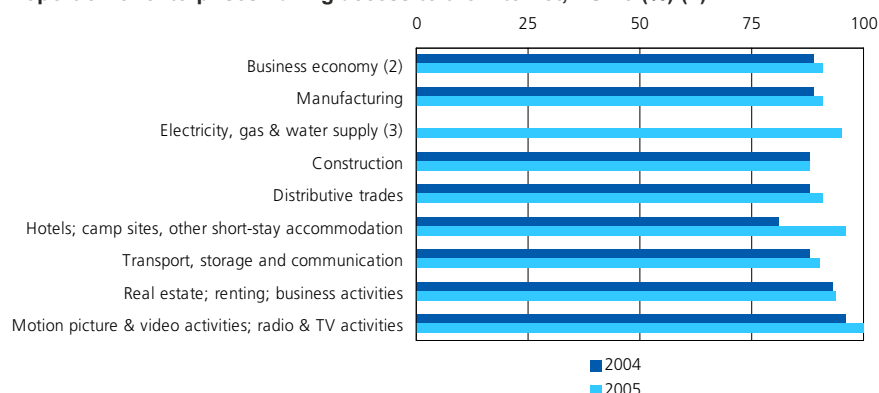
Telecommunication services (NACE Group 64.2) generated EUR 174.3 billion of value added in the EU-25 in 2003, accounting for a 3.6 % share of total value added in the non-financial business (NACE Sections C to I and K) economy, the third largest non-financial business economy activity at the NACE group level (based on available data). The 1.1 million persons employed in telecommunication services represented a significantly lower share of the non-financial business economy workforce, just 1.0 %.

The United Kingdom and Germany had the largest telecommunications sectors in the EU-25 in 2003, with 19.5 % and 18.1 % respectively of EU-25 value added and 21.2 % and 17.2 % respectively of EU-25 employment – see Table 21.11. However, the highest levels of specialisation ⁽¹³⁾ in telecommunications (relative to non-financial business economy value added) were found in several of the Member States that joined the EU in 2004, including the three Baltic Member States (Lithuania, 2002), Slovakia and Hungary, as well as Luxembourg and Portugal – in all of these Member States the contribution of value added from telecommunication services to the non-financial business economy value added total was more than 5 %. The lowest value added specialisation ratio was observed in Slovenia (2002) where telecommunication services value added represented 1.9 % of the non-financial business economy total.

⁽¹²⁾ NACE Sections D, F and G, Groups 55.1 and 55.2, Sections I and K and Groups 92.1 and 92.2, for enterprises with 10 or more persons employed.

⁽¹³⁾ Lithuania and Slovenia, 2002; Denmark, Greece, Ireland, Cyprus, Malta, the Netherlands, Poland and Sweden, not available.

Figure 21.8
Proportion of enterprises having access to the Internet, EU-25 (%) (1)



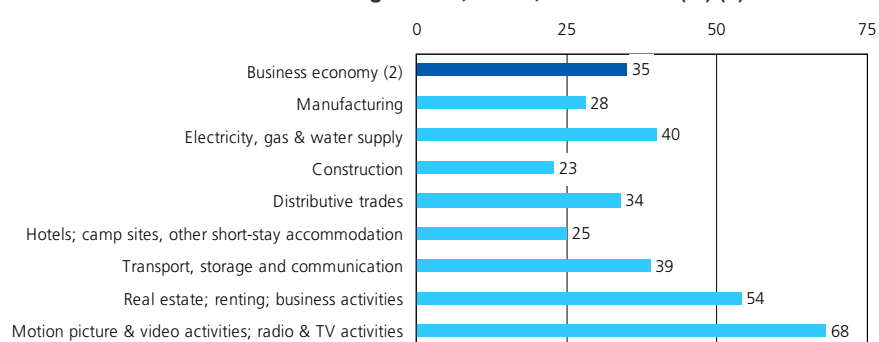
(1) Enterprises with 10 or more persons employed.

(2) Covering enterprises in NACE Sections D, F, G, I and K and NACE Groups 55.1, 55.2, 92.1 and 92.2.

(3) Not available for 2004.

Source: Eurostat (Information society statistics)

Figure 21.9
Use of the Internet in normal working routine, EU-25, start of 2005 (%) (1)



(1) Percentage of persons employed using a computer connected to the Internet in their normal work routine within enterprises with 10 or more persons employed.

(2) Covering enterprises in NACE Sections D, F, G, I and K and NACE Groups 55.1, 55.2, 92.1 and 92.2.

Source: Eurostat (Information society statistics)

Table 21.11
Telecommunications (NACE Group 64.2)

Value added and employment: ranking of the top 5 Member States, 2003 (1)

Rank	Highest value added (EUR million)	Share in EU-25 value added (%)	Highest number of persons employed (thousands)	Share in EU-25 employment (%)
1	United Kingdom (33 968.4)	19.5	United Kingdom (242.4)	21.2
2	Germany (31 478.1)	18.1	Germany (196.3)	17.2
3	France (23 485.5)	13.5	France (157.1)	13.7
4	Italy (22 086.5)	12.7	Italy (99.6)	8.7
5	Spain (15 228.1)	8.7	Spain (71.4)	6.2

(1) Slovenia, 2002; Denmark, Greece, Ireland, Malta, the Netherlands and Poland, not available.

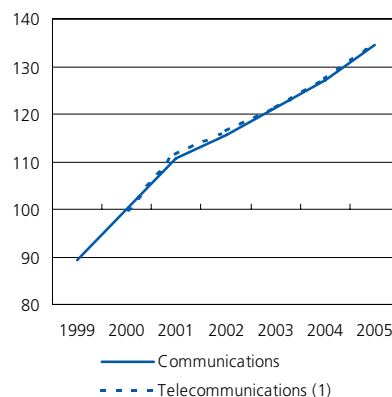
Source: Eurostat (SBS)

Annual short-term statistics are available for the index of turnover for telecommunication services for the years 2000 to 2004 - see Figure 21.10. As with post and courier activities (the other part of communications), EU-25 turnover growth was uninterrupted during this period; annual average growth between 2000 and 2005 was 6.1 %. Growth was particularly strong in 2001 (11.5 %) since when it ranged between 4.3 % and 5.6 % each year, with the rate of growth accelerating in 2004 and 2005.

COSTS, PRODUCTIVITY AND PROFITABILITY

The productivity and profitability of the EU-25's telecommunications sector in 2003, as measured by apparent labour productivity, wage adjusted labour productivity and the gross operating rate, was particularly high, relative to other activities within communications, publishing and printing, and also relative to the non-financial business economy (NACE Sections C to I and K) as a whole. Value added per person employed in the EU-25 was EUR 152 300, the wage adjusted labour productivity ratio was 302.1 % (indicating that apparent labour productivity was just over three times as high as average personnel costs), and the gross operating rate was 31.3 %. Of the non-financial business economy NACE groups for which data are available, telecommunications had the second highest level for each of these three indicators in 2003. Although relatively high, at EUR 50 400 per employee, average personnel costs in the EU-25 in 2003 were more moderate, only the tenth highest of the non-financial business economy NACE groups, but nevertheless the highest within non-financial services.

Figure 21.10
Telecommunications (NACE Group 64.2)
Evolution of turnover, EU-25 (2000=100)



(1) Series starts in 2000.
Source: Eurostat (STS)

Table 21.12

Telecommunications (NACE Group 64.2)

Cost, productivity and profitability indicators, ranking of the top 5 Member States compared to EU-25 averages, 2003

Rank	Investment in tangible goods relative to total operating costs (%) (1)	Purchases of goods and services as a share of total operating costs (%) (1)	Personnel costs as a share of total operating costs (%) (1)	Apparent labour productivity (EUR thousand) (2)	Average personnel costs (EUR thousand) (2)	Wage adjusted labour productivity (%) (2)	Gross operating rate (%) (2)
EU-25	13.3	78.5	21.5	152.3	50.4	302.1	31.3
1	Cyprus (42.3)	Luxembourg (94.2)	Cyprus (59.0)	Luxembourg (647.2)	Belgium (65.7)	Luxembourg (1 054.8)	Cyprus (56.6)
2	Slovakia (33.0)	Estonia (86.0)	Belgium (24.4)	Italy (221.8)	Luxembourg (61.4)	Estonia (581.2)	Latvia (47.8)
3	Slovenia (32.5)	Lithuania (85.6)	France (23.6)	Spain (213.4)	Germany (60.4)	Latvia (498.9)	Czech Republic (43.2)
4	Latvia (31.0)	Finland (84.7)	Germany (23.3)	Portugal (181.6)	France (58.5)	Slovakia (473.8)	Slovakia (40.5)
5	Czech Republic (20.0)	Italy (83.6)	United Kingdom (22.9)	Belgium (166.4)	Sweden (57.4)	Italy (462.3)	Estonia (40.1)

(1) Slovenia, 2002; Denmark, Greece, Ireland, Malta, the Netherlands and Poland, not available; EU-25 is an EU average based on available data for 2002 and 2003.

(2) Slovenia, 2002; Denmark, Greece, Ireland, Malta, the Netherlands and Poland, not available.

Source: Eurostat (SBS)

21.3: AUDIO-VISUAL ACTIVITIES

This subchapter looks at several activities linked to audio-visual products. The film and video activity is covered by NACE Group 92.1, which includes cinematographic and audio-visual production (including films and TV fiction, advertising and documentaries) and production services (for example, special effects or dubbing), as well as distribution activities.

The radio and television activity consists of three major activities: the production of programmes, the compilation of schedules for those programmes, and their transmission to the final consumer. The first two are included in NACE Group 92.2 and form part of this subchapter, while the transmission of signals via hertzian relays, satellite or cable networks is covered by NACE Group 64.2, which concerns telecommunication services – see Subchapter 21.2.

Note that no European structural business statistics (SBS) are available for the film, video, radio and television activities (NACE Groups 92.1 and 92.2) and that the analysis of these activities presented below is based on data from alternative sources.

Audio-visual activities provide much of the content for the information society, particularly concerning entertainment products and providing information.

MOTION PICTURE AND VIDEO ACTIVITIES

In November 2005 Recommendation 2005/865/CE of the European Parliament and Council on film heritage and the competitiveness of related industrial activities was adopted, highlighting the need for the European film heritage to be methodically collected, catalogued, preserved and restored, in order to ensure that is passed down to future generations.

According to MEDIA Salles ⁽¹⁴⁾, France produced the most films among the Member States, with a total of 203 productions in 2004 (including co-productions), followed by Italy, Spain and the United Kingdom each with between 130 and 140 films. Germany (87 films) was the only other Member State ⁽¹⁵⁾ to produce more than 30 films in 2004 – see Table 21.13.

⁽¹⁴⁾ More information at: <http://www.mediasalles.it>.

⁽¹⁵⁾ Malta, not available.

Table 21.13
Main indicators of the cinema industry, 2004

	National film productions (units) (1)	Cinema screens (units) (2)	Total number of seats (thousands) (3)	Total number of admissions (millions) (4)	Total revenue from ticket sales (EUR million) (5)	Market share of US films (%) (6)
BE	17	515	115.2	24.1	142.3	77.9
CZ	21	675	:	12.0	36.3	:
DK	25	380	57.0	12.8	105.2	72.1
DE	87	4 870	864.3	156.7	892.9	72.1
EE	4	81	:	1.2	4.8	:
EL	25	450	:	11.0	73.6	:
ES	133	4 497	1 625.4	143.9	691.6	76.6
FR	203	5 314	1 074.8	195.2	1 136.4	53.2
IE	8	335	58.7	17.3	100.9	:
IT	138	3 610	:	115.8	658.1	61.9
CY	4	38	:	0.7	4.7	:
LV	3	78	:	1.7	5.0	:
LT	1	75	:	1.5	4.5	:
LU	14	24	4.6	1.4	8.9	71.7
HU	29	722	:	13.7	41.6	:
MT	:	43	:	1.0	:	:
NL	28	623	112.9	23.0	154.1	74.1
AT	17	558	101.6	19.4	124.7	:
PL	22	878	:	33.4	114.0	:
PT	15	594	124.5	18.8	76.1	75.7
SI	6	111	:	3.0	10.9	:
SK	2	281	:	2.9	6.8	:
FI	13	342	57.5	6.9	50.8	76.3
SE	27	1 179	167.6	16.6	141.2	69.5
UK	133	3 342	741.5	171.3	1 092.1	73.2
BG	7	80	:	3.1	6.4	:
HR	1	145	:	3.0	8.5	:
RO	21	183	:	4.0	6.3	:
TR	19	1 147	:	28.8	94.9	:

(1) Includes co-productions; Greece and Sweden, 2003; Ireland, Cyprus and Turkey, 2001.

(2) Greece, estimate; Italy, excluding screens active 60 or less days per year.

(3) Ireland, 2000.

(4) Greece, estimate; the Netherlands, excluding some small distributors.

(5) Greece, estimate; the Netherlands, excluding some small distributors; Romania, net box office.

(6) Italy, sample.

Source: European Cinema Yearbook, 2005 edition, copyright MEDIA Salles

Table 21.14
Evolution of the broadcast market in terms of net revenues, EU-25 (EUR million)

	1999	2000	2001	2002	2003
Broadcasters net revenues:	59 208	65 077	67 879	68 598	70 955
Public broadcasters (radio and television)	26 647	27 510	28 713	28 932	29 067
Private radio stations financed by advertising (estimated)	3 536	3 963	4 164	4 493	4 800
Private television financed by advertising	17 272	19 480	19 002	18 220	18 293
Home shopping	1 152	1 324	1 465	1 659	1 783
Pay-TV premium	3 157	3 343	3 642	3 698	3 332
TV packagers	5 154	6 725	7 646	8 222	10 275
Thematic channels	2 290	2 732	3 248	3 374	3 405

Source: Yearbook online premium service 2005, copyright European Audiovisual Observatory

EU-25 film distribution and projection activities enjoyed strong growth during the 1990s following the opening of a large number of multiplex sites. There were nearly 30 000 cinema screens in the EU-25 in 2004. The total number of admissions to cinemas in the EU-25 topped 1 billion in 2004, higher than in 2003 and comparable with its level in 2002, while EU-25 box office receipts were equal to EUR 5.7 billion in 2004. American productions dominated the European film marketplace, accounting for at least 60 % of ticket sales in all but one of the Member States with data available for 2004; the exception was France where the market share of films from the United States stood at 53.2 %.

TELEVISION AND RADIO

The so-called 'Television without frontiers' Directive adopted in 1989 aimed to create the conditions necessary for the free movement of television broadcasts within the EU. Among other matters, the directive ensures that events which are regarded by a Member State as being of major importance for society may not be broadcast in such a way that a substantial part of the population of that Member State is deprived of seeing them. Bearing in mind the development and application of digital technologies and other developments, in December 2005 the European Commission adopted a proposal⁽¹⁶⁾ for an 'Audiovisual media services' Directive, to update the television without frontiers Directive. This proposal covers all types of TV-like services, whether broadcast or not, and distinguishes broadcasting which pushes content to viewers, and on-demand services which the viewer pulls from a network.

⁽¹⁶⁾ COM(2005) 646.

For scheduled broadcasting, the proposal aims to make existing rules more flexible, and encourage self- and co-regulation. The proposed directive would also support new forms of advertising, and in particular would provide a legal framework for product placements: with some exceptions, clearly identified product placement would be permitted, providing an additional revenue stream.

In 2003, broadcasters' net revenues (excluding retail and similar non-broadcast revenue) amounted to EUR 71.0 billion in the EU-25, of which 41.0 % came from public broadcasters (of both radio and television), according to the EAO⁽¹⁷⁾ – see Table 21.14.

⁽¹⁷⁾ EAO (European Audiovisual Observatory), more information at: <http://www.obs.coe.int>.

21.4: PUBLISHING, PRINTING AND REPRODUCTION OF RECORDED MEDIA

Publishing can be defined as the act of producing and issuing informative material. Printing involves placing the publishing material on paper or other materials. These activities are covered by NACE Group 22.1 (for publishing) and NACE Group 22.2 (for printing and service activities related to printing). Note that publishing activities include not only the publishing of printed matter, but also the publishing of music.

As well as printing and publishing, this subchapter also includes the reproduction of recorded media (NACE Group 22.3), including reproduction services for sound and video recording (NACE Classes 22.31 and 22.32) and reproduction services for software (NACE Class 22.33). These activities were included in other subchapters in previous editions of this publication.

Publishing and printing comprises all the stages necessary to transform a piece of creative writing, music or information into a product available for distribution to the public. The explosion of information and communications technologies (ICTs) has created a wide range of opportunities for this sector and different media to work with. The Internet was initially seen by many as a direct competitor to printed matter, but enterprises that traditionally published printed and other off-line media (such as CDs and DVDs) have often diversified into on-line media too, creating new products for new markets. However, there is competition between printed and on-line media for readers and hence for advertising revenue. Digital rights management is a major issue for this sector, particularly for sound and video recordings, whether on-line or off-line.

FOCUS ON MUSIC RECORDING SALES

Music recording is dominated by a small number of multinational distribution companies, often referred to as the 'majors', including Universal, Sony/BMG⁽¹⁸⁾, EMI and Warner. According to IFPI⁽¹⁹⁾, some 545.2 million sound recordings were sold on music CDs in the EU-15⁽²⁰⁾ in 2005, 82.1 million singles, and 46.8 million music DVDs. The United Kingdom was the largest national market in terms of CDs and also singles, while France and Germany had the largest markets for music DVDs (see Table 21.15).

⁽¹⁸⁾ In July 2006 the Court of First Instance of the European Communities annulled the 2004 decision by the European Commission to authorise the creation of Sony BMG.

⁽¹⁹⁾ IFPI (the International Federation of the Phonographic Industries), more information at: <http://www.ifpi.org>.

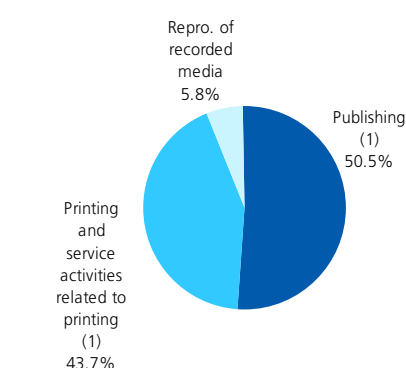
⁽²⁰⁾ Excluding Luxembourg.

Table 21.15
Sound recording sales, 2005 (million units)

	Singles	CDs	DVDs
BE	2.7	14.0	1.0
CZ	0.0	3.2	0.2
DK	0.2	9.6	0.3
DE	17.8	114.7	9.6
EE	:	:	:
EL	0.3	7.0	0.3
ES	1.7	31.1	3.2
FR	25.4	96.2	14.7
IE	1.2	7.7	0.6
IT	1.0	31.6	1.8
CY	:	:	:
LV	:	:	:
LT	:	:	:
LU	:	:	:
HU	0.0	4.2	0.2
MT	:	:	:
NL	2.0	20.4	4.6
AT	1.2	10.5	0.6
PL	0.0	9.0	0.4
PT	0.2	7.0	0.8
SI	:	:	:
SK	:	:	:
FI	0.3	7.4	0.4
SE	1.3	15.4	0.6
UK	26.8	172.6	8.3
IS	:	:	:
NO	0.5	11.0	0.3
CH	1.4	15.1	0.4

Source: IFPI, <http://www.ifpi.org>

Figure 21.11
Publishing, printing, reproduction of recorded media (NACE Division 22)
Breakdown of sectoral value added, EU-25, 2003 (%)

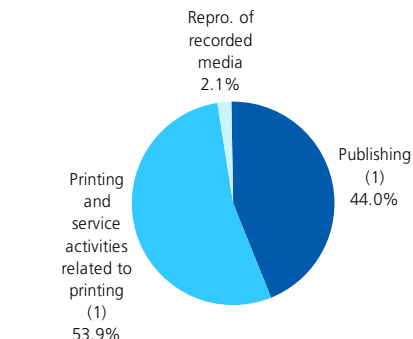


(1) Rounded estimate based on non-confidential data.
Source: Eurostat (SBS)

STRUCTURAL PROFILE

The total value added generated in the EU-25's publishing, printing and reproduction of recorded media sector (NACE Division 22) reached EUR 90 billion in 2003, some 1.9 % of non-financial business (NACE Sections C to I and K) economy total. There were 1.8 million persons employed in these activities in the EU-25, which represented a slightly lower share of the non-financial business economy workforce (1.6 %).

Figure 21.12
Publishing, printing, reproduction of recorded media (NACE Division 22)
Breakdown of sectoral employment, EU-25, 2003 (%)



(1) Rounded estimate based on non-confidential data.
Source: Eurostat (SBS)

Wealth creation in publishing, printing and reproduction of recorded media was dominated by two subsectors, as publishing (NACE Group 22.1) contributed 50.5 % of the EU-25's value added in this sector in 2003, while printing and service activities related to printing (NACE Group 22.2) contributed 43.7 %; the reproduction of recorded media (NACE Group 22.3) generated just 5.8 % of sectoral value added. In employment terms, the printing and service activities related to printing subsector was more labour-intensive, accounting for 53.9 % of the publishing, printing and reproduction of recorded media sector's workforce, while the contribution of the reproduction of recorded media was lower still, at 2.1 %.

Table 21.16
Publishing, printing, reproduction of recorded media (NACE Division 22)
Value added and employment: ranking of the top 5 Member States, 2003

Rank	Highest value added (EUR million) (1)	Share in EU-25 value added (%) (1)	Highest number of persons employed (thousands) (2)	Share in EU-25 employment (%) (2)	Highest share of national non-financial business economy value added (%) (3)	Highest share of national non-financial business economy employment (%) (4)
1	United Kingdom (21 829.4)	24.3	Germany (377.0)	20.7	United Kingdom (2.5)	Denmark (2.8)
2	Germany (18 128.3)	20.1	United Kingdom (357.7)	19.7	Finland (2.3)	Finland (2.4)
3	France (11 000.8)	12.2	France (204.6)	11.2	Malta (2.3)	Sweden (2.0)
4	Italy (8 503.5)	9.4	Italy (169.7)	9.3	Netherlands (2.2)	United Kingdom (2.0)
5	Spain (6 449.8)	7.2	Spain (146.7)	8.1	Latvia (2.0)	Germany (1.8)

(1) Malta and Sweden, 2002; Greece and Luxembourg, not available.

(2) Sweden, provisional; Malta, 2002; Greece and Luxembourg, not available.

(3) Malta, Lithuania and Sweden, 2002; Greece, Ireland, Cyprus and Luxembourg, not available.

(4) Sweden, provisional; Malta and Lithuania, 2002; Greece, Ireland, Cyprus and Luxembourg, not available.

Source: Eurostat (SBS)

A large part of the EU-25's value added in the publishing, printing and reproduction of recorded media sector in 2003 was concentrated in the United Kingdom (24.3 % of the EU-25 total) and Germany (20.1 %). Publishing, printing and reproduction of recorded media activities in the United Kingdom generated 2.5 % of non-financial business economy value added, 2.3 % in Finland and Malta (2002), and 2.2 % in the Netherlands ⁽²¹⁾. The lowest contribution of publishing, printing and reproduction of recorded media activities to national non-financial business economy value added was 1.3 % in both Slovakia and the Czech Republic.

There was no clear pattern as to the importance of one or other of the subsectors within the Member States. In 2003, publishing accounted for more than half of total value added in 12 of the 23 Member States for which data are available ⁽²²⁾, reaching a high of 62.1 % of the value added for publishing, printing and reproduction of recorded media in Finland. Printing and service activities related to printing generated more than half of sectoral value added in 10 of the remaining 11 Member States and was particularly dominant in Malta (2002), Cyprus and Belgium, where it generated more than 60 % of the sector's value added. Only in Ireland was the reproduction of recorded media the most important subsector, where its contribution to Irish value added in publishing, printing and reproduction of recorded media was 81.2 %.

Annual short-term statistics show that between 1996 and 2000 the EU-25 production index for publishing, printing and reproduction of recorded media grew at an average rate of 3.5 % per annum. The strongest growth over this period was within the reproduction of recorded media which averaged growth of 15.3 % per annum - see Figure 21.13. After 2000, publishing, printing and reproduction of recorded media output contracted for three years, despite strong growth in 2002 and 2003 for the reproduction of recorded media. For the first time since 2000 all three parts of the activity recorded annual growth in 2004, 0.9 %

⁽²¹⁾ Publishing, printing and reproduction of recorded media activities accounted for 10.7 % of manufacturing (NACE Section D) value added in the United Kingdom, compared with 10.0 % for Ireland (the second highest ratio); no data available for the importance of this sector in the Irish non-financial business economy.

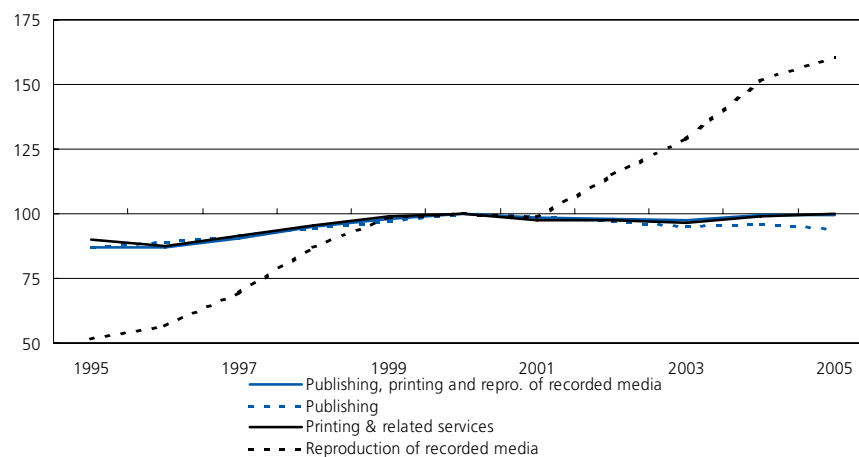
⁽²²⁾ Malta and Sweden, 2002; Greece and Luxembourg, not available.

Table 21.17
Production value of selected printed matter and recorded media products
(CPA Division 22), EU-25, 2004 (EUR million)

	Prodcom code	
Children's picture; drawing or colouring books published by you; or printed and published by you	22.11.21.80	369
Books, brochures, leaflets and the like; electronic	22.11.22.00	453
Dictionaries and encyclopaedias; and serial instalments thereof published by you; or printed and published by you	22.11.31.00	1 878
Printing of newspapers; journals and periodicals; appearing at least four times a week	22.21.10.00	3 355
New stamps; stamp-impressed paper; cheque forms; banknotes, etc	22.22.11.00	1 692
Printing of note books, letter pads, memorandum pads of paper/paperboard	22.22.20.15	462
Printing of binders, folders and file covers of paper/paperboard excl. book covers	22.22.20.50	833
Printing of newspapers, journals and periodicals, appearing <4 times a week incl. newspaper supplements excl. inserts	22.22.32.20	8 999
Binding/finishing incl. finishing of printed paper/cardboard excl. finishing of books, brochures, magazines, catalogues, samples, advertising literature	22.23.10.50	530
Composition; plate-making services; typesetting and phototypesetting	22.24.10.00	1 440

Source: Eurostat (PRODCOM)

Figure 21.13
Publishing, printing, reproduction of recorded media (NACE Division 22)
Index of production, EU-25 (2000=100)



Source: Eurostat (STS)

for publishing, 2.6 % for printing and service activities related to printing, and 17.6 % for the reproduction of recorded media. For the publishing activity this period of growth was short lived as output contracted by 1.9 % in 2005, and growth slowed in the other two activities, down to 0.6 % for printing and service activities related to printing, and 5.9 % for the reproduction of recorded media.

Table 21.18

Publishing, printing, reproduction of recorded media (NACE Division 22)**Cost, productivity and profitability indicators, ranking of the top 5 Member States compared to EU-25 averages, 2003**

Rank	Investment in tangible goods relative to total operating costs (%) (1)	Purchases of goods and services as a share of total operating costs (%) (2)	Personnel costs as a share of total operating costs (%) (2)	Apparent labour productivity (EUR thousand) (3)	Average personnel costs (EUR thousand) (3)	Wage adjusted labour productivity (%) (3)	Gross operating rate (%) (3)
EU-25	3.9	71.6	28.4	49.0	35.0	142.0	14.0
1	Malta (14.3)	Ireland (91.4)	Cyprus (37.9)	Ireland (220.4)	Belgium (45.7)	Ireland (526.3)	Malta (28.6)
2	Cyprus (12.9)	Slovakia (83.7)	Denmark (35.5)	Austria (68.4)	Austria (45.6)	Latvia (217.1)	Ireland (27.1)
3	Latvia (9.2)	Hungary (83.1)	United Kingdom (34.2)	Netherlands (66.9)	France (44.7)	Malta (203.6)	Latvia (24.0)
4	Slovenia (9.0)	Czech Republic (80.8)	Germany (32.3)	United Kingdom (61.0)	Netherlands (43.2)	Slovakia (195.5)	United Kingdom (19.4)
5	Estonia (8.4)	Poland (80.6)	Malta (32.3)	Belgium (60.4)	Ireland (41.9)	Lithuania (174.5)	Poland (17.7)

(1) Malta and Sweden, 2002; Belgium, Greece and Luxembourg, not available; EU-25 is an EU average based on available data for 2002 and 2003.

(2) Malta and Sweden, 2002; Greece and Luxembourg, not available; EU-25 is an EU average based on available data for 2002 and 2003.

(3) Malta and Sweden, 2002; Greece and Luxembourg, not available; EU-25, rounded estimate based on non-confidential data.

Source: Eurostat (SBS)

Table 21.19

Printed matter and printing services (CPA Groups 22.1 and 22.2)**External trade, EU-25, 2005**

	Extra-EU exports (EUR million)	Share of EU industrial exports (%)	Extra-EU imports (EUR million)	Share of EU industrial imports (%)	Trade balance (EUR million)	Cover ratio (%)
Printed matter and printing services	6 142	0.6	3 299	0.3	2 844	186.2
Books, newspapers and other printed matter and recorded media	4 606	0.5	2 400	0.2	2 205	191.9
Printing services and services related to printing	1 537	0.2	899	0.1	638	171.0

Source: Eurostat (Comext)

COSTS, PRODUCTIVITY AND PROFITABILITY

Apparent labour productivity for the EU-25's publishing, printing and reproduction of recorded media sector stood at EUR 49 000 per person employed in 2003. There was a significant difference between the level of productivity recorded for each of the subsectors, as each person employed generated an average of EUR 57 000 of value added within publishing, EUR 39 700 within printing and service activities related to printing, and EUR 132 600 within the reproduction of recorded media. The ratio for the reproduction of recorded media was the third highest level among the non-financial business economy NACE groups in 2003, after fuel processing (NACE Group 23.2) and telecommunications (NACE Group 64.2 - see Subchapter 21.2).

In contrast, average personnel costs per employee were quite similar, ranging from EUR 30 600 in printing and service activities related to printing to EUR 39 200 for publishing, with reproduction of recorded media between these two at EUR 35 300 per employee. The wage adjusted labour productivity ratio for the reproduction of recorded media was very high, at 375.7 % the highest of all non-financial business economy NACE groups. The publishing subsector and the printing and service activities related to

printing subsector recorded wage adjusted labour productivity rates of 145 % and 130 % respectively. In a similar manner, the gross operating rate was high for the reproduction of recorded media subsector (25.6 %), while for the other two subsectors it was about half this rate in 2003, but nevertheless higher than the 2002 average for the non-financial business economy.

EXTERNAL TRADE

The EU-25 was a net exporter of printed goods, with a trade surplus equal to EUR 2.8 billion for printed matter and printing services (CPA Groups 22.1 and 22.2) in 2005, of which 77.6 % of the surplus could be attributed to books, newspapers and other printed matter and recorded media (CPA Group 22.1). The trade surplus for these goods was 11.4 % higher overall in 2005 than five years earlier. Exports were valued at EUR 6.1 billion in 2005, and imports at EUR 3.3 billion - see Table 21.19.

Among the Member States, Germany was the largest exporter of printed matter and printing services, with exports valued at EUR 4.8 billion (intra and extra-EU trade combined), followed by the United Kingdom (EUR 3.8 billion). The United Kingdom was also the largest importer, with imports of printed matter and printing services valued at EUR 2.9 billion in 2005, followed by France (EUR 2.3 million) and

Germany (EUR 2.1 billion). As a result, the largest trade surplus for printed matter and printing services in 2005 was recorded in Germany (EUR 2.6 billion), followed by the United Kingdom (EUR 0.9 billion). In 2005 Austria and France registered the largest trade deficits for printed matter and printing services among the Member States, at EUR 319.9 million, and EUR 279.9 million respectively.

Switzerland was the main EU-25 export market for published and printed goods, its 20.2 % share of EU-25 exports well ahead of the United States (15.5 %). In terms of imports into the EU-25 the situation was different, with the United States providing nearly one third (32.2 %) of all imports, followed by China (21.5 %) and Switzerland (11.0 %).

Table 21.20

Publishing, printing, reproduction of recorded media (NACE Division 22)
Main indicators, 2003 (1)

	EU-25	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT
Turnover (EUR million) (2)	234 000	6 242	1 895	4 411	47 047	211	:	16 189	33 950	11 620	26 018	132	219	255	:	1 941	129
Production (EUR million)	:	6 042	1 871	4 439	46 366	196	:	16 068	32 573	10 742	25 919	134	216	250	:	1 562	128
Value added at factor cost (EUR million) (2)	90 000	2 075	624	1 870	18 128	78	:	6 450	11 001	3 871	8 504	63	97	91	:	501	66
Gross operating surplus (EUR million) (2)	32 000	709	309	434	4 521	25	:	2 592	2 070	3 144	3 610	19	53	41	:	215	37
Purchases of goods and services (EUR million)	:	4 162	1 330	2 605	28 516	133	:	10 138	23 171	7 698	17 796	72	126	168	:	1 411	61
Gross investment in tangible goods (EUR million) (3)	:	277	81	290	1 360	16	:	639	902	99	937	15	16	18	:	96	13
Number of persons employed (thousands) (2)	1 820	34	44	46	377	6	:	147	205	18	170	2	10	11	:	40	2
Personnel costs (EUR million) (2)	58 000	1 366	315	1 436	13 608	52	:	3 858	8 931	727	4 894	44	44	51	:	286	29
App. labour productivity (EUR thous./pers. emp.) (2)	49.0	60.4	14.2	40.5	48.1	13.6	:	44.0	53.8	220.4	50.1	26.8	9.9	8.7	:	12.6	32.0
Average personnel costs (EUR thous./employee) (2)	35.0	45.7	9.5	31.7	37.6	9.4	:	29.0	44.7	41.9	36.9	19.4	4.6	5.0	:	7.7	15.7
Wage adjusted labour productivity (%) (2)	142.0	132.1	149.3	127.5	127.8	145.2	:	151.5	120.4	526.3	135.7	138.3	217.1	174.5	:	162.8	203.6
Gross operating rate (%) (2)	14.0	11.4	16.3	9.8	9.6	11.9	:	16.0	6.1	27.1	13.9	14.6	24.0	15.9	:	11.1	28.6
Investment per person employed (EUR thousand) (3)	:	8.2	1.9	6.3	3.6	2.8	:	4.4	4.4	5.6	5.5	6.3	1.6	1.7	:	2.4	6.3
	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	HR	RO	TR	IS	LI	NO	CH
Turnover (EUR million) (4)	12 223	4 503	4 032	2 746	686	502	4 101	7 003	46 641	265	:	670	:	:	:	4 245	:
Production (EUR million) (4)	12 115	4 428	3 987	2 715	625	472	4 150	7 037	45 719	257	:	607	:	:	:	4 259	:
Value added at factor cost (EUR million) (5)	4 928	1 835	1 366	1 093	237	140	1 615	2 310	21 829	70	:	211	:	:	:	1 912	:
Gross operating surplus (EUR million) (5)	1 876	676	715	332	71	69	508	380	9 049	34	:	129	:	:	:	541	:
Purchases of goods and services (EUR million) (4)	7 192	2 724	2 706	1 701	443	364	2 574	4 707	24 584	201	:	476	:	:	:	2 432	:
Gross investment in tangible goods (EUR million) (4)	342	264	215	187	55	32	246	238	1 630	28	:	78	:	:	:	121	:
Number of persons employed (thousands) (4)	74	27	96	41	10	10	30	52	358	14	:	32	:	:	:	30	:
Personnel costs (EUR million) (5)	3 152	1 160	651	761	166	71	1 117	1 930	12 781	36	:	82	:	:	:	1 371	:
App. labour productivity (EUR thous./pers. emp.) (5)	66.9	68.4	14.3	26.7	24.0	14.2	54.3	42.9	61.0	4.9	:	6.6	:	:	:	64.6	:
Average personnel costs (EUR thous./employee) (5)	43.2	45.6	9.0	19.3	18.2	7.3	38.2	39.5	38.2	2.9	:	2.7	:	:	:	46.5	:
Wage adjusted labour productivity (%) (5)	155.0	150.1	158.2	138.1	132.0	195.5	142.1	108.6	159.8	171.7	:	247.2	:	:	:	139.1	:
Gross operating rate (%) (5)	14.9	15.0	17.7	12.1	10.4	13.7	12.4	5.5	19.4	12.8	:	19.2	:	:	:	12.7	:
Investment per person employed (EUR thousand) (4)	4.6	9.8	2.2	4.6	5.5	3.2	8.3	4.6	4.6	2.0	:	2.4	:	:	:	4.1	:

(1) Malta, 2002. (2) EU-25, rounded estimate based on non-confidential data. (3) Belgium, 2002. (4) Sweden, provisional. (5) Sweden, 2002.

Source: Eurostat (SBS)

Table 20.21

Post and telecommunications (NACE Division 64)
Main indicators, 2003 (1)

	EU-25	BE	CZ	DK	DE	EE	EL	ES	FR	IE	IT	CY	LV	LT	LU	HU	MT
Turnover (EUR million)	467 723	14 525	4 367	7 634	87 671	539	:	34 050	68 819	9 762	55 995	430	623	782	2 144	4 738	243
Production (EUR million)	:	14 492	4 285	7 633	76 659	533	:	27 486	68 972	6 047	56 104	430	585	746	1 961	3 447	246
Value added at factor cost (EUR million)	231 786	7 334	2 465	3 767	44 701	267	:	17 400	35 101	4 890	28 234	353	376	344	882	2 190	190
Gross operating surplus (EUR million)	127 055	3 558	1 696	1 618	23 229	200	:	11 959	15 121	3 604	18 424	237	283	243	659	1 333	134
Purchases of goods and services (EUR million)	:	7 660	1 993	4 341	48 510	268	:	16 570	33 211	4 856	27 434	77	249	446	1 224	2 540	53
Gross investment in tangible goods (EUR million)	:	1 814	475	747	5 142	53	:	3 038	4 562	364	3 270	72	95	90	124	524	65
Number of persons employed (thousands)	2 988	84	74	53	611	8	:	178	462	32	261	4	13	16	4	66	3
Personnel costs (EUR million)	104 731	3 777	769	2 149	21 472	68	:	5 441	19 981	1 286	9 810	116	93	101	223	857	56
App. labour productivity (EUR thous./pers. emp.)	77.6	87.2	33.5	70.7	73.2	34.3	:	97.9	75.9	154.4	108.3	96.6	28.4	21.8	214.3	33.4	60.3
Average personnel costs (EUR thous./employee)	35.7	46.7	11.2	40.8	35.9	8.7	:	31.8	43.3	42.1	38.1	32.0	7.0	6.4	54.5	13.4	17.9
Wage adjusted labour productivity (%)	217.4	186.7	297.8	173.1	203.8	393.7	:	308.3	175.4	366.4	284.6	302.3	405.1	338.1	392.9	248.7	337.5
Gross operating rate (%)	27.2	24.5	38.8	21.2	26.5	37.1	:	35.1	22.0	36.9	32.9	55.0	45.5	31.1	30.8	28.1	55.2
Investment per person employed (EUR thousand)	:	21.6	6.4	14.0	8.4	6.8	:	17.1	9.9	11.5	12.5	19.8	7.2	5.7	30.2	8.0	20.7
	NL	AT	PL	PT	SI	SK	FI	SE	UK	BG	HR	RO	TR	IS	LI	NO	CH
Turnover (EUR million)	23 905	8 986	9 432	7 561	1 117	1 351	8 010	12 624	96 969	1 358	:	2 448	:	:	:	8 672	:
Production (EUR million)	23 407	6 356	8 993	7 377	1 017	1 243	7 480	12 629	91 311	1 309	:	2 357	:	:	:	8 628	:
Value added at factor cost (EUR million)	12 329	4 566	5 247	3 606	551	723	2 820	5 198	44 563	787	:	1 322	:	:	:	3 687	:
Gross operating surplus (EUR million)	8 073	2 526	3 441	2 351	298	503	1 421	1 925	22 079	589	:	829	:	:	:	1 853	:
Purchases of goods and services (EUR million)	11 666	4 681	4 252	4 153	557	625	5 391	7 605	52 957	605	:	1 125	:	:	:	4 998	:
Gross investment in tangible goods (EUR million)	:	904	1 212	752	202	238	1 110	1 328	9 849	337	:	508	:	:	:	632	:
Number of persons employed (thousands)	117	54	171	35	12	30	41	75	543	53	:	89	:	:	:	38	:
Personnel costs (EUR million)	4 256	2 040	1 806	1 255	253	220	1 399	3 273	22 484	198	:	494	:	:	:	1 834	:
App. labour productivity (EUR thous./pers. emp.)	105.5	84.7	30.8	104.5	47.2	23.8	69.0	69.4	82.1	15.0	:	14.8	:	:	:	97.6	:
Average personnel costs (EUR thous./employee)	35.5	38.1	11.1	36.4	22.5	7.3	34.3	44.0	42.3	3.9	:	5.6	:	:	:	49.5	:
Wage adjusted labour productivity (%)	296.9	222.4	277.5	286.7	210.3	328.2	201.0	157.7	194.4	385.2	:	263.3	:	:	:	197.0	:
Gross operating rate (%)	33.8	28.1	36.5	31.1	26.7	37.2	17.7	15.2	22.8	43.4	:	33.8	:	:	:	21.4	:
Investment per person employed (EUR thousand)	:	16.8	7.1	21.8	17.3	7.9	27.2	17.7	18.2	6.4	:	5.7	:	:	:	16.7	:

(1) Malta, 2002.

Source: Eurostat (SBS)

