



Finnish Communications
Regulatory Authority

Communications Markets in Finland

Market review

2008





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INTRODUCTION

The Finnish Communications Regulatory Authority, FICORA, has the aim of ensuring effective and secure communication connections enjoyed by the general public and businesses in Finland. FICORA would not be able to fulfil this task efficiently without up-to-date, reliable information on market developments. In fact, collecting and analysing information on the communications market is a prerequisite for ensuring that FICORA's statutory duties are carried out. FICORA collects information on telecommunications, media and postal operations from the relevant business sectors themselves and by carrying out and commissioning surveys and studies.

Although the economic recession deteriorated prospects towards the end of 2008, it did not have any major impact on the number of new subscriptions reported. On the contrary, the number of some subscription types, especially mobile broadband subscriptions, continued to rise during the second half and the use of many communication services showed a marked upward trend throughout the year. Nevertheless, media companies whose operations are based on advertising revenue were hit by the recession, bearing in mind that the fourth quarter saw a decline in advertising expenditure in particular.

In 2008, enhancing the availability of broadband subscriptions dominated the headlines in the communications sector. There is still scope for improvements in broadband availability in remote rural areas in particular. However, in 2008 almost 70 per cent of households already had a broadband subscription. On the other hand, the number of broadband subscriptions grew by almost 20 per cent during the year, totalling more than two million at the year end. The supply of broadband subscriptions focused on faster connections. At the end of 2008, the majority of fixed-line broadband connections were 2Mbit/second or higher, these connections accounting for almost 60 per cent of all fixed-line broadband subscriptions.

No major players entered the telecoms market in 2008. However, the market share of the old-established operators underwent some changes. A rapid increase in the mobile broadband penetration rate was reflected in a slight change in market share among the providers of broadband subscriptions. In the meantime, the market share among the largest three providers of mobile subscriptions levelled off, with DNA increasing its share by three percentage points. Yet, the most significant market share changes were seen

among the providers of fixed-line subscriptions: whereas Elisa increased its market share by three percentage points, TeliaSonera's market share fell by four percentage points.

In 2008, the prices of telecommunications services did not undergo any major changes. In the mobile communications market, several small operators offered lower prices than the largest players through their main subscription products, but this had no significant effect on mobile call rates. The prices of wireless broadband subscriptions fell slightly although they remained markedly higher than those of fixed-line broadband subscriptions based on the same connection speed. The prices of fixed-line network subscriptions and phone calls rose slightly.

Digital TV broadcasting has involved the introduction of new TV services which enable viewers to watch TV programmes at the time they prefer, for example. Equipment and services for internet TV broadcasting have won popularity, whereas the pay television penetration rate slowed down in 2008 from the rate recorded a year ago, which may partly be explained by the fact that pay-TV channels cannot offer programmes that appeal to all viewer groups. In 2008, men accounted for almost two-thirds of pay-TV viewers.

Surveys of the effectiveness of change-of-address services commissioned by FICORA have shown the rapid pace at which people have adopted electronic services in their daily transactions. Accordingly, in 2002 only two per cent of customers filed their change-of-address on the internet as against up to 53 per cent in 2008. Those who filed their change-of-address on the internet were also more often highly satisfied with the service vis-à-vis those who used other channels.

This Annual Review 2008 is the third of its kind released by FICORA, aimed at providing an overview of developments in the telecoms, postal and media sectors, as in the previous year. We would like to express our warmest thanks to all those who have provided us with the data and information used in this review, and hope that this review will, in the best possible way, meet the needs of those interested in developments in the communications market.

Johanna Juusela
Director
Communications Markets and Services



TELECOMMUNICATIONS MARKET

In 2008, telecoms companies continued to further develop their networks and services. They updated 3G networks to enable faster data transfer and announced that they would begin updating HSPA mobile communication networks in the 900 MHz frequency band. This frequency band enables a more cost-efficient way of implementing and providing mobile broadband connections on an extensive basis in sparsely populated areas than the 2,100 MHz frequency band mainly used at the moment.

Telecoms companies also announced that they would increasingly invest in telecommunication networks based on fibre optic technologies, enabling them to provide consumers and corporate customers with faster data transfer connections. These investments will primarily focus on

major cities where fibre optic technology will be used to replace or supplement the current networks based on metal cables. Faster broadband connections of up to 100 Mbit/s will enable the provision of new services, such as television and video-on-demand services, via broadband connections.

In addition, several non-profit regional network organisations continued to expand data communication networks, based on fibre optic technology, in smaller localities. The regional networks also joined forces to set up co-operation groups with the aim of increasing the interest of telecommunication service operators in providing regional network customers with more versatile and inexpensive services.

Table 1.
Development of broadband connections 2006–2008

Year	2006		2007		2008	
	30.6.	31.12.	30.6.	31.12.	30.6.	31.12.
DSL	1 066 100	1 161 100	1 210 900	1 270 500	1 270 100	1 231 300
Real estate and housing company subscription	69 900	72 900	98 100	114 000	104 600	134 900
Cable modem	161 500	181 100	192 900	209 600	212 900	214 800
Mobile broadband				143 100	307 100	479 700
Wireless broadband				15 300	19 600	26 100
Other	12 400	13 800	18 300	7 700	9 000	9 800
Total	1 309 900	1 428 900	1 520 200	1 760 200	1 923 300	2 096 600

Broadband services

Broadband subscriptions and technologies

In Finland, the number of broadband subscriptions continued to grow in 2008, their year-end number totalling roughly 2,096,600 and involving both households and corporate customers. The number of the subscriptions increased by approximately 336,000, or by 19 per cent year on year, due mainly to mobile broadband subscriptions whose number rose by over 336,000 in 2008. The number of subscriptions based on DSL technology fell by almost 40,000. Not even the deterioration in the economic situ-

ation during the second half of 2008 could dampen demand for mobile broadband connections, as evidenced by their growth rate in volume terms in the second half exceeding that in the first half. According to the Telepalveluiden käyttötutkimus (Survey of Use of Telecommunications Services) commissioned by FICORA and based on interviews of 2,000 consumers, 70 per cent of households had internet access, 96 per cent of these being broadband connections.

Figure 1. Broadband connections and market shares of operator groups

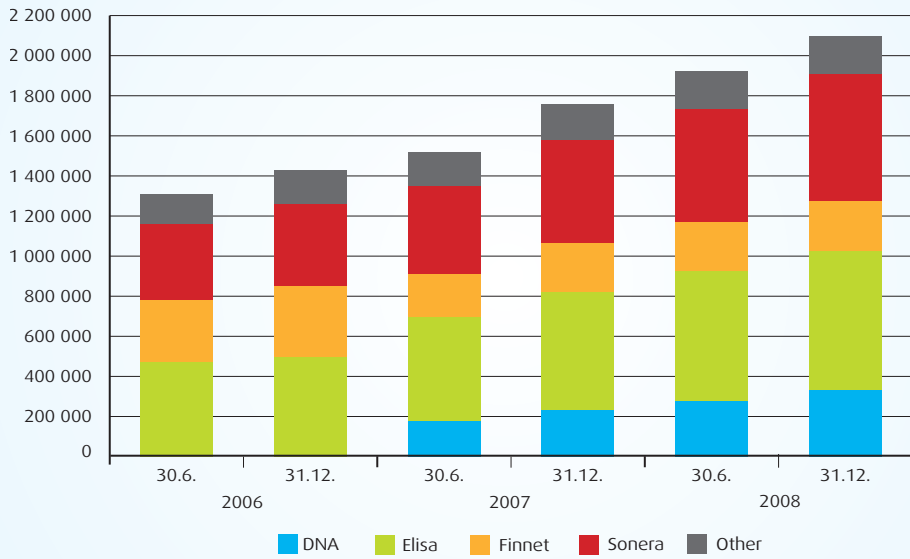
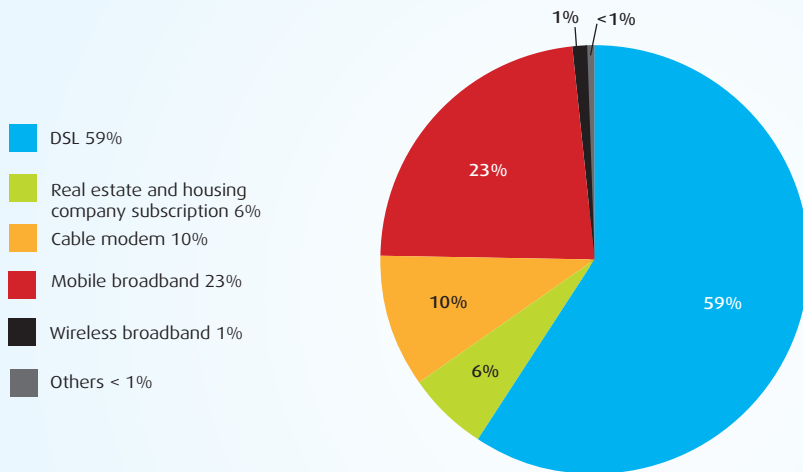


Figure 2. Broadband subscriptions by type, 31 Dec. 2008





Elisa remained the market leader, its market share standing at 33 per cent at the end of 2008. Teliasonera's market share was 30 per cent, DNA's 16 per cent and the combined market share of Finnet Group companies 12 per cent. The total market share of other companies providing broadband services stood at nine per cent. At the end of 2007, Elisa's market share was 34 per cent, Teliasonera's 29 per cent, DNA's 13 per cent and the Finnet Group 14 per cent. In 2008, Welho remained the largest player among the other companies providing broadband services. The main reason for these market share changes lies behind the spread of mobile broadband subscriptions. If we exclude mobile broadband subscriptions, no major market share changes occurred in 2008.

At the end of 2008, almost 60 per cent of all fixed-line broadband connections had a bit rate of 2 Mbit/s or more, broadband connections of 10 Mbit/s or faster accounted for around 10 per cent and those of 100 Mbit/s or faster for roughly one per cent. Around 40 per cent of all fixed-line broadband connections had a bit rate of less than 2 Mbit/s.

The Survey of Use of Telecommunications Services revealed that roughly three out of four internet users thought they needed a broadband connection at the minimum bit rate of 1 Mbit/s and 46 per cent of the respondents preferred a broadband connection of at least 2 Mbit/s. Almost 20 per cent of the respondents showed an interest in IPTV services and over 20 per cent in video-on-demand (over the internet). Only a few respondents claimed to be users of these services.

ADSL or other DSL-based subscriptions remained the most popular among the types of broadband subscriptions. However, DSL subscriptions accounted for a smaller share of all subscriptions, decreasing from 70 per cent at the end of 2007 to 59 per cent at the end of 2008. Mobile broadband subscriptions became the second most common subscription type after the summer of 2008, outstripping connections via a cable modem. Mobile broadband subscriptions increased their share of all broadband subscriptions by almost 15 percentage points, to around 23 per cent. At the end of 2008, the number of mobile broadband subscriptions came to almost 479,700. The number of cable modem subscriptions continued to grow slowly and subscriptions based on broadband connections via the cable TV network accounted for around 10 per cent of all broadband subscriptions. Likewise, the number of wireless subscriptions provided to fixed locations, such as broadband connections based on Flash-

OFDM via the @450 network and on WiMAX technology, continued to grow slowly. At the end of 2008, the number of various fixed wireless broadband subscriptions totalled around 26,100. The number of real estate and housing company subscriptions also continued to increase slightly.

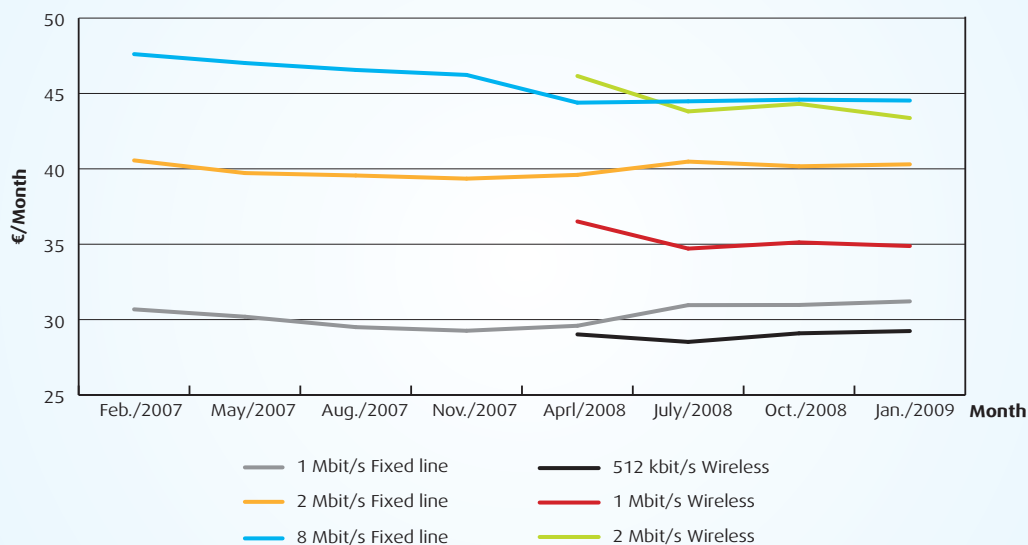
Broadband market and prices

According to the Survey of Use of Telecommunications Services, people were slightly more inclined to change their broadband service's provider than a year ago. Around six per cent of the respondents claimed to have switched to another provider within the year, with a better offer from a competitor being the most important reason for such a change, followed by moving house. Less than a fifth of the respondents changed their service provider due to dissatisfaction with it. However, people were less dissatisfied with their service provider than in the previous year. Every sixth respondent said that they had changed their broadband service provider at least once since the purchase of their first broadband subscription.

The survey studied consumers' satisfaction with the service offering available in their area of residence. Of the respondents, 60 per cent reported that they have competing broadband subscription supply in their residential area, and 86 per cent of these respondents were of the opinion that the supply was sufficient. However, a quarter of the respondents could not comment on this issue. In 2008, a few operators discontinued the provision of new fixed-line broadband subscriptions in smaller localities and some broadband service providers decreased the provision of their subscriptions, or even discontinued the sale of connections of 1 Mbit/s and lower.

The year saw some changes in broadband subscription charges over the previous year. Average prices of typical 1 and 2 Mbit/s broadband subscriptions saw a slight increase in 2008, whereas the price of subscriptions based on the fastest connections (8 Mbit/s) fell markedly from the previous year's level. Moreover, the monthly price of the most common subscription type targeted at consumers, 2 Mbit/s, averaged around EUR 40, varying from roughly EUR 24 to around EUR 60, depending on the region and service provider. The number of fixed-term subscriptions continued its upward trend. Providers of these subscriptions offered lower monthly charges than in general or made other special offers.

Figure 3. Price development of broadband connections Feb./2007–Jan./2009



The prices of wireless broadband subscriptions based on 1 Mbit/s connections or faster fell in 2008. For example, broadband connections via Digita's @450 network showed a marked decrease in prices. As a matter of fact, these subscriptions served as a major alternative to fixed-line broadband connections in rural areas. In the meantime, the prices of mobile broadband subscriptions chiefly remained unchanged. However, on average wireless subscriptions remained much more expensive than fixed-line broadband connections of the same bit rate.

In 2008, the supply of broadband subscriptions focused on faster connections. Many telecoms companies began to provide super-fast connections of over 100Mbit/s via fibre optic and cable TV networks.

Customer service quality of broadband service providers

In 2008, an average of over 80 per cent of broadband service providers answered customer phone calls in less than one minute and an average of over 90 per cent in less than five minutes. During the average quarter, 3.1 notices of defects were filed per 100 broadband subscriptions, which is slightly less than a year ago. Almost all new subscriptions ordered, or 99 per cent, were delivered to customers within less than 38 days.

Mobile communication services

Mobile subscriptions and volume of telephone calls

Mobile subscriptions continued to grow at an annual rate of 12 per cent, the year-end number of mobile subscriptions in Finland totalling more than 6.8 million. This figure includes the contract (invoiced afterwards) and prepaid subscriptions of households and companies. Prepaid subscriptions represented slightly over 10 per cent of all mobile subscriptions. According to the survey mentioned above, roughly 98 per cent of Finns aged 15–79 years claimed to be users of mobile phones.

In 2008, the volume of telephone calls remained at the 2007 level but calls increased by almost seven per cent in terms of minutes. Accordingly, the average duration of telephone calls lengthened by ten seconds, standing at around 2 minutes and 55 seconds.

Table 2. Development of mobile subscriptions and number of phone calls 2006–2008

Year	2006		2007		2008	
	January-June	July-December	January-June	July-December	January-June	July-December
Mobile subscriptions	5 360 000	5 670 000	5 810 000	6 080 000	6 430 000	6 830 000
Telephone calls (no.)	2 164 000 000	2 279 000 000	2 342 000 000	2 467 000 000	2 472 000 000	2 490 000 000
Call minutes	6 090 000 000	6 403 000 000	6 687 000 000	6 859 000 000	7 233 000 000	7 315 000 000

Figure 4.
Mobile telephone calls 2006–2008

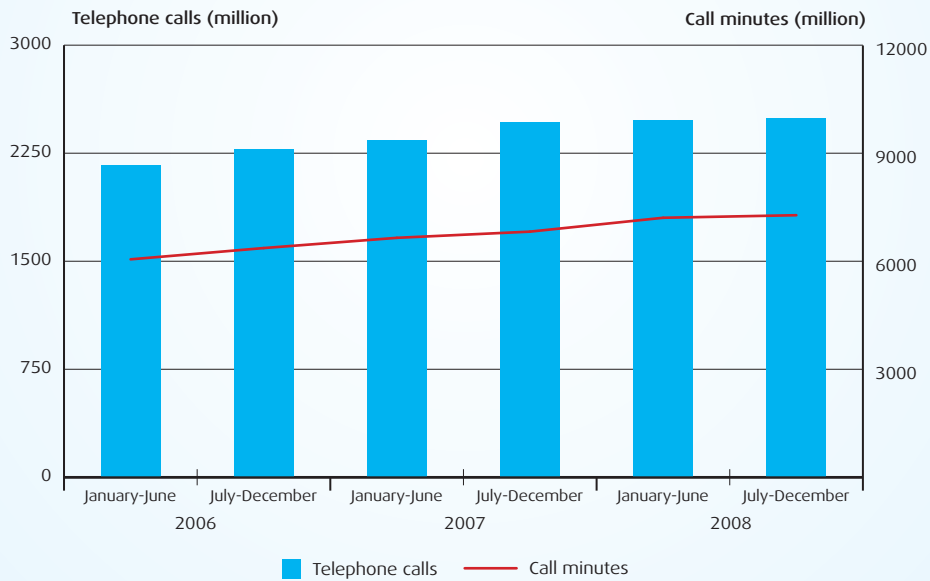
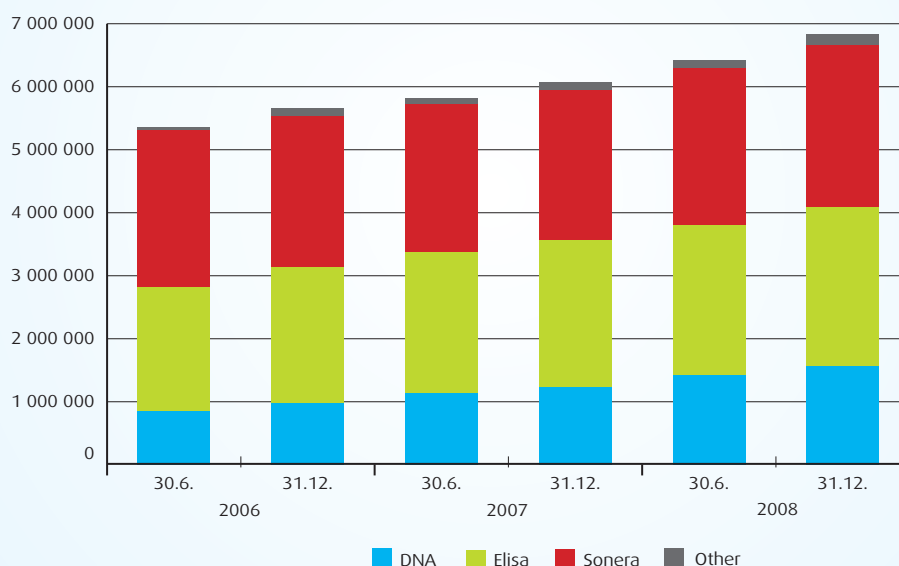


Figure 5.
Mobile subscriptions and market shares



The market share gap between mobile communication operators narrowed year on year, with TeliaSonera's market share at the end of 2008 standing at 38 per cent, Elisa's at 37 per cent and DNA at 23 per cent, as against the respective market share a year ago being 39, 38 and 20 per cent. The combined market share of independent service operators remained at around 2 per cent.

In 2008, the number of SMS messages sent in Finland totalled almost 3.5 billion, up by more than ten per cent year on year, and that of multimedia messages 35 million, showing a slow-down in year-on-year growth which stood at less than eight per cent. According to the survey, around three out of four mobile phone users sent SMS messages actively while one out of four users sent multimedia messages actively.

The volume of data transferred over mobile communications networks multiplied during 2008, increasing from around 500 terabytes to approximately 4,200 terabytes. This data volume transferred over mobile communications networks in 2008 corresponds to roughly one standard CD disk of monthly data

transfer per mobile broadband subscription. All in all, almost 1.7 million mobile communication subscriptions used mobile communications network data transfer services.

The number of 3G-capable terminal devices on mobile communications networks continued to increase, coming to almost two million at the end of 2008. This figure comprises subscription-packaged terminal devices and those purchased separately.

The number of tie-in subscriptions sold during the second half of 2008 totalled almost 290,000, accounting for almost 30 per cent of all mobile subscriptions sold. In 2008, consumers switched their mobile telephone subscriptions to another operator at the previous year's pace. According to the statistics on number transfers by Numpac Oy, 2008 saw around 430,000 number transfers, which is around 20,000 less than a year ago. According to the FICORA survey mentioned above, around one-tenth of users changed their mobile telephone subscription providers within the year.

Figure 6.
SMS and MMS messages sent in 2006–2008

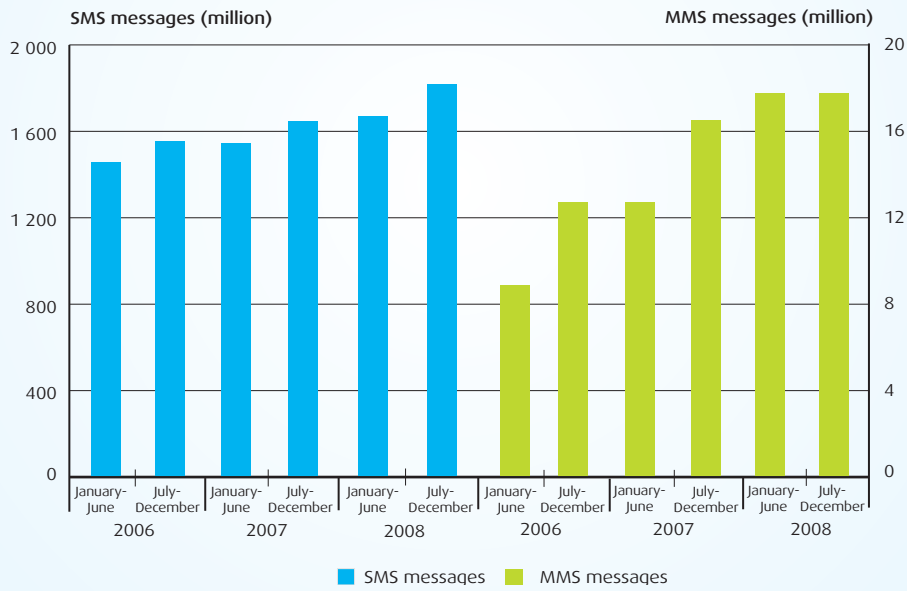
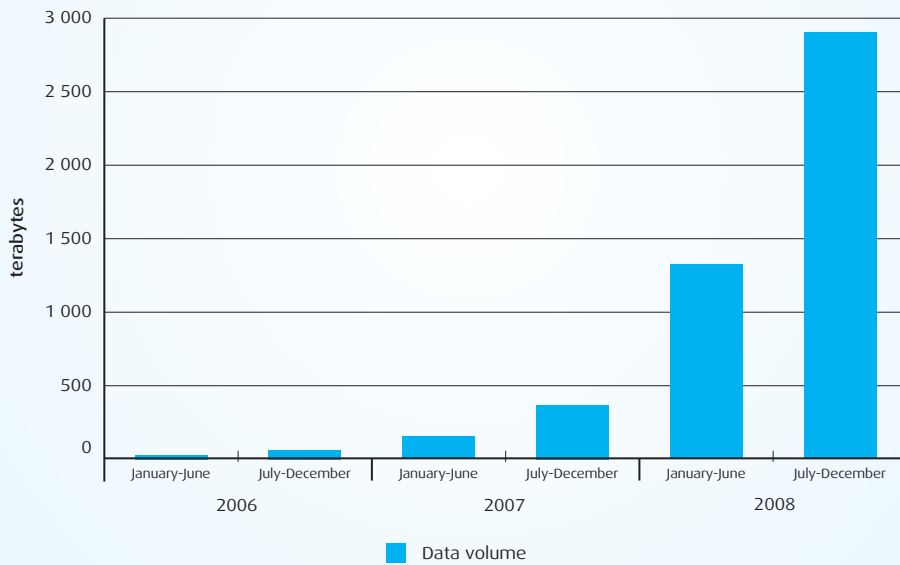


Figure 7. Data volume
transferred over mobile networks



Tie-in sale still permissible

Selling a mobile handset and subscription as a package deal (tie-in sale) for 3G mobile phones will remain permissible. A new act on package deals, establishing a provision regarding the tie-in sale of 3G mobile handsets, came into force on 2 April 2009, the preceding act being temporarily in force between 1 April 2006 and 1 April 2009. In comparison with the previous act, the new act contains minor amendments.

Under the new act, a telecoms company may, as part of the package deal, conclude a maximum of a two-year subscription contract with the customer. Under a new provision of the act, a telecoms company offering consumers a contract with a term longer than 12 months must also provide the consumer with the opportunity to conclude a fixed-term contract of 12 months.

Under the new act, consumers also have the right to cancel their fixed-term contract to become effective after two weeks' time from the cancellation if they pay the charges for the unused contract period and any other charges agreed for this kind of situation.

Consumers may still cancel their fixed-term contract with effect two weeks from the cancellation if they have, for a reason not primarily considered a fault of their own, committed a payment default due to a serious illness, unemployment or for some other special reason. If the consumer cancels the contract on the basis of any of the reasons stated above, the telecoms company will have the right to recover the terminal device sold under the package deal from the consumer. The telecoms company may not charge the consumer for any payments for the unused contract period under the subscription contract.

Caps for roaming charges throughout the EU

The summer of 2007 saw the entry into force of the Roaming Regulation throughout the EU, regulating roaming charges for calls made and received abroad. This regulation sets the maximum rate charged by mobile communication network companies from each other and that charged for

roaming from consumers. These price caps apply to roaming phone calls made between EU countries and received within an EU country. The Regulation also covers the EEA countries Norway, Iceland and Liechtenstein.

Currently, the maximum charge for a phone call between EU countries is 56.12 cents per minute and that for a phone call received 26.84 cents per minute. The autumn of 2008 will see a further reduction of a few cents in the maximum charges.

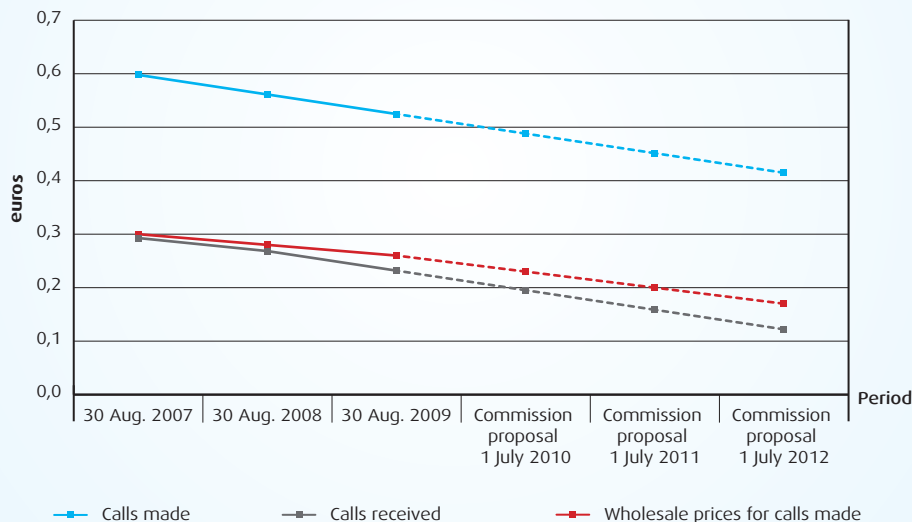
Moreover, mobile communication companies are at all times required to send their customers an SMS message on roaming charges whenever a customer enters an EU country, and provide them with a toll-free telephone number which they can use to inquire about the details of pricing bases. This price cap and the related obligations to provide information simplified the rates system within the EU.

For the time being, this roaming regulation does not apply to SMS or data transfer. In particular, data transfer rates have huge variations abroad, with large price differences and a high overall price level.

The Roaming Regulation will remain in force for three years until 30 June 2010. In August 2008, the European Commission proposed that the Regulation be extended for another three years until June 2013, involving an annual reduction of three cents on ex-VAT roaming calls. The Commission also proposed that the Roaming Regulation be extended to cover SMS wholesale and retail prices and the wholesale prices of data services, in addition to call charges, and that roaming phone call bills be based on charges per second. However, the minimum roaming call charges would be subject to a minimum charge time of no more than 30 seconds. Approval based on the co-decision procedure of the European Parliament and Commission is required for the Commission proposal's entry into force.

The regulation which entered into force in 2007 does not apply to phone calls made and received outside the EEA. Only domestic phone calls and SMS are usually included in

Figure 8. Maximum roaming charges in 2007–2009 and Commission proposal on cap on roaming rates for 2010–2012 (retail prices include VAT of 22%)



the monthly rates of package subscriptions involving talk time and SMS. This also applies to various data packages and mobile broadband subscriptions.

Use of new mobile communications services

According to the FICORA survey, 18 per cent of mobile phone holders said that they were active in using their mobile phone to browse websites and search for information, and 14 per cent said that they were active in using their mobile phone to read their e-mail messages or use some other e-mail service. The usage rate of both these mobile phone services had markedly increased on the previous year. According to the survey, 44 per cent of respondents who had bought a 3G mobile handset said that they had increased their use of the internet and e-mail after the purchase of the 3G mobile handset. The survey also revealed that 27 per cent of mobile handset holders had a 3G phone, the corresponding figure a year ago being 4 per cent lower.

Mobile communications market and prices

Mobile call charges remained stable throughout 2008, with no major changes in call rates per minute. Changes were mainly seen in the supply of various voice and SMS packages which operators use with a view to reaching various customer groups. Smaller service operators aim to challenge

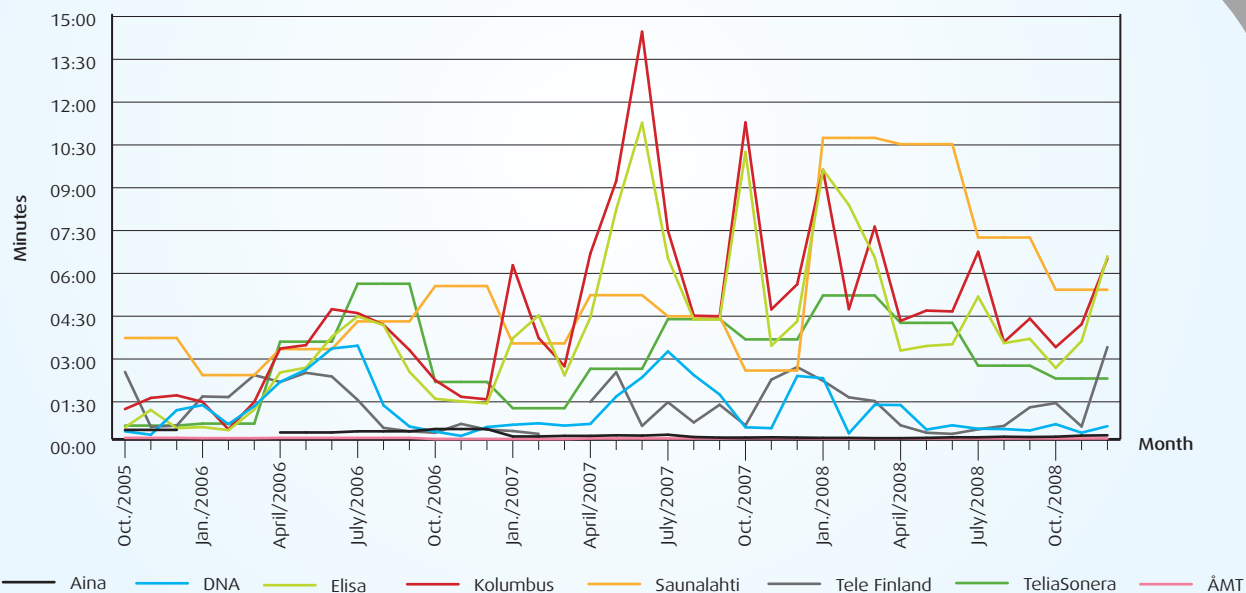
large, traditional operators by offering lower call rates. Large operators also aim to offer lower call rates through their lower-cost brands. At the year end, the rate of a phone call of 2 minutes and 45 seconds from each service provider's most inexpensive mobile subscription to another domestic subscription varied from 16.2 cents to 28.6 cents.

According to the Survey of Use of Telecommunications Services, the call rates of slightly over half of mobile phone users were based on per-minute charges for their personal phone calls. Various voice packages were also popular, more than one-third of respondents having one, and 22 per cent had concluded a fixed-term subscription contract.

The survey revealed that almost every other respondent was not aware of the costs of using his/her mobile phone abroad, with 40 per cent being somewhat aware of call charges. Only around 14 per cent of the respondents said that they ask about the call rates in advance before they go abroad.

In the end of 2008, some operators began to provide mobile subscriptions in which the user enjoys slightly lower call rates by permitting the delivery of text message advertisements to his or her mobile phone.

Figure 9. Response times of mobile operators' customer service



Quality of mobile operators' customer service

In 2008, well over half of mobile communications firms answered customer phone calls within less than one minute and more than 80 per cent within less than five minutes. During the average quarter, 0.7 notices of defects were filed per 100 mobile subscriptions. The number of bill complaints rose slightly on the previous year, due mainly to the unfavourable development in first half of the year. In 2008, bill complaints filed with mobile phone service providers accounted for an average of 0.19 per cent of all bills.

For mobile communications services, Ålands Mobiltelefon's customer service recorded the quickest response times

throughout the year. The Aina Group's customer service response times also remained excellent in 2008. On average, response times shortened almost throughout 2008, with most operators experiencing a 'hiccup' in this respect at the beginning of the year. Response times also lengthened towards the end of the year. In particular, Saunalahti's customer service response time multiplied in the first half 2008 but improved during the second half. Elisa and Kolumbus demonstrated major monthly variations and TeliaSonera showed a steady shortening in its response times throughout the year. Of the large mobile phone operators, only DNA managed to record a response time of less than one minute, which is considered good.

Table 3. Development of fixed-line connections and number of phone calls 2006–2008

Year	2006		2007		2008	
	January-June	July-December	January-June	July-December	January-June	July-December
Fixed-line connections	2 000 000	1 920 000	1 830 000	1 740 000	1 650 000	1 650 000
Telephone calls (no.)	695 000 000	620 000 000	553 000 000	495 000 000	458 000 000	409 000 000
Call minutes	3 046 000 000	2 298 000 000	2 198 000 000	1 827 000 000	1 644 000 000	1 396 000 000

Fixed-line telephone network services

According to the Survey of Use of Telecommunications Services, almost every third Finnish household had a fixed-line telephone subscription, but a fixed-line telephone served as the only telephone in only a few per cent of households. In 2008, the number of fixed-line telephone subscriptions continued to decline further, showing a decrease of five per cent or by around 85,000 subscriptions. At the end of 2008, the number of fixed-line telephone subscriptions in Finland totalled less than 1.7 million.

This was the first time in which VoIP subscriptions were included in the total number of fixed-line subscriptions. Therefore, the decrease in the number of these subscriptions

seemed to slow down in the second half, in particular. Without the inclusion of VoIP subscriptions, the number of fixed-line subscriptions has continued to fall steadily. At the end of 2008, the number of VoIP subscriptions came to roughly 45,000. This figure includes only the so-called voice band broadband telephone solutions provided by telecoms companies to end-users, these solutions enabling them to make and receive phone calls, but excludes VoIP business telephone switchboard solutions and VoIP usage, based on free applications such as Skype or MSN Messenger.

Fixed-line telephone calls followed the same downward trend as the number of subscriptions towards the year end. The volume of calls per minute fell by almost a quarter and the volume of phone calls by less than 20 per cent. The relative development continued almost unchanged over 2007.

Figure 10. Phone calls in the fixed-line network in 2006–2008

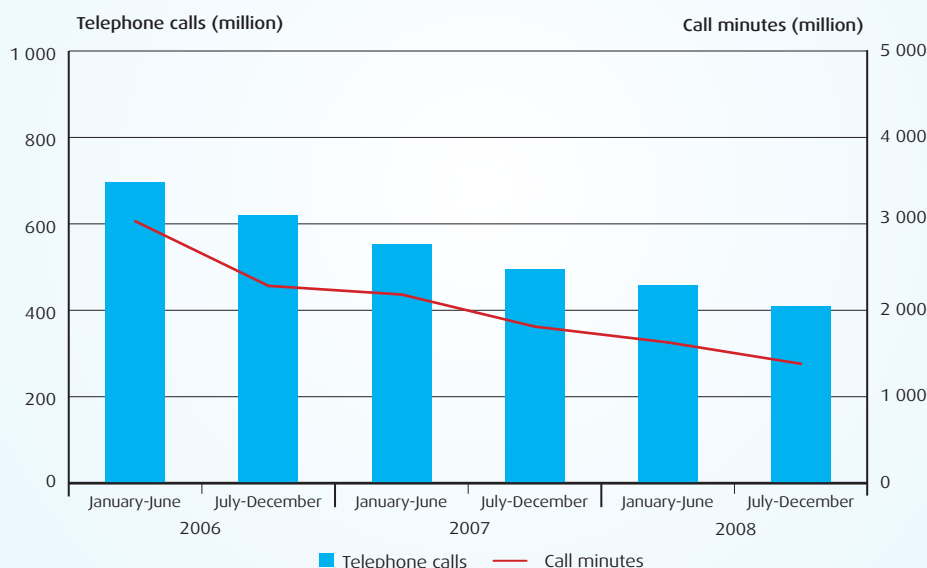
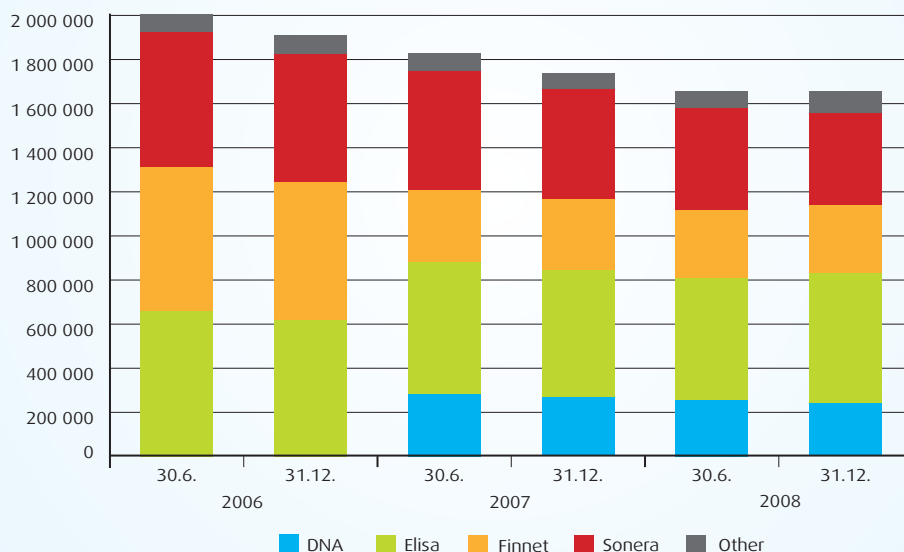


Figure 11. Fixed-line subscriptions and market share by operator



The average duration of fixed-line telephone calls shortened from three minutes and 48 seconds in 2007 to three minutes and 30 seconds in 2008.

In 2008, the market share of the largest fixed-line telephone operators underwent changes, that of TeliaSonera declining by four per cent and that of Elisa rising by three per cent. Elisa remained the market leader with a market share of 36 per cent and TeliaSonera's year-end market share stood at 25 per cent, the Finnet Group's at 19 per cent and DNA's at 15 per cent, as against the respective market share a year ago being 33, 29, 18 and 15 per cent. The combined market share of independent service operators remained at around five per cent.

Prices of fixed-line telephone services

In the main, fixed-line telephone call rates rose in 2008. In March 2009, the activation fee of a fixed-line telephone connection averaged around EUR 80 and the monthly fee around EUR 13. Where most operators raised their activation fees, DNA, one of the largest players, abandoned fixed-line

telephone activation fees throughout Finland. Monthly subscription fees increased by an average of around five per cent.

Call rates also showed an upward trend. Local call rates rose by an average of four per cent and long-distance call rates and rates for calls from fixed-line telephones to mobile phones increased by almost ten per cent. Phone calls from fixed-line telephones to mobile phones cost 14–27 cents per minute plus a local network charge.

Customer service quality of fixed-line telephone service

In 2008, an average of more than 90 per cent of fixed-line telephone companies' customer service answered customer calls within less than one minute and 100 per cent within less than five minutes. During the average quarter, 1.5 notices of a defect were filed per 100 telephone subscriptions. In 2008, bill complaints filed with fixed-line telephone service providers accounted for an average of 0.24 per cent of all bills.



Table 4. Digital television broadcasting channels in national multiplexes, 12 March 2009

Multiplex A	YLE TV1	YLE TV2	YLE Teema	YLE FST5	SVT Europa
Multiplex B	MTV3 MTV3 MAX	Nelonen SubJuniori	Sub SubLeffa	JIM	Liv
Multiplex C	Urheilukanava Canal+ First Disney Channel	The Voice/ TV Viisi Canal+ Hits Urheilu+ kanava	Klubi.tv Canal+ Sport 1 DIGIVIIHDE	ISKELMÄ Canal+ Sport 2	IskelmäTV Harju & P. Canal69
Multiplex E	Discovery Channel Nickelodeon	Eurosport KinoTV	MTV3 Fakta MTV3 Ava	Music Television MTV	

TV AND RADIO BROADCASTING

Finland switched to all-digital television broadcasting when analogue broadcasting over cable TV networks came to an end on 29 February 2008. Digital TV programmes are broadcast in five national multiplexes with a varying coverage and channel offering.

Multiplex D is primarily reserved for the use of DVB-H, i.e. mobile TV. Holders of the digital television network operating licence may broadcast over a DVB-H network without a separate operating licence. In addition, the holders of the separate operating licence for multiplex D, granted by FICORA, comprise Elisa Corporation, Mobilive Entertainment Ltd. Oy, Pro Radio Oy and Stiftelsen Arcada.

In the Vaasa region, the regional multiplex operating licence has been granted to KRS-TV rf (in the Kristiinankaupunki area), När-TV rf (in the Närpiö area) and Vaasan Läänin Puhelin Oy.

Within radio broadcasting, ten national or comparable operating licences have been granted to seven applicants and 47 local operating licences to 33 applicants. As a result of the entry into force of the decree on the use of the radio and television frequency spectrum in June 2008, several radio broadcasting stations and frequencies changed across Finland.

HDTV broadcasting was tested during 2008. Digital broadcast of the Beijing Olympic Games, provided by the Finnish Broadcasting Company (YLE), over the Helsinki Metropolitan Area's terrestrial network in August and the Karjala Tournament was broadcast by MTV 3 in November. These test broadcasts were favourably received among viewers. According to a survey commissioned by Digita, consumers currently have sufficient technical capabilities and knowledge of, and an interest in, viewing HDTV broadcasts. In the second half of 2008, the Ministry of Transport and Communications began to prepare application procedures governing operating licences for HDTV test broadcasting of longer duration. In March 2009, two such operating licences became subject to the application procedure. Accordingly, people outside the Helsinki Metropolitan Area would also have the opportunity to watch programmes based on test HDTV broadcasting through the terrestrial network, bearing in mind that the licences require 60 per cent population coverage in continental Finland by the end of 2011. These licences would be valid until 2016.

Alongside conventional television broadcasting services, the market has seen the introduction of new services which pay special attention to viewers who are unable to watch TV at a particular time. Several TV channels also distribute programmes via their websites free of charge and against a separate fee. Moreover, for example IPTV set-top boxes, with a remote recording feature and other devices and services using an internet connection, have won popularity.

Television broadcasting

Reception of television broadcasts

The switchover to all-digital broadcasting was completed in 2008 when cable TV networks adopted digital broadcasting at the end of February as a continuation to the digitisation of the terrestrial network in the autumn of 2007. The switchover resulted in a slight decrease in the number of TV households: non-TV households accounted for eight per cent at the end of 2008, as against six per cent a year earlier.

The so-called basic set-top boxes without a recorder remained more popular than those with a recorder. At the end of 2008, around 41 per cent of TV households had a digital set-top box with a hard disk recorder. However, the proportion of set-top boxes with a recorder has increased significantly, considering that only over a quarter of digital TV households had one at the end of 2007.

Over one million households receive TV broadcasting via the cable network and roughly one million via the terrestrial network, with the satellite network mainly supplementing these networks. At the end of 2008, T receivers, or digital set-top boxes for the reception of broadcasting via the terrestrial network, accounted for almost 60 per cent of all digital receivers held by households, and C receivers for the reception of broadcasting via the cable network represented over 40 per cent. It is worth noting that one household may have more than one digital set-top box of various kinds, irrespective of the method of receiving TV broadcasting. The share of integrated digital televisions, or TV sets with an in-built digital tuner, of all digital receivers had grown from 14 per cent at the end of 2007 to almost 25 per cent a year later. The share of television broadcasts received through IPTV i.e. broadband connection remained marginal.

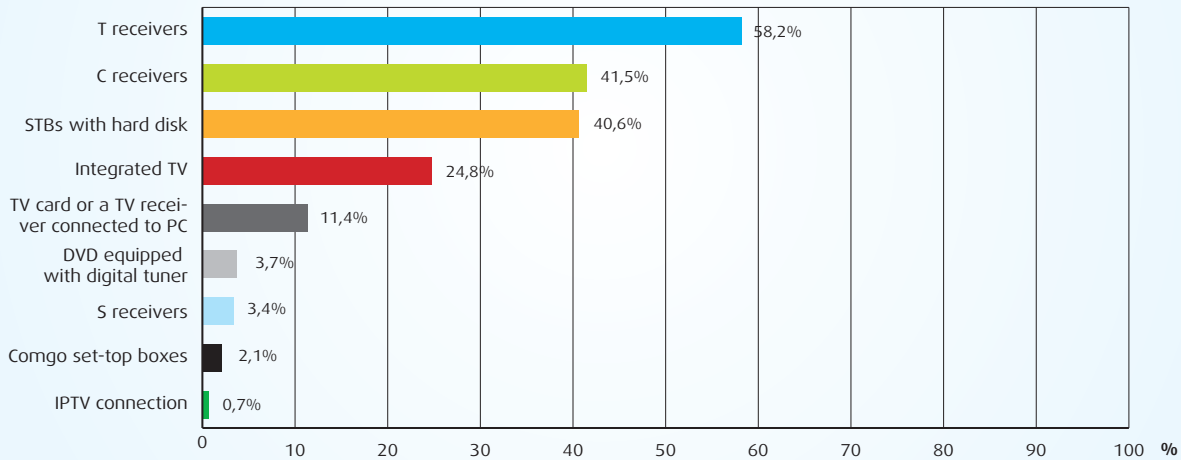
FICORA has monitored consumer satisfaction with the usability of digital television by commissioning the related surveys, the most recent one being carried out in March 2008 following the cable network's switchover to the digital system. According to the survey, digital TV continued to receive good marks from its users. On a scale of 1 to 5 (1=poor and 5=excellent), digital TV usability scored 3.57 in the latest survey, 3.54 in the October 2007 survey and 3.62 in the January 2007 survey. The survey also revealed that the adoption of a digital receiver had become easier. Only 12 per cent of households said that they had had difficulties in the adoption, as against 15 per cent reported at the end of 2007 and 19 per cent at the beginning of 2007.

By and large, consumers were satisfied with the usability of digital TV although many reported some problems in using or watching it. However, people encountered these problems less often than the previous survey suggested. The majority of problems continued to relate to subtitling, picture quality or the jamming of the digital TV receiver. The most important reason given by cable TV households without a digital receiver, for not having such a receiver, was that purchasing such a receiver was unnecessary. Some households also wished to wait for the introduction of technologically more advanced devices. According to the March 2008 survey, households without a digital receiver represented five per cent of all TV households.

Origin of television programming

The provisions of the TV without Frontiers Directive regulate the origin of TV programmes. This directive sets out the minimum rules according to which TV broadcasting companies must allow the majority of their annual broadcasting time

Figure 12. Frequency of digital TV equipment in TV households in December 2008



Source: Finnpanel 2008

Figure 13. Overall score for digital TV usability

(share of households with a set-top box or digital TV, n=947; 841; 651; 581; 520)

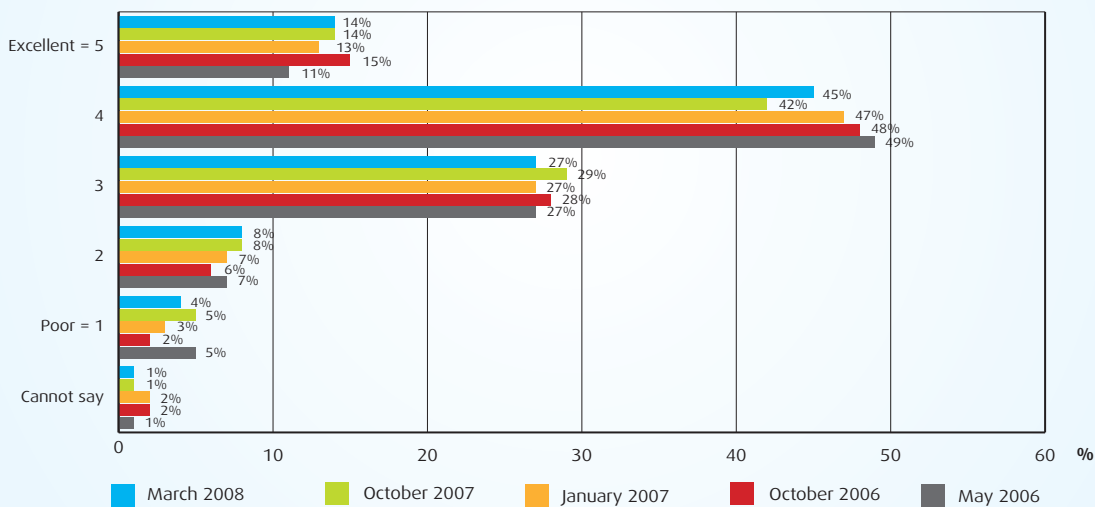


Figure 14. Level of TV programming of European origin in 2007

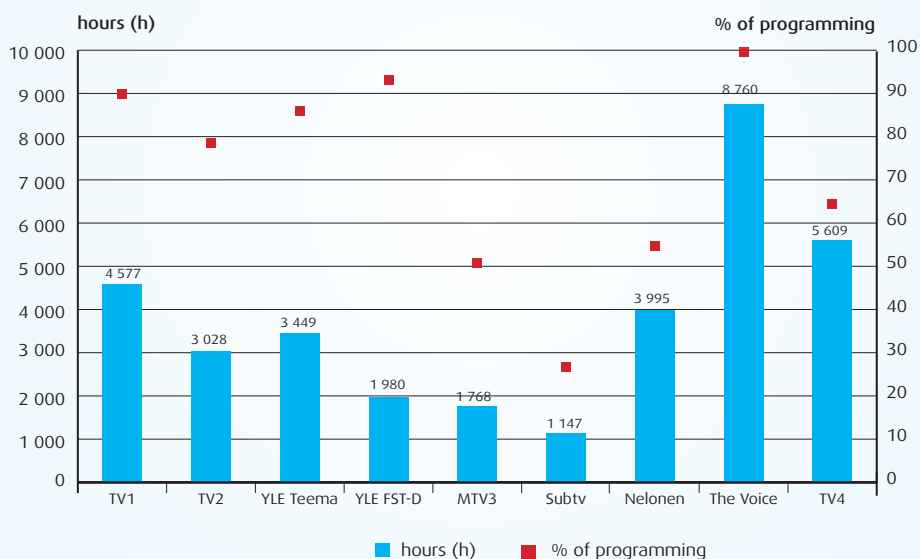


Figure 15. Programmes of independent producers in 2007

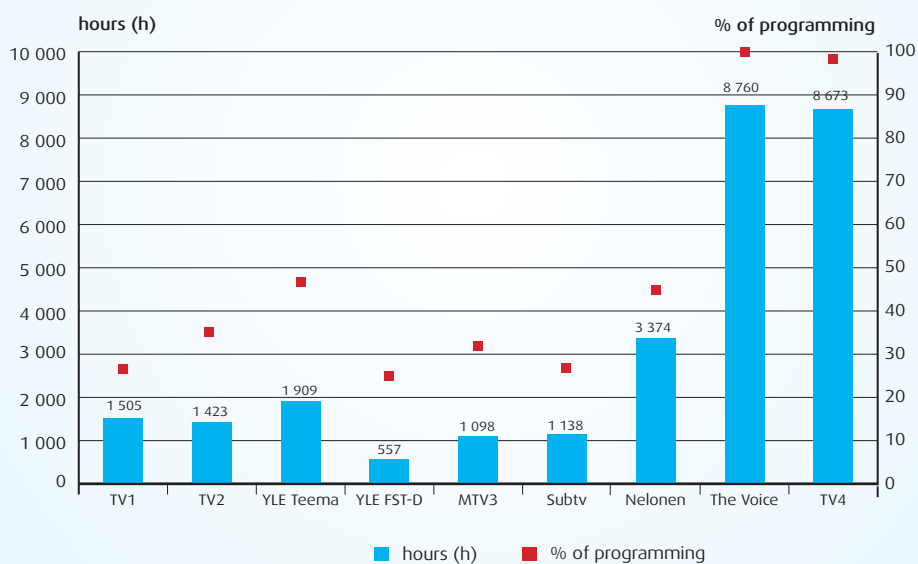
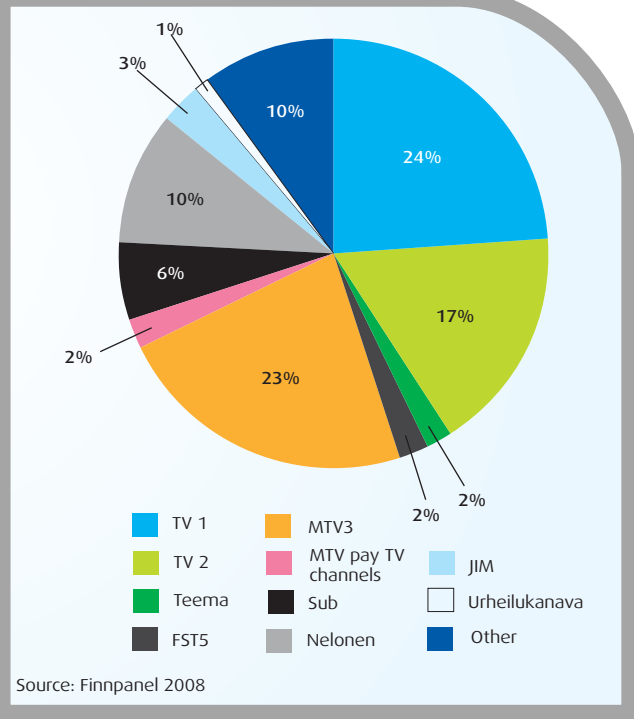


Figure 16. Shares of TV channels of minutes of viewing in 2008



for European programmes and ten per cent for production companies independent of TV broadcasters. Finland has complied with these provisions practically as such, but applies the minimum requirement of 15 per cent for independent production. However, these provisions do not apply to news, sports events, game shows, commercials or the time reserved for teletext broadcasting. Moreover, the provisions apply only to national TV, not local, broadcasting.

FICORA annually collects data on the origin of programming from the broadcasters to which these provisions apply. Data for 2008 will be collected during the spring of 2009.

In the main, in 2007 Finnish TV channels fulfilled the requirements set for European origin and the independence of production. Of channels broadcasting general programming, the Finnish Broadcasting Company's TV1 and TV2 channels broadcast European production the most, whereas the commercial channels MTV3 and Nelonen broadcast much less programmes of European origin.

The amount of independent production did not vary greatly between channels, except for The Voice and TV4. All or almost all of their broadcasting was based on independent production.

Television viewing

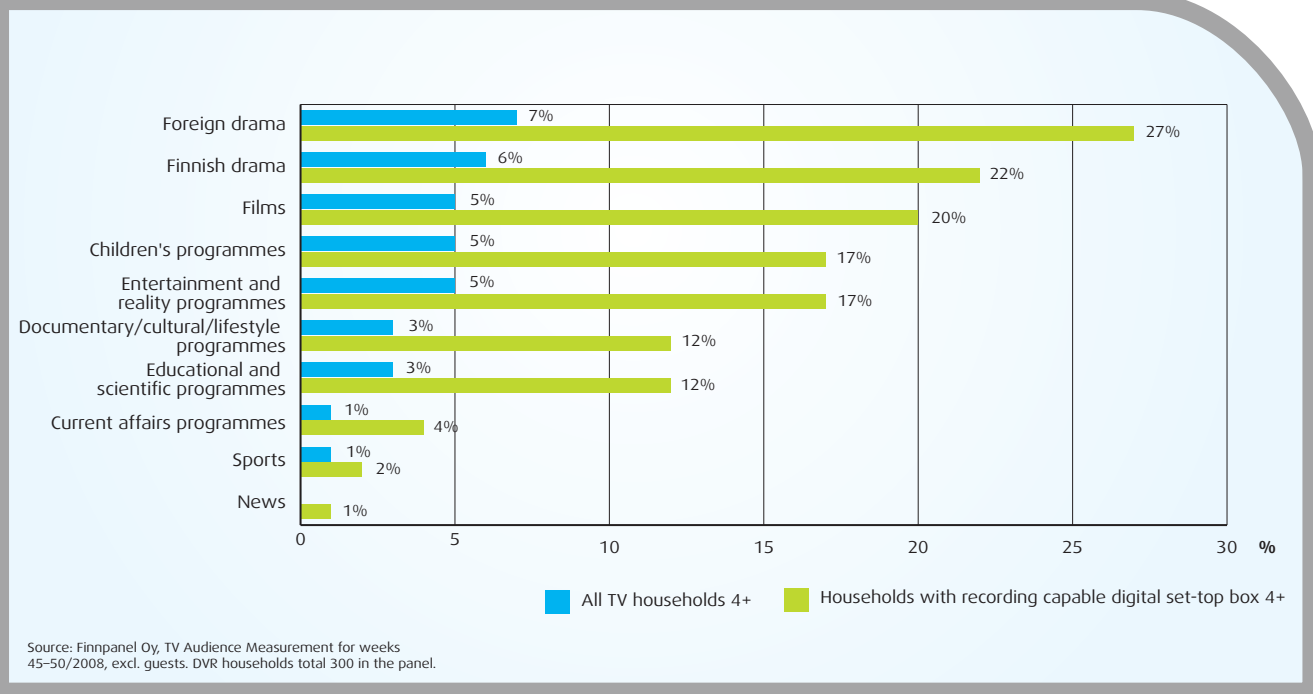
In 2008, the time spent watching TV increased by six per cent, or roughly ten minutes on the previous year. It is worth pointing out that half of this growth is explained by the inclusion of guest viewing in Finnpanel's reporting. Guest viewing refers to viewing by non-panel members within panel homes. If we deduct timeshift viewing¹ from this figure, i.e. viewing recorded programmes within one week of the recording day, TV viewing increased only by one minute per day. In 2008, the time spent watching TV averaged 2 hours and 57 minutes.

In 2008, the number of channels viewed every week remained the same as a year ago, i.e. nine, and that viewed on a daily basis increased to an average of five. Major channels maintained their popularity, but it is worth noting that JIM and YLE Teema increased their share of viewing to over two per cent.

The pay TV penetration rate slowed down in 2008, the number of pay TV households totalling some 609,000 at the end of 2008, as against around 600,000 a year earlier. This year-on-year growth is modest in comparison with the status in the previous year when the figure more than doubled

¹ Roughly half of timeshift viewing was included in reporting in 2008.

Figure 17. Increase in timeshifting vis-à-vis live viewing by programme type



over the year-end of 2006. Pay TV channels, which are more commonly viewed by families with children, account for some six per cent of all television viewing. In 2008, over a fifth of children's (at the age of 4-9) TV viewing came from pay TV channels. However, men accounted for almost two-thirds of pay TV viewing.

At the end of 2008, 41 per cent of TV households, or around 914,000 households, had a digital set-top box with a hard disk recorder. These set-top boxes have won increasing popularity, considering that roughly 600,000 households had one at the end of 2007. According to Finnpanel's TV Audience Measurement conducted between weeks 45 and 50, time shifting increased television viewing by around 14 per cent in households owning a digital set-top box with a hard disk recorder, with drama series being time-shifted the most often and news and sports events the least often.

Amount of media advertising

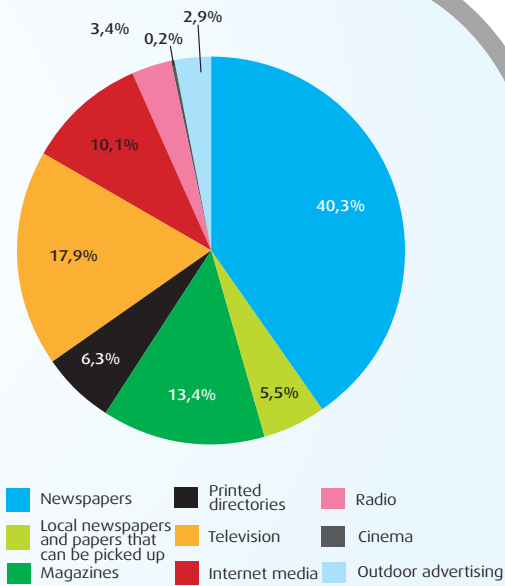
Media advertising expenditure totalled EUR 1.5 billion in 2008, the sixth consecutive year of growth. In fact, expenditure did not grow if we take account of changes made in

the research method of the Media Advertising Survey 2008: electronic directories, search engines and printed directories were included in the survey and the collection of data on local and free-issue newspapers was extended. Without these changes, media advertising expenditure would have remained unchanged on the previous year. Media advertising remained on a growth trajectory in the first half 2008 but began to decline in the fourth quarter in particular.

Newspapers continued to represent the largest single media group in terms of advertising, followed by television and magazines.

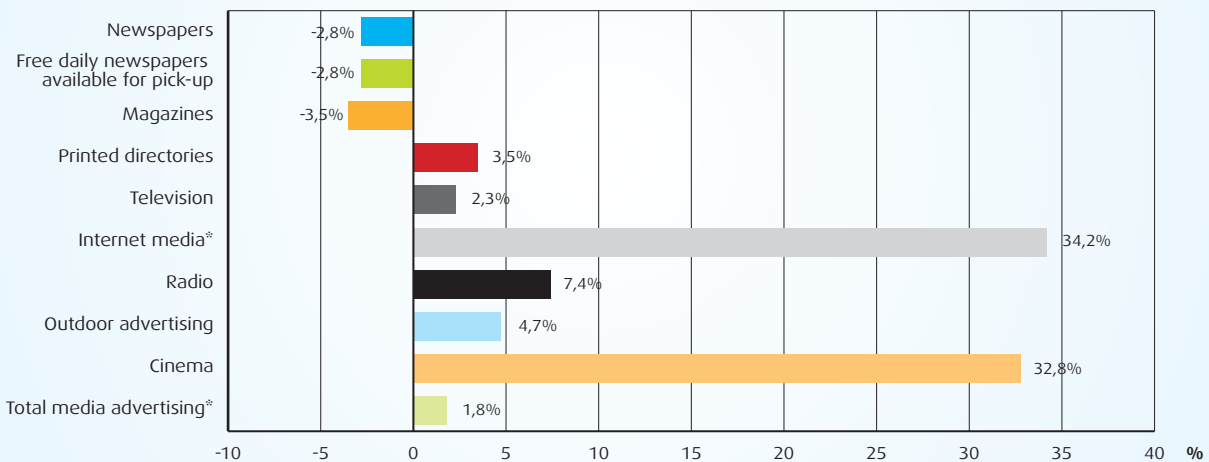
In 2008, the volume of media advertising grew by 1.8 per cent year on year, if we do not take account of the change in the research method mentioned above, expenditure on electronic media showing the strongest growth. Internet media advertising increased by a stunning 34 per cent. Electronic media advertising represented roughly 32 per cent of all media advertising. Within retail and food, media advertising showed the strongest growth, with other sectors showing a downward trend.

Figure 18. Shares of media advertising in 2008



Source: TNS Media Intelligence

Figure 19. Development of media advertising by media group in 2008



*The figure is not comparable with that recorded for 2007 due to a change made in the research.

Source: TNS Media Intelligence

Duration and placing of TV advertising

In accordance with a general provision governing the general principles of advertising under the Act on Television and Radio Operations, advertising must be kept separate from other parts of the programme service, by optical or acoustic means. FICORA carries out sample studies of the prime-time programming of commercial TV channels twice a year. According to a study carried out in the spring of 2008, the channels used break signals regularly between commercial breaks during the same programme. However, the channels used these signals between two programmes to varying degrees. Where roughly every second commercial break was separated in MTV 3 and Nelonen by the break signal between two programmes, Sub performed better considering that it used the appropriate break signals between all programmes, except for one.

The law also provides that a period of at least 20 minutes must elapse between each successive commercial break within a programme. This provision does not apply to the period between the beginning of the programme and the first commercial break, or to the period from the last commercial break within a programme and the end of the programme. TV channels complied with this 20-minute rule in

the case of feature films, but chiefly failed to do so in the case of other programmes of long duration. However, the situation looked slightly better compared with the previous two studies. In the 2008 study, the duration of the programme section varied between 15 and 18 minutes on average.

In addition to the separation and placing of advertising, the law regulates the amount of advertising in programming in such a way that the proportion of commercial spots and teleshopping spots within a given clock hour may not exceed 20%, i.e. 12 minutes. According to the spring 2008 study, the advertising time was an average of over 11.5 minutes per clock hour. The total number and duration of commercial breaks is not comparable with those shown by the spring 2007 study, because the 2007 study recorded data less than normally. In comparison with the spring 2006 study, no major changes in the total number of breaks occurred in any of the channels and the total advertising time remained somewhat the same in the cases of MTV 3 and Nelonen but increased markedly in that of Sub.

Figure 20. Separation of advertising from other programming by break signals: breaks between two programmes in the springs of 2004–2008



Figure 21. Duration of programme sections in May 2008

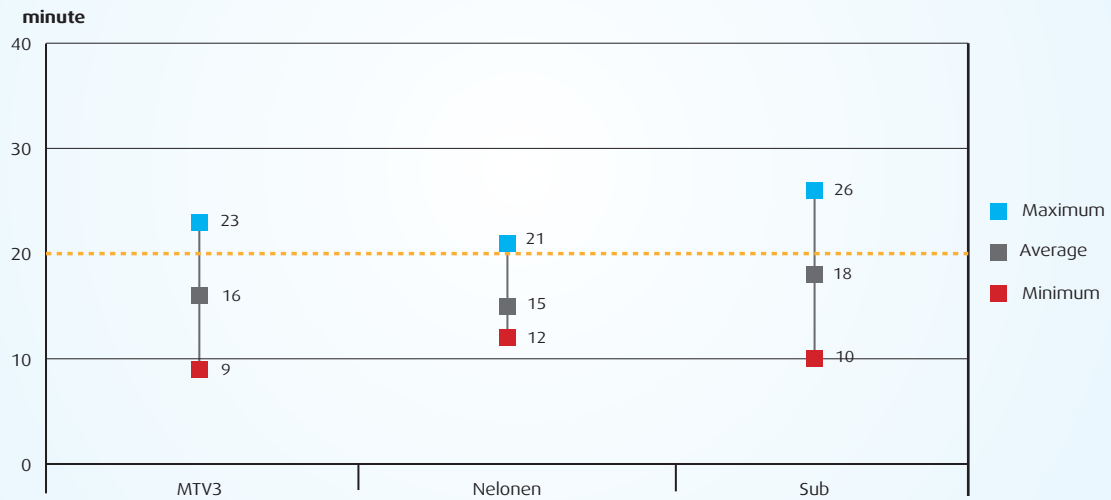


Figure 22. Duration of advertising per clock hour during 2002–2008 (average over the period of study)

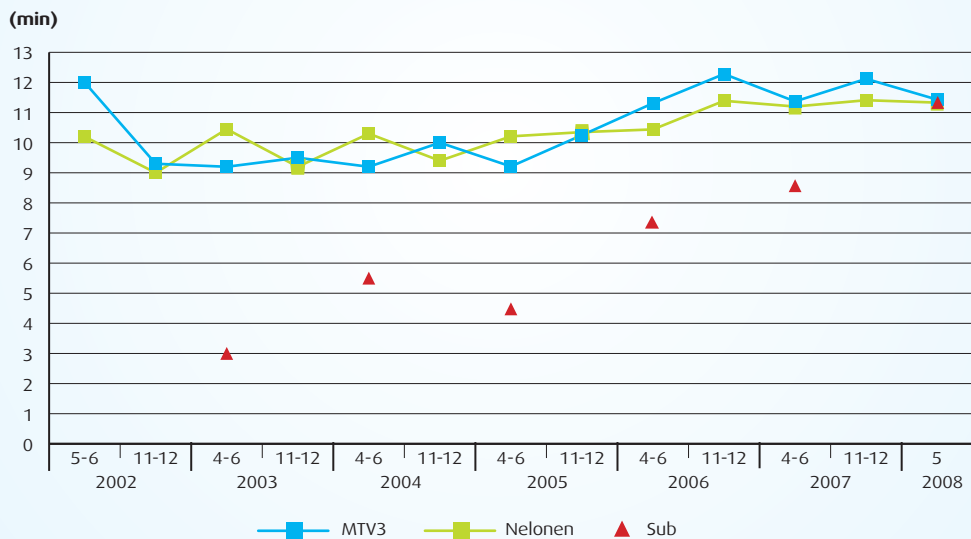
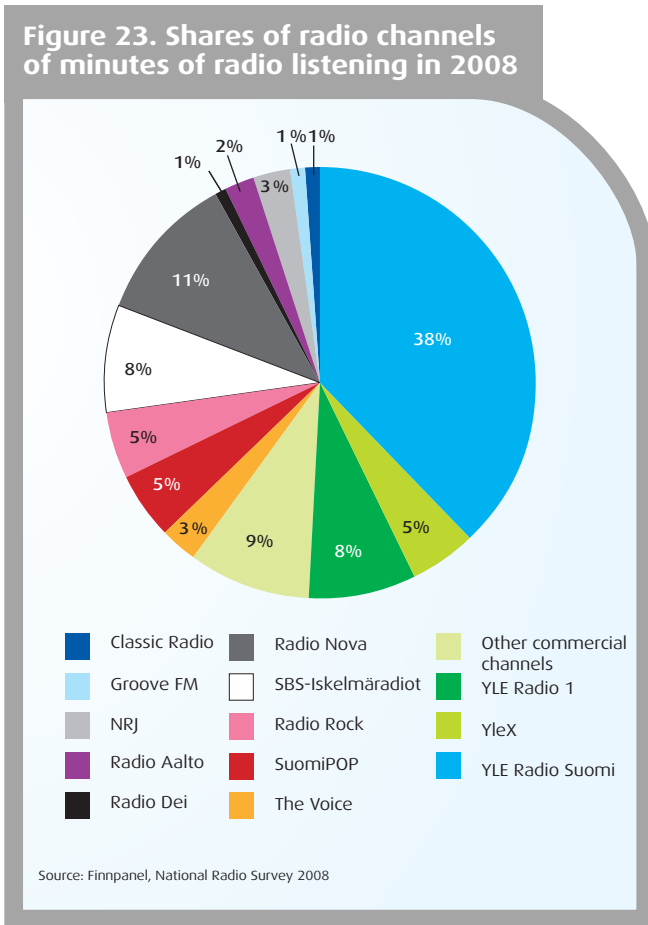


Figure 23. Shares of radio channels of minutes of radio listening in 2008



Radio broadcasting

Radio listening

In 2008, the daily time spent listening to the radio averaged 3 hours and 15 minutes, down by one minute on the previous year. On an average day, Finns listened to 1.5 radio channels, as in the previous year, and 2.7 channels during one week. On average, Finns had the opportunity to listen to 15–20 radio channels. Almost 80 per cent of Finns listened to the radio on a daily basis and 95 per cent on a weekly basis.

According to a survey conducted in the spring of 2008, 46 per cent of Finns had a mobile handset with an FM radio and seven per cent listened to the radio via their mobile handset on a weekly basis. According to a survey carried out in the autumn of 2008, six per cent of Finns listened to the radio via their digital TV and nine per cent via the internet.

Programming content of commercial radio channels

The new operating licences for commercial radio operations granted by the Government entered into force at the beginning of 2007. The conditions of the operating licences included requirements for radio programming, for example, with respect to the proportion of speech content. FICORA supervises compliance with these requirements, carrying out its first compliance study in 2007. For this purpose, FICORA commissioned another study in 2008 as part of the series of studies conducted since 2007. FICORA carried out a sample study on the programming of ten radio channels or stations between 6.00 am and 6.00 pm during one weekday, i.e. prime time.

The proportion of speech programmes of the weekly broadcasting time of radio channels holding an operating licence must be 15–30 per cent in minimum. According to this one-day sample study, commercial radio stations complied with the requirement for speech content and other conditions of the operating licences to varying degrees, as shown in the previous study too.

With respect to compliance with the requirement for speech content at daily level, the best performers were Järviradio and Radio 88,2. Radio Nova and The Voice had the largest amount of speech content but their operating licences also require a higher proportion of speech content (30 per cent and 20 per cent, respectively) than those of other radio stations studied (15 per cent). Metro FM was the poorest performer in fulfilling the requirement for its speech content.

The conditions of operating licences for local radio stations also include requirements for editorial content involving issues relevant to the coverage area or serving local special groups, such as news. In fulfilling this requirement for local content, the best performers were Radio Mega and Radio 88,2, whereas Iskelmä Satakunta and Iskelmä Jyväskylä were the poorest performers. The low level of local content of the Iskelmä radio stations is partly explained by the fact that the programme content of Iskelmä Jyväskylä, Iskelmä Satakunta and Iskelmä Savonlinna was, to a large extent, identical at the time the study was carried out.



Table 5. Mail delivery volume 2006–2007
(expressed in million of items)

Time	2006	2007
Domestic deliveries	3 798	3 876
- under universal service	1 104	1 097
- other	2 694	2 779
-unaddressed mail	1 662	1 746
International deliveries	110	94

POSTAL SERVICES

Mail delivery volumes

According to the statistics for 2007, the number of domestic postal items delivered totalled 3,876 million, up by around two per cent on the previous year², 1,097 million, or roughly 28 per cent, of which fell within the scope of universal service subject to an operating licence. The statistics on postal deliveries and transport services for small items will be published later in 2009.

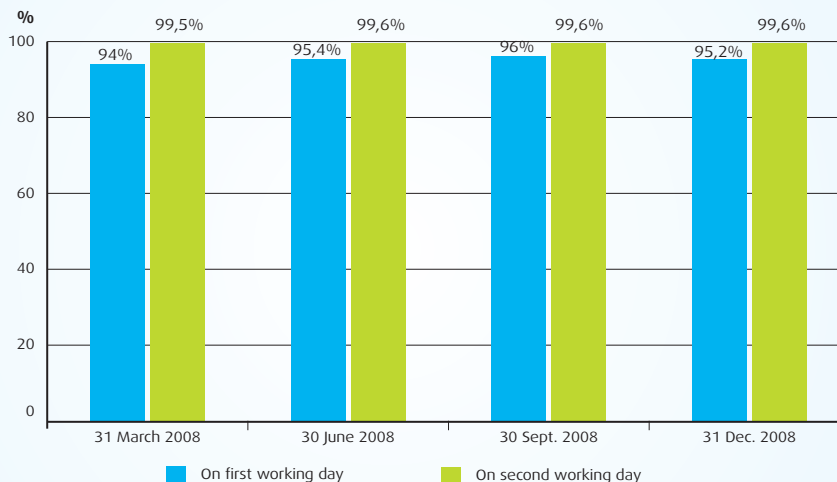
In 2007, the volume of domestic postal items delivered outside the scope of universal service totalled 2,779 million, the majority of which, 1,746 million items, comprised unaddressed direct mail and free local papers. The next largest items were newspaper deliveries. The volume of international postal items for the companies surveyed totalled 94 million in 2007.

Delivery time of 1st class letters

At least 85 per cent of domestic letters within the scope of universal service and posted at the postal company for delivery on the working day following their posting (1st class letters) must be delivered to their addressees on the working day following their posting, and at least 98 per cent on the second working day following their posting, at the latest.

Itella Corporation monitors the delivery time of 1st class letters through a continuous panel survey. Accordingly, in 2008 an average of around 95 per cent of 1st class letters were delivered on the working day following their posting and an average of 99.5 per cent on the second working day following their posting.

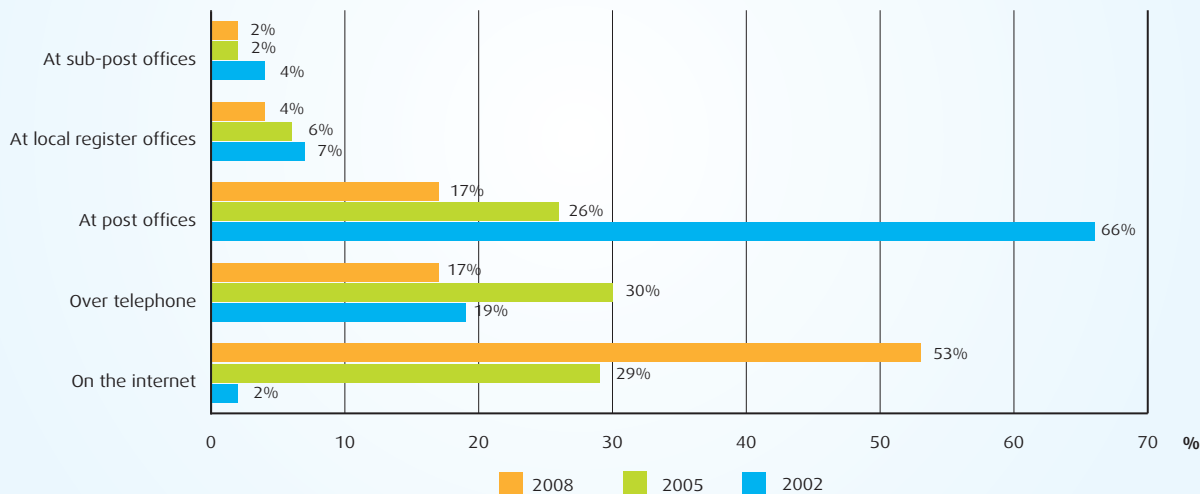
Figure 24. Delivery time of 1st class letters in 2008 (cumulative result)



Source: Service level survey for letters by Itella Corporation/Add Value Research Ltd

² The statistics cover 100 per cent of postal operations. For other providers of delivery and courier services, the response rate stood at 84 per cent. The survey's aggregate response rate was 85 per cent.

Figure 25.
Change-of-address submitted during 2002–2008



Performance of change-of-address services

The national guidelines on the organisation of mail delivery, issued by FICORA, require that the postal company pay particular attention to the effectiveness and reliability of the change-of-address service and the mail redirection service. FICORA regularly monitors the performance of change-of-address services by commissioning consumer surveys conducted by TNS Gallup Oy on a nationwide basis, and has monitored the change-of-address services of Itella (formerly Finland Post) since 2002. The 2008 survey of the change-of-address service was the third one conducted.

In the last six years, the method of submitting a change of address has undergone a radical change, only local register offices and franchised post offices maintaining their position in this respect. In 2002, only two per cent of those submitting a change of address did so on the internet, as against up to 53 per cent in 2008. Post offices have experienced the opposite trend, with 66 per cent being submitted in 2002 and only 17 per cent in 2008. Where people aged over 40 years tended to submit their change of address at post offices in person, younger people tended to use the internet.

The majority of those submitting their change-of-address notification were able to use the service successfully in one go, with 81 per cent of respondents having no problems or a cause for complaint in this respect. They also gave rather

high marks for service quality. Up to 55 per cent of the respondents regarded the speed of service implementation as "Excellent", 34 per cent ticked "Excellent" for paying for the service, 31 per cent ticked "Excellent" for the general availability of information on the service and staff service-mindedness was considered "Excellent" by 28 per cent of the respondents. The share of "Cannot say" answers to the question of staff service-mindedness rose from five per cent in 2002 to 29 per cent, which is probably explained by the increasing popularity of the internet as the channel for change-of-address notifications and the resulting lower number of face-to-face contacts with staff.

By and large, every second service user thought that the change-of-address service was in no need of improvement, although 38 per cent stated that the service would require some improvement. Those requiring some improvement were found mainly among persons aged 25–39 years, upper-level salaried employees or managers/executives, and entrepreneurs. The outlet or channel used to submit a change-of-address notification seems to have had an effect on these statements. Those submitting their notification at franchised post offices were more inclined to call for improvements than those submitting their notification in some other way. The replies of those surveyed to open-ended questions regarding any required improvements have been compiled for use as the basis of improvements.

Figure 26. Perceived service quality regarding change-of-address notifications in 2008

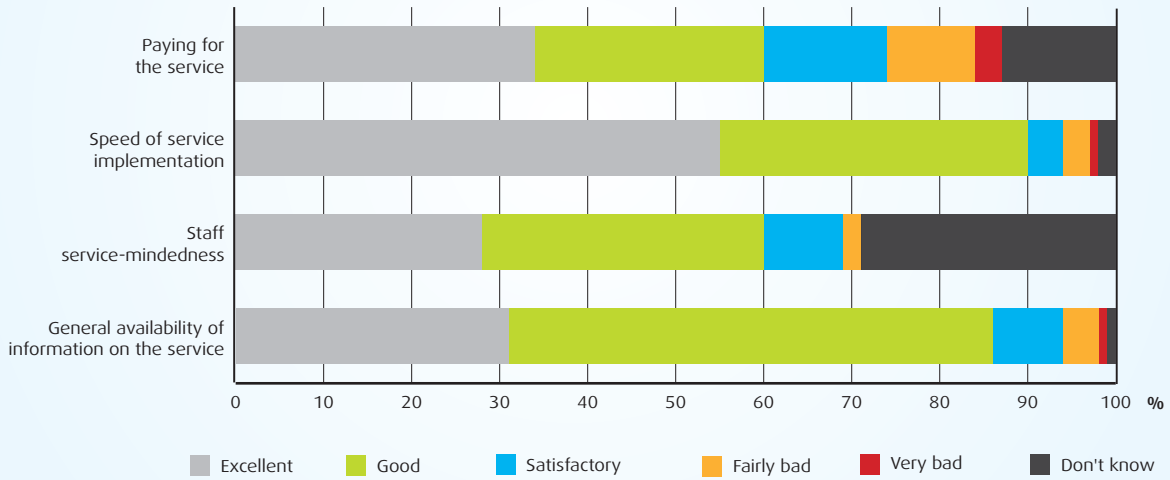


Figure 27. Most important improvements required for change-of-address service in 2008

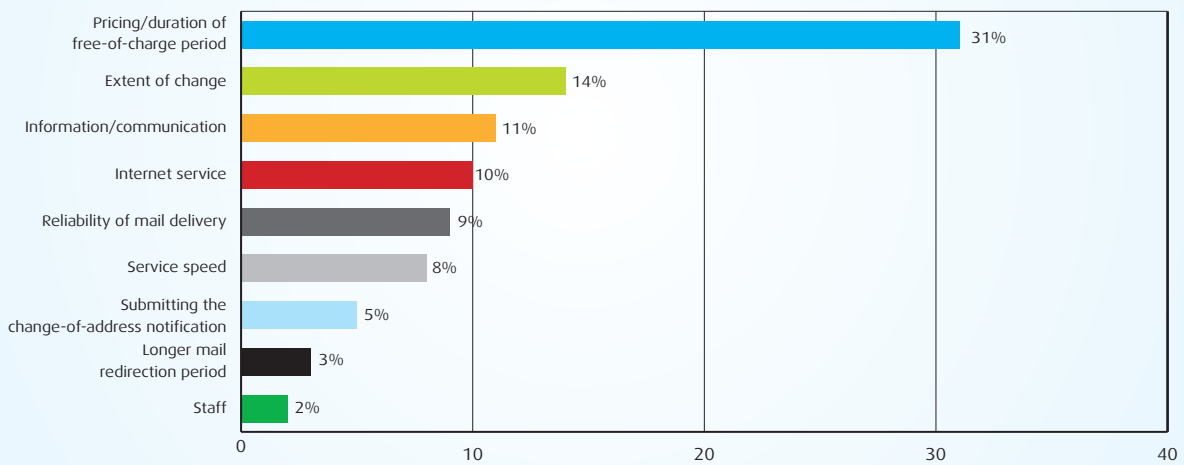
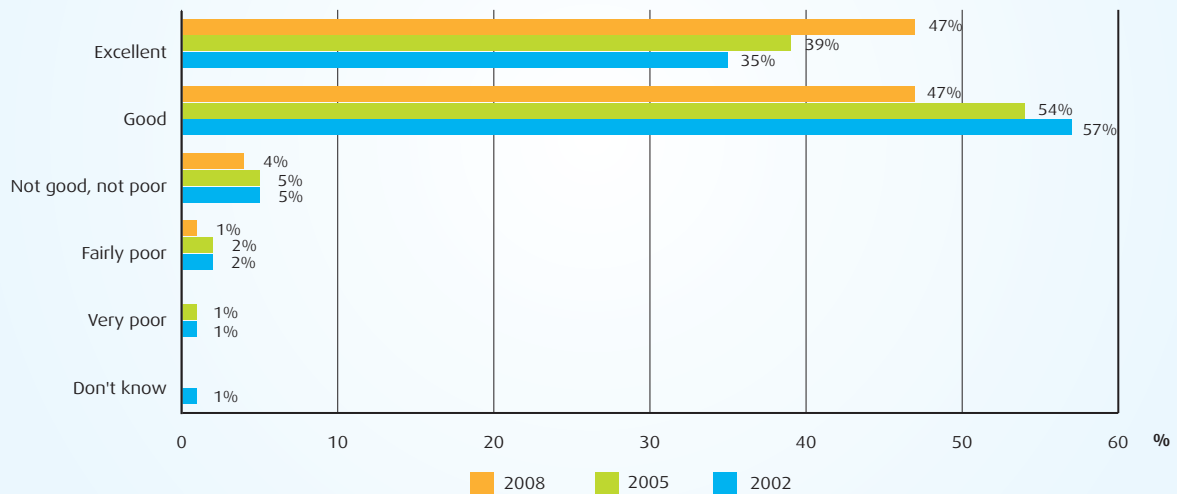


Figure 28.
Overall score for change-of-address service



Of those surveyed, 47 per cent ranked the change-of-address service as “Excellent”. The proportion of those giving the highest score has continuously grown since the first survey, and this growth is a major one (35 per cent) in comparison with 2002. With no major differences of opinion being reported between population groups, people’s opinions of the service differed slightly with respect to their method of submitting a change-of-address notification. A total of 52 per cent of those using the internet to submit the notification, i.e. a proportion larger than of those using another channel or outlet, regarded the service as excellent.



ABBREVIATIONS AND ACRONYMS

3G (third generation) networks, services and terminal devices

- represent third generation wireless data transfer solutions enabling the use in mobile communication networks of services that require high data transfer rates

ADSL (Asymmetric Digital Subscriber Line)

- the most common DSL technology in use, in which the rate of data transfer from the network to the subscriber is higher than from the user to the network

DSL (Digital Subscriber Line)

- digital telecommunication connection technology over the telephone network

DVB-H (Digital Video Broadcasting - handheld)

- the standard for digital television broadcasting for mobile terminal devices such as mobile phones

Flash-OFDM (Fast Low-latency Access with Seamless Handoff Orthogonal Frequency Division Multiplexing)

- technology for the wireless broadband network that enables a mobile connection

HDTV (High-definition Television)

- high-resolution technology in which the frame size comprises a minimum of 1,280 horizontal pixels and 720 vertical pixels, whereas the resolution of the frame size of conventional digital television is 768 x 576 pixels at best

HSPA (High-Speed Packet Access)

- technology for enhancing data transfer rates of 3G mobile telephone networks

IPTV (Internet Protocol Television)

- technology that broadcasts digital television broadcasting or video through an IP-based receiver and broadband connection

MMS (Multimedia Messaging Service)

- standard used in mobile telephone communication, enabling the use of images, sound and video in the messages, in addition to text

SMS (Short Message Service)

- text message system for mobile phones

Video on Demand (VoD)

- chargeable programming service which can be subscribed and delivered via a broadband connection

VoIP (Voice over Internet Protocol)

- real-time voice and image transfer technology provided through an internet connection which can be used similarly to conventional basic telephone service

WiMAX (Worldwide Interoperability for Microwave Access)

- radio-based wireless connection technology enabling broadband connections many kilometres away from base stations, providing users with a wireless network connection as fast as the current cable modem and xDSL connections

FIGURES

FIGURE 1. Broadband connections and market shares of operator groups

FIGURE 2. Broadband subscriptions by type, 31 Dec. 2008

FIGURE 3. Price development of broadband connections Feb./2007–Jan./2009

FIGURE 4. Mobile telephone calls 2006–2008

FIGURE 5. Mobile subscriptions and market shares

FIGURE 6. SMS and MMS messages sent in 2006–2008

FIGURE 7. Data volume transferred over mobile networks

FIGURE 8. Maximum roaming charges in 2007–2009 and Commission proposal on cap on roaming rates for 2010–2012 (retail prices include VAT of 22%)

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FIGURE 25. Change-of-address submitted during 2002–2008

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2006–2008

TABLE 2. Development of mobile subscriptions and number
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TABLE 4. Digital television broadcasting channels in national
multiplexes, 12 March 2009

TABLE 5. Mail delivery volume 2006–2007 (expressed in
million of items)

SOURCES

Digita Oy and Digitv.fi

Survey of Usability of Digital TV

Finnpanel Oy

Itella Corporation

Ministry of Transport and Communications

2007 statistics on postal deliveries and transport services for small items

Survey of Use of Telecommunications Services 2007 and 2008

Interim and annual reports, and press releases of telecoms companies

TNS Media Intelligence

FICORA market monitoring

FICORA market surveys



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