

Price level of the Finnish telecommunications charges 2005





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Abstract <p>The study focuses on the pricing and the price changes of the voice communications products in Finland during the year 2005. The study is restricted to the household products and to the voice communications. In addition, the price level of the broadband services is analysed.</p> <p>The study analyses the price level on the first of January 2006 and the development during the year 2005. Using the time series the price development has also been studied during the past decade. Ministry of Transport and Communications has yearly contracted out the corresponding study from the year 1992.</p> <p>The voice communications charges decreased on average by 20,5 % during the year 2005. If the voice communications and broadband services are considered together, then the prices have declined 19,7 per cent. The declining of the telecommunication prices has been record fast during two years in a row.</p> <p>The growth and the price reductions of the broadband services have continued during the last year. The average price reductions of the major broadband operators have been 13,6 per cent. The monthly broadband service charges of the major operators in the beginning of the year 2005 were as follows: 256 kbit/s 20 euro, 512 kbit/s 23 euro, 1 Mbit/s 29 euro and 2 Mbit/s 40 euro.</p>			
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ABBREVIATIONS

DNA Finland Oy	DNA
Elisa Oyj	Elisa
TDC Song	Song
TeliaSonera Finland Oyj	Sonera

SUMMARY

The study focuses on the pricing and the price changes of the key telecommunications services in Finland. Main emphasis will be on voice communications products available to households in Finland as public telecommunications services. The results of the study are based on public price lists. The study presents the situation at the beginning of the year 2006 and records the development trends over the previous year. The price development of the telecommunications services has been described with the help of price indices. The indices of the key telecommunications services have been calculated for the period of 1995-2005.

The prices of voice communications services during the period 1.1.2005 – 1.1.2006 changed in the following way:

Mobile calls	-27,3 %
Local services	- 0,3 %
Long-distance calls	+ 3,3 %
International calls	0,0 %
Voice communications in all	- 20,5 %
Broadband services	- 13,6 %

The total change of the voice communications services has been calculated weighting the services with the respective turnover in the Finnish telecommunications market. If the voice communications and broadband services are considered together, then the prices have declined 19,7 percent. The declining of the telecommunication prices has been record fast during two years in a row.

The mobile call prices of the three major mobile operators Sonera, Elisa and DNA have decreased 27,3 per cent on average. This average has been calculated using the market share weights in Finnish mobile market. In the mobile market there were large price reductions already in the end of the year 2004, which effected considerably on the average price of the year 2005.

The calls from fixed to mobile network have been open to competition since 1.3.2005 due to the legislative change in the Telecommunications Market Act in Finland. According to the change in law the customer can choose where to buy the service of a call from fixed to mobile phone. In order to get cheaper calls the customer must first make an agreement with some telephone operator. In that case the peak calls 1.1 2006 were 40 per cent and off peak calls 10 per cent cheaper compared with the mobile operator prices.

The growth and the price reductions of the broadband services have continued during the last year. The average price reductions of the major broadband operators have been 13,6 per cent. The monthly broadband service charges of the major operators in the beginning of the year 2006 were as follows: 256 kbit/s 20 euro, 512 kbit/s 23 euro, 1 Mbit/s 29 euro and 2 Mbit/s 40 euro.

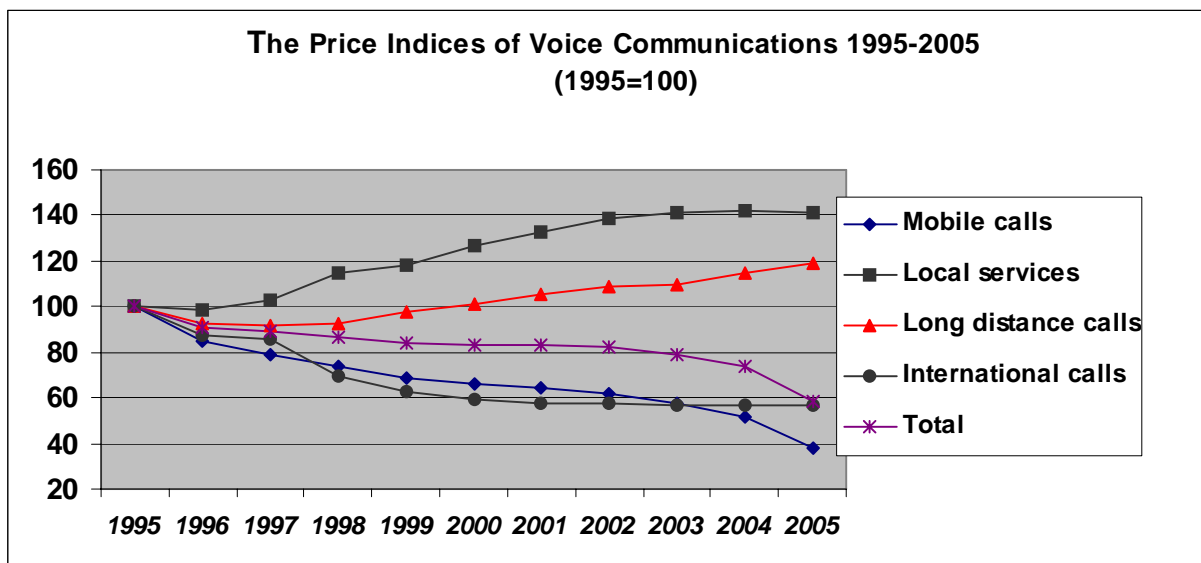
During the year 2005 the local call prices were decreased by 0,5 per cent, but the monthly charges remained on the previous year level. This was caused by the introduction of customer agreements by the telephone operators. A local peak hour call with the duration of four minutes costs 4 cents per one minute. The regional differences of the local call prices have not changed in Finland during the year 2005.

The total price of a long-distance call (local network charge and long-distance charge together) increased by 3,3%. This was caused by the increase in the local network charges by 2,2 per cent and the increase of the Finnet evening call prices. The long-distance charges of other operators remained the same.

The international telephone call prices of the main operators have remained in the previous year level.

The price development of the voice communications services during the period 1995-2005 is presented in the enclosed figure and table. The index of the local services in the figure consists of the price development of the local calls and the monthly charges.

FIGURE 1: Price development of voice communications 1995-2005



Year	Mobile calls	Local services	Long-distance calls	International calls	Voice Comm. in all	Broad-band services
1995	100,0	100,0	100,0	100,0	100,0	
1996	85,3	98,4	92,4	87,8	91,1	
1997	78,8	102,8	92,1	86,1	88,9	
1998	73,4	115,0	92,8	69,4	86,9	
1999	68,4	118,3	97,5	62,8	83,7	
2000	66,1	127,1	101,3	59,0	83,5	
2001	64,2	133,0	105,0	57,7	83,2	
2002	62,0	138,4	108,8	57,7	82,5	
2003	57,7	140,9	109,5	57,0	78,7	100,0
2004	52,0	141,7	114,9	57,0	73,5	55,0
2005	37,8	141,2	118,8	57,0	58,5	47,2
Muutos 2005/2004	- 27,3 %	-0,3 %	3,3 %	0,0 %	- 20,5 %	-13,6%
Muutos 2005/1995	- 62,2 %	+ 41,2%	+18,8 %	-43,0 %	- 41,5 %	

It would be very interesting to estimate the price development of voice communications after the introduction of the competition. The fact is that the period 1994-1995 lacks information on mobile call prices. By estimating the reduction to be 3 % per annum in the above-mentioned two years the result is that the competition has decreased prices of voice communications by 43 % during the period 1993-2005. The consumer prices in Finland have increased 17 % during the same time and thus the prices of voice communications have decreased in real values 52 % after the start of the competition.

Introduction

The study focuses on the pricing and the price changes of key telecommunications services in Finland. The main emphasis is on the voice communications products available to households. The results of the study are based on public price lists and not on actual recorded transactions. The study is an analysis of the supply of telecommunications services rather than an analysis of the market. All the prices in the study include VAT(22%).

The study covers the situation on 1 January 2006 and records the development during the previous year. The development has been inspected during the last decade with the help of the time series. Ministry of Transport and Communications Finland has yearly published these studies since 1992. The previous studies give the solid ground for this study. The price changes have been calculated using price indices. The majority of the indices have been calculated for the period 1995-2005.

The study is made by Telecom Consulting Kangas (Pertti Kangas) in co-operation with Ministry of Transport and Communications Finland and the operators. Kangas and the Ministry have done the English version. The author thanks all the parties involved.

The total index of the voice communications services has been calculated by combining the indices of local services, long-distance calls, international calls and mobile calls. The turnover of these services was some 69 % from the total turnover of the Finnish telecommunications market in 2004 according to Telecommunications in Finland 2004 published by Statistics Finland. As to the services used by the households, the percentage is much higher. Data communications are excluded from the study because these services are mainly offered to the business sector.

The number of companies offering telecommunications products in the country is 228 according to Finnish Communications Regulatory Authority (www.ficora.fi).

The number of telecommunications companies by service researched in the study was the following
(1.1.2005):

- local services 42
- long-distance calls 7
- international calls 7
- mobile calls 6

Telephone subscriptions and monthly charges

Both European Union and the Finnish authorities have requested that the owning of the telephone operator and the use of the services must be separated from each other. The telephone operators have accordingly abolished the reductions from the monthly charges due to the ownership status

to the operator. This can be seen in the following table. The prices of fixed telephone subscriptions have considerably decreased at the same time.

The number of telephone operators which offer the ownership (share) subscriptions:
(in parenthesis total number of operators)

15.11.1994	(47)	42
15.11.1995	(47)	38
15.11.1996	(47)	32
01.01.1998	(46)	30
01.01.1999	(47)	25
01.01.2000	(47)	19
01.01.2001	(47)	17
01.01.2002	(47)	11
01.01.2003	(44)	9
01.01.2004	(42)	6
01.01.2005	(42)	4
01.01.2006	(42)	4

The average fee of the fixed telephone subscription of was 92 euro at the first of January 2006.

The monthly charge of telephone subscription is the same regardless the number of calls made by the holder of subscription. The average monthly charge of telephone subscription (11,8 euro).

The price baskets for local services

The price basket for local services is based on one most general subscription type in each operator. The basket includes:

- the monthly charges of one year
- 1000 local calls with evening prices, the length of one call is 4 minutes

The country average has been calculated weighting the basket values of the operators with the number of telephone lines.

For the regional comparisons the country has been divided to four segments. The division of Finnish telecommunications areas to these segments is following:

- **Southern Finland:** Uusimaa
- **Western and Central Finland:** Turku and Pori, Åland, Häme, Central Finland and Vaasa
- **Eastern Finland:** Kymi, Mikkeli, Kuopio and North Carelia
- **Northern Finland:** Oulu and Lapland

TABLE 1: The Regional differences of the local service prices at 1.1.2006

Region	Value of local price basket 1.1.2006, euro	Proportion to the country average
Southern Finland	313	1,05
Western and Central Finland	278	0,93
Eastern Finland	317	1,06
Northern Finland	298	1,00
The whole of Finland	299	1,00

Southern and Eastern Finland nowadays are the most expensive regions. Western and Central Finland catches the eye under the country average.

The basket value of the country average decreased by 0,3 % from the previous year. The corresponding change was 0,7 per cent increase in the previous study.

TABLE 2: Values of local price baskets of Finnish telecomm operators at 1.1.2006, euro

Weighted mean	299
Median	259
Upper quarter	294
Lower quarter	242
The most expensive operators	
Sonera	338
Telekarelia	331
Elisa	318
Savonlinnan Puhelin	318
The cheapest operators	
Mariehamns Telefon	175
Ålands Telefonandelslag	175
Laitilan Puhelin	208

The call prices

The charges of long-distance calls, international calls and calls to mobile network consist of two parts: the local network tariff and the actual minute charge of the respective operator. A long-distance call is a call between telecommunications areas.

The local calls

The peak prices of the local calls calculated from the price of a 4-minute call have decreased 0,4% on average compared with the prices of the previous year. 28 local operators out of the total 42 operators did not change their local call prices at all.

TABLE 3: Peak prices of local calls for the Finnish telecommunications operators at 1.1.2006, cents/minute

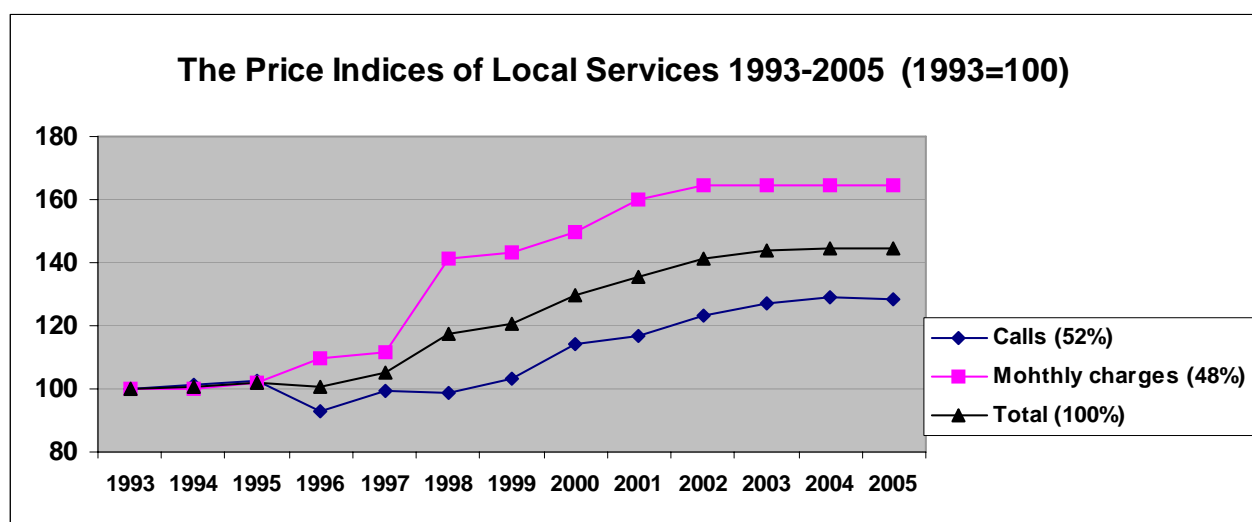
Weighted mean	3,98
Median	3,85
Upper quarter	4,12
Lower quarter	3,39
The most expensive operators	
Telekarelia	5,28
Lounet	4,56
Hämeen Puhelin	4,34
The cheapest operators	
Laitilan Puhelin	1,33
Mariehamns Telefon	2,88
Ålands Telefonandelslag	2,88
The largest operators	
Sonera	4,12
Elisa (Helsinki)	4,21

TABLE 4: The average peak prices of local calls by region and the change from the previous study

Region	Price for a local call 1.1.2006, cents/min	Proportion to the average, % 1.1.2006	Proportion to the average, % 1.1.2005
Southern Finland	4,16	1,05	1,06
Western and Central Finland	3,84	0,96	0,95
Eastern Finland	4,07	1,02	1,03
Northern Finland	3,84	0,96	0,98
Country average	3,98	1,00	1,00

The Proportion of the regional price level to the country average are roughly the same during the years 2005 and 2006. The average price of Southern Finland is somewhat higher than the country average (+5%).

FIGURE 2: Price development of local services 1993-2005



Year	Monthly charges	Local calls	Total
1993	100,0	100,0	100,0
1994	100,0	101,3	100,7
1995	102,0	102,3	102,1
1996	109,8	92,6	100,5
1997	111,5	99,3	105,0
1998	141,5	98,9	117,5
1999	143,2	103,3	120,8
2000	149,6	113,9	129,8
2001	160,2	116,6	135,8
2002	164,3	123,0	141,3
2003	164,3	127,4	143,9
2004	164,3	128,8	144,8
2005	164,3	128,2	144,4

The long-distance calls

The total price of a long-distance call consists of a local network charge and an actual long-distance charge. The actual long-distance charges of the major long-distance operators increased 5,7 % from the previous year. This was caused by the increase in Finnet call prices during the evenings and the 2,2 % increase of the local network charge. The effect of the local network charge on the total long-distance call price is described more later on.

TABLE 5: The long-distance call charges at 1.1.2006

Operator	Working days, cents/ minute	Weekends and evenings, cents/ minute	Nights, cents/ minute
Large operators:			
Elisa	7,40	3,80	3,80
Finnet	6,95	6,95	6,95
Sonera	7,40	4,04	3,70
Song	6,56	3,70	3,70
Small operators:			
Cubio Communications	6,05	6,05	6,05
Globetel	4,00	4,00	4,00
Saunalahti	3,50	3,50	3,50

The times of the day which are used in index calculations:

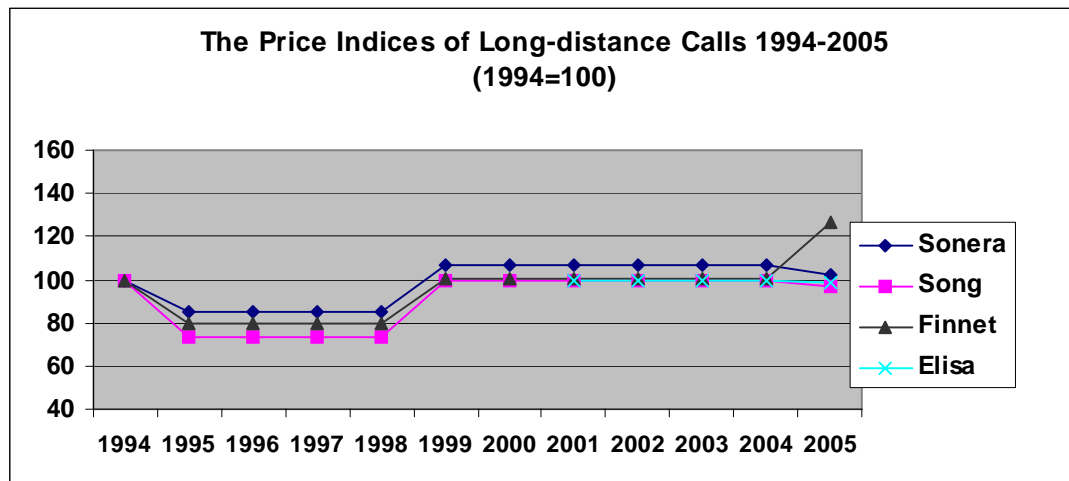
- working days: Mon-Fri 08-17
- weekends and evenings: every day 17-20 and Sat-Sun 08-17
- nights: every night 20-08

TABLE 6: Changes in the total long-distance call prices of the three major operators weighted with the respective turnover

Date	Long-distance charge		Local network charge		Total price	
	Cents/ minute	Change %	Cents/ minute	Change %	Cents/ minute	Change %
Working days	7,08	-3,2	3,05	+2,2	10,13	-1,8
Evenings	4,28	+6,6	3,05	+2,2	7,33	+4,6
Nights	4,12	+8,7	3,05	+2,2	7,17	+5,6

The total long-distance price increased by 3,3 % on average.

FIGURE 3: The price development of long-distance calls 1994-2005



Year	Sonera	Song	Finnet	Elisa
1994	100,0	100,0	100,0	
1995	85,3	73,4	79,5	
1996	85,3	73,4	79,5	
1997	85,3	73,4	79,5	
1998	85,3	73,4	79,5	
1999	106,8	99,8	100,5	
2000	106,8	99,8	100,5	
2001	106,8	99,8	100,5	100
2002	106,8	99,8	100,5	100
2003	106,8	99,8	100,5	100
2004	106,8	99,8	100,5	100
2005	101,9	97,0	126,8	98,7

The international calls

The price development of international calls has been calculated with the help of the international call basket. The same basket has been used in the previous studies. The countries in the basket receive about 65 % from all outgoing international calls. The percentage shares of the countries in the basket are as follows:

Sweden	47,2 %
Germany	13,9 %
Russia	11,0 %
Great Britain	11,5 %
Estonia	9,5 %
USA	6,9 %

The pricing of international calls changed from the beginning of the year 2001. The Finnish operators charge more when the international call is terminating in the mobile network instead of the fixed network. This is due the fact that some foreign mobile operators also charge more when an international call is terminating to their network. All the operators have since increased their international call prices for this reason.

TABLE 7: Average prices of international calls using the call basket definition at 1.1.2006, cents/min

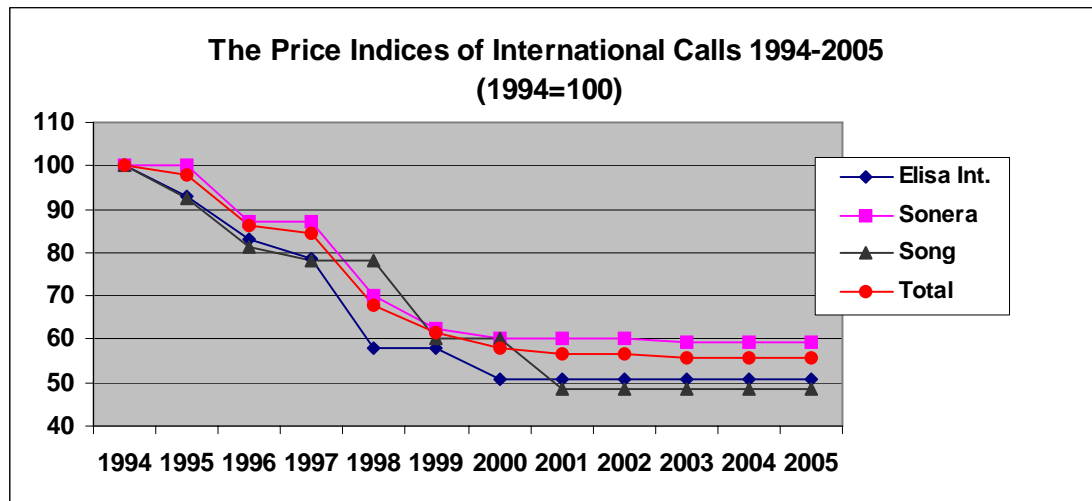
Operators	Working days		Other times	
	Price	Change, %	Price	Change, %
International calls to fixed network				
Large operators:				
Elisa International	22,0	0,0	22,0	0,0
Finnet 996	18,7	0,0	18,7	0,0
Sonera	26,0	0,0	20,7	0,0
Song	18,2	0,0	18,2	0,0
Small operators:				
Cubio	7,7	0,0	7,7	0,0
Globetel	7,4	-2,6	7,4	-2,6
Saunalahti	13,1	0,0	13,1	0,0
International calls to mobile network				
Elisa International	40,5	0,0	40,5	0,0
Finnet 996	35,7	-6,5	35,7	-6,5
Sonera	46,5	0,0	41,2	0,0
Song	35,9	0,0	35,9	0,0
Cubio	23,7	-0,5	23,7	-0,5
Globetel	27,0	-0,4	27,0	-0,4
Saunalahti	34,1	16,8	34,1	16,8
IP-calls				
Song, fixed	13,7	0,0	13,7	0,0
Song, mobile	30,4	0,0	30,4	0,0
Sonera, fixed	14,1	new	14,1	new
Sonera, mobile	34,5	new	34,5	new

The international call prices of large operators to fixed network have not changed compared with the previous year. There are however reductions in the prices of the smaller operators. The index value of the international calls did not change despite of the 6,5 % decrease of Finnet international calls to mobile network.

The joint international call market share of Elisa International, Finnet 996, Sonera and Song was clearly over 90 per cent in the autumn of 2004.

The price development of the international calls during the period 1995-2005 has been described in the enclosed figure and table.

FIGURE 4: Price development of international calls 1994-2005



Year	Elisa Intern.	Sonera	Song	Total 1)
1994	100,0	100,0	100,0	100,0
1995	92,9	100,0	92,6	98,0
1996	83,0	87,3	81,4	86,1
1997	78,8	87,3	78,1	84,5
1998	58,0	70,0	78,1	68,0
1999	58,0	62,5	60,3	61,6
2000	50,9	60,4	60,3	57,8
2001	50,8	60,4	48,4	56,6
2002	50,8	60,4	48,4	56,6
2003	50,9	59,1	48,4	55,9
2004	50,9	59,1	48,4	55,9
2005	50,9	59,1	48,4	55,9

1) The total index includes the international calls of Finnet 996 from the year 2003.

The basic internet

The five major Internet Service Providers for households are MTV3, Sonera, Saunalahti, Elisa and Finnet. In addition tens of companies operate as Internet Service Providers.

TABLE 8: Prices of Internet basic subscriptions at 1.1.2006

Subscription	Number of E-mail addresses	Space for home pages (Mt)	Connection fee (euros)	Monthly charges (euros/month)
Sonera Internet				
-Fun	2	25	0	8,28
-Active	10	25	0	16,99
dna Internet		25	0	7,99
	5			
Saunalahti Internet KiT 1)	-	-	0	0
Elisa Int. Free 2)	-	-	0	0
Elisa Internet	1	500	0	8,24
MTV3 Internet	6	20	0	0

1) The fee for Saunalahti Internet mailbox is 20 e/year

2) The fee for Elisa Internet mailbox is 2,99 e /month

The broadband services

The broadband connections now are more popular than the basic services as to using the Internet. All the local operators, several cable television operators and a few new challengers, for instance power plants, provided the ADSL services at the beginning of the year 2006.

The prices of different broadband services has been studied and the results can be found in the Annex 2. The basic ADSL service, real estate ADSL service as well as cable modem service have all been dealt with. The usual speeds for the households services are: 256 kbit, 512 kbit, 1 Mbit and 2 Mbit per sec.

It was not possible calculate the average of the monthly charges for broadband services without the help of operators. Therefore Elisa and Sonera have given for the study the information of their average prices. The prices of the two operators vary in different areas in the country.

The monthly average of the five operators and the price change from the previous year have been presented in the Table 9. The average set up and installation charge is 146 euro for all transmission speeds. Very often due to the competition, however, these services are offered free of charge.

Table 9. The monthly average of broadband services at 1.1.2006, euro:

Monthly charge/ Speed	Average 1.1.2006	Average 1.1.2005	Price change from the previous year
256/256	20,4	21,4	- 4,8
512/512	23,2	25,9	- 10,6
1M/512	29,0	35,0	- 17,1
2M/5122	39,7	47,1	- 15,6

The reductions are notable for the second successive year due to the competition. It can be seen from the table that the reductions grow with the speed of the broadband connection.

The real estates are also using the broadband services by organising the service themselves with the help of independent service companies. One high-speed broadband connection is ordered from the telephone operator and is then divided with the residents of the real estate. This can lead to the cheaper monthly charges.

The cable television operators and also some telephone operators have also declined their cable modem prices from the previous study. When the monthly charges were around 19,9 euro in the beginning of the year 2005, now the usual monthly charge is 16,5 euro.

The mobile services

The price development of mobile services has been calculated from the information given by three mobile operators Elisa, Sonera and DNA. This information consists of the average price of all basic mobile calls over the period of the year 2005. The country average has been calculated weighting the prices of the three operators with the market shares in Finnish mobile market.

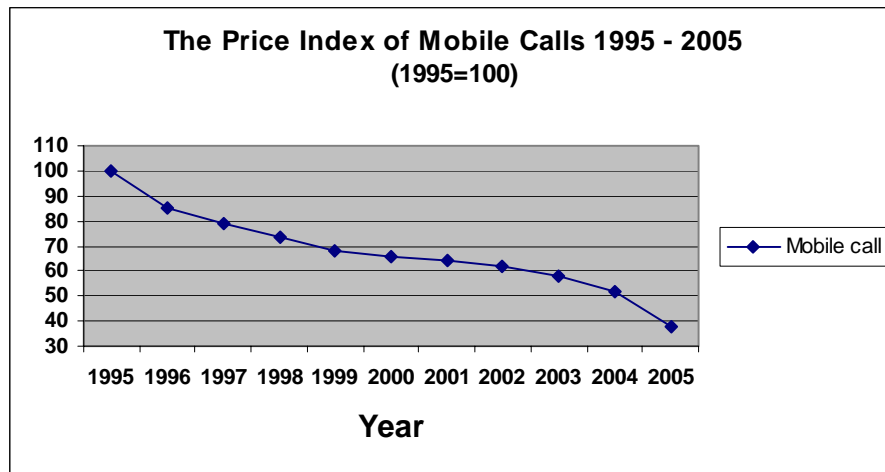
After 1995, when information has been available, the average prices of mobile calls have been steadily declining. During the period 1995-2004 the average prices were reduced about 7 % in a year. During the year 2005 the average reduction of mobile call prices was as much as 27,3 %. The large campaigns together with the large price reductions in the end of the year 2004 are the main reason for the price development of the year 2005.

A clear manifestation of the hard competition in the Finnish mobile market is the popular habit to exchange the mobile operator. It started, when it became possible to exchange the operator and to maintain the mobile number in the process from and on 1.7.2003. The effect of the exchanges to the average mobile prices cannot be estimated, because the details are not common knowledge. The total number is known – 1,5 million Finns, 31 per cent, exchanged the mobile operator during the year 2005. The price development described in this study can however be considered sufficiently reliable despite of the lack of this factor. This can be justified with the fact that many

mobile users exchange the operator several times and they do not always aim to gain lower prices but lucrative speech time offers.

The price development of mobile calls during the period 1995-2005 has been described in the enclosed figure and table.

FIGURE 5: Price development of Mobile calls 1995-2005



Year	Mobile calls
1995	100,0
1996	85,3
1997	78,8
1998	73,4
1999	68,4
2000	66,1
2001	64,2
2002	62,0
2003	57,7
2004	52,0
2005	37,8

An example of the actual prices of mobile operators is presented in the following table. All the operators offer a mobile subscription, where the calls have equal prices despite of the direction of the call (standard subscription). Another usual type of subscription is the one where the calls have lower prices when called to the network of the same mobile operator. A pattern, where the minute price of the mobile call and the price of SMS are equal, have become popular in mobile pricing.

Table 10. The minute price of a mobile call (cents/min) and the price of SMS (cents) at 1.1.2006

Subscription/ Operator	Sonera	Elisa	DNA	Tele Finland	Kolumbus	Sauna- lahti	Globetel	Cubio
Standard	7,9/7,9	8,5/8,5	6,9/6,9	6,9/6,9	6,9/6,9	6,9/6,9	-	6,5/6,5
Same network	3,9/3,9 1)	5/5	2/2	-	-	4/4	3/3	-
Other network	11,9/11,9	9,9/9,9	9/9	-	-	9,9/9,9	13/9	-

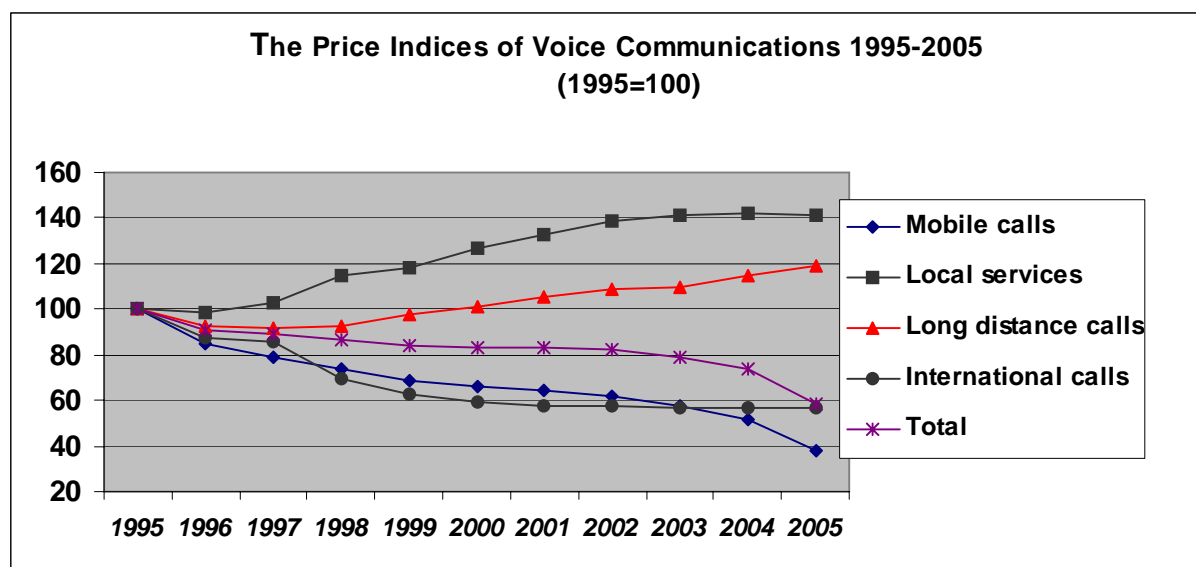
1) The price to the own network is valid only evenings and week ends, other times 11,9 cent/min

Most of the prices are same compared with the beginning of the year 2005. Only Sonera and Elisa have lower prices in a few services. See closely in the Appendix 8.1.

The voice communications, in all

The price development of the most important services of voice communications: mobile calls, local services, long-distance calls and international calls during the period 1995-2005 has been described in the enclosed figure and table. The index of the local services in the figure consists of the price development of the local calls and the monthly charges.

FIGURE 6: The price development of the voice communications 1995-2005



Year	Mobile calls	Local services	Long-distance calls	International calls	Total
1995	100,0	100,0	100,0	100,0	100,0
1996	85,3	98,4	92,4	87,8	91,1
1997	78,8	102,8	92,1	86,1	88,9
1998	73,4	115,0	92,8	69,4	86,9
1999	68,4	118,3	97,5	62,8	83,7
2000	66,1	127,1	101,3	59,0	83,5
2001	64,2	133,0	105,0	57,7	83,2
2002	62,0	138,4	108,8	57,7	82,5
2003	57,7	140,9	109,5	57,0	78,7
2004	52,0	141,7	114,9	57,0	73,5
2005	37,8	141,2	118,8	57,0	58,5
Change 2005/1995	-62,2 %	+ 41,2 %	+18,8 %	-43,0 %	- 41,5 %

The prices of mobile and international calls have declined more than the prices of other services. The prices of long-distance calls, however, decreased heavily already before the competition. Since 1990 the prices of long-distance calls have decreased about 50 %. The conclusion is that the competition has considerably declined all the prices except the prices of local services.

On the other hand one has to take into account that some local telecommunications companies and Sonera are nowadays listed companies. The companies pay dividend to their shareholders, who at the same time are users of their services. This fact compensates the increase of local prices due to the separation of the ownership and the use of telecommunications services.

It would be very interesting to estimate the price development of voice communications after the introduction of the competition. The fact is that the period 1994-1995 lacks information on mobile call prices. By estimating the reduction to be 3 % per annum in the above-mentioned two years the result is that the competition has decreased prices of voice communications by 43 % during the period 1993-2005. The consumer prices in Finland have increased 17 % during the same time and thus the prices of voice communications have decreased in real values 52 % after the start of the competition.

THE REFERENCE LIST

1. The price lists and home pages of the operators
2. The supplementing information from the operators, Finnet Focus Oy and Ministry of Transport and Communications Finland
3. Ministry of Transport and Communications Finland: the publications of The Price Level of the Finnish Telecommunications Charges 27/2005, 21/2004, 15/2003, 15/2002, 18/2001, 14/2000, 14/1999, 17/1998, 4/1997, V6/1996, V9/1995, 2/1994 and 11/1993
4. Statistics Finland: Telecommunications in Finland 2004
5. Focus Consulting: Telecommunications market in Finland 2005
6. Newspaper articles

The price comparison of telecommunications operators 1.1.2006
(All prices include VAT)

ANNEX 1/1

The price basket of local services for a household

The price basket includes:

- 12 monthly charges
- 1000 four minute local calls made in the evening

Telecommunications operator	Monthly charge, euro/month	Price for a local call, 4 min in evenings, cents	Price basket, euro	Price basket, euro
	1.1.2006	1.1.2006	1.1.2006	1.1.2005
Alajärven Puhelinosuuskunta	8,5	14,0	242	242
Auria Oy	8,2	15,6	255	230
Elisa Oyj / Helsinki	12,5	16,8	318	321
Elisa Oyj / Joensuu	11,0	16,8	300	304
Elisa Oyj / Jyväskylä	11,6	15,5	294	295
Elisa Oyj/ Riihimäki	11,0	16,8	300	303
Elisa Oyj / Tampere	11,0	17,0	302	305
Etelä -Satakunnan Puhelin Oy	9,0	14,4	252	257
Eurajoen Puhelin Osk	8,0	15,5	251	227
Forssan Seudun Puhelin Oy	10,5	15,5	281	262
Hämeen Puhelin Oy	11,3	17,4	309	309
Härkätien Puhelin Oy	8,0	15,7	253	253
Iisalmen Puhelin Oy	9,2	15,4	264	252
Ikaalisten-Parkanon Puh. Oy	9,8	13,1	248	248
Jakobstadsnejdens Tel. Ab	10,0	13,5	255	255
Kajaanin Puhelinosuuskunta	6,6	13,1	210	210
Karjaan Puhelin Oy	6,4	14,1	218	218
Keikyän Puhelinosuuskunta	10,0	16,0	280	280
Kemiön Puhelin Oy	10,0	16,4	284	284
Kokkolan Puhelin Oy	8,5	13,7	240	240
KPY Palvelut Oy	11,6	15,8	297	297
Kymen Puhelin Oy	11,0	14,6	278	278
Laitilan Puhelin Osk	12,9	5,3	208	208
Lohjan Puhelin Oy	10,0	12,5	245	245
Lounet Oy	11,8	13,3	274	274
Loviisan Puhelin Oy	7,3	16,0	248	237
Lännen Puhelin Oy	8,0	13,3	229	229
Mariehamns Telefon Ab	5,0	11,5	175	175
Mikkelin Puhelin Oyj	12,5	14,0	289	289
Oulun Puhelin Oyj	11,0	15,4	286	286
Paraisten Puhelin Oy	11,8	16,5	306	306

Telecommunications operator	Monthly charge, euro/month	Price for a local call, 4 min in evenings, cents	Price basket, euro	Price basket, euro
	1.1.2006	1.1.2006	1.1.2006	1.1.2005
Pohjanmaan PPO Oy	8,5	13,1	233	233
Pohjois-Hämeen Puhelin Oy	7,5	12,7	217	217
Päijät-Hämeen Puhelin Oyj	11,5	13,4	272	272
Salon Seudun Puhelin Oy	9,0	13,7	245	239
Satakunnan Puhelin Oy	10,0	15,3	273	273
Savonlinnan Puhelin Oy	13,0	16,2	318	318
Sonera Oyj	14,4	16,5	338	344
Telekarelia Oy	10,0	21,1	331	295
Vaasan Läänin Puhelin Oy	7,9	13,6	231	231
Vakka- Suomen Puhelin Oy	10,0	13,9	259	259
Ålands Telefonandelslag	5,0	11,5	175	175
The Weighted Mean	11,8	15,7	300	300

The price basket of local services for a household is based on the most common subscription.

The average is weighted with the number of telephone subscriptions.

The monthly charge includes local calls in the prices of the following operators:

The price of a local call (4 min in the evening) of Elisa, Eurajoen Puhelin, Forssan Seudun Puhelin, Hämeen Puhelin, Härkätien Puhelin, Laitilan Puhelin, Lännen Puhelin, Salon Seudun Puhelin, Satakunnan Puhelin, Savonlinnan Puhelin and Vakka –Suomen Puhelin is an average of near calls and local calls with the following weights: near calls 60%, local calls 40%. A near call is a call within the concession area of the local operator.

The Broadband Services

ANNEX 2/1

The set up and monthly charges of ADSL -services 1.1.2006 (kbit/s)

Major telecommunications operators

Telecommunications Operator	Set up and Installation charges, euro	Monthly charge			
		Speed: 256/256, euro	Speed: 512/512, euro	Speed: 1M/512, euro	Speed: 2M/512, euro
Finnet Com (pääkaupunkiseutu)	157	17,4	19,8	23,8	34
Elisa Oyj (pääkaupunkiseutu)	123	17,9	19,9	24,9	34,9
Etelä-Satakunnan Puhelin Oy	120	19,9	22,9	29	35
Forssan Seudun Puhelin Oy	*) 49	19	24	29	34
Hämeen Puhelin Oy	129	17,5	19,9	23,9	33,9
Kajaanin Puhelinosuuskunta	*) 50	21,5	23,5	31,5	43,9
Kokkolan Puhelin Oy	133	19,9	24,5	34,9	43
KPY Palvelut Oy	*) 120	24,9	24,9	30	47
Kymen Puhelin Oy	199	-	24,9	30	46
Lohjan Puhelin Oy	140	19,9	23,9	34	44
Lännen Puhelin Oy	198	17,9	19,9	25,4	34,4
Mariehamns Telefon Ab 1)	*) 49	24,5	-	-	49
Mikkelin Puhelin Oyj	*) 149	-	24,9	36	47
Multi.fi (Pietarsaari)	139	-	25,9	34,9	41,9
Oulun Puhelin Oyj	129	19,9	25	33	47
Pohjanmaan PPO Oy	78	23	27	35	47
Pohjois-Hämeen Puhelin Oy	109	22,9	25,9	32	38
Päijät-Hämeen Puhelin Oyj	159	19,5	23,5	30,9	45,9
Salon Seudun Puhelin Oy	153	19,9	23,9	30,9	36,9
Satakunnan Puhelin Oy	99	-	23,9	32,9	39
Saunalahti ADSL	207	17,9	19,9	24,5	36
Savonlinnan Puhelin Oy	99	-	23,5	32,5	47,5
Sonera (pääkaupunkiseutu)	227	17,5	19,9	23,9	33,9
Telekarelia Oy	29	-	-	21	27
Vaasan Läänin Puhelin Oy	145	20,9	25,9	37	44
Vakka- Suomen Puhelin Oy	79	19,9	22,9	32,9	38,9
The Weighted mean 2)	146	20,4	23,2	29,0	39,7

Set up and Installation includes normal costs to open the service. Several operators have lucrative offers on set up and installation charges. If the price list includes only the set up charge of ADSL -service, this is indicated with *). Several operators offer also 4M and 8M services.

1) The pricing is different from the above table, maximal speed even 8000-12000 / 600-800, 3km

2) The weighted mean of Sonera, Elisa, Finnet, HTV and Saunalahti

All the local operators in this study were offering ADSL- service 1.1.2006.

The Broadband Services

ANNEX 2/2

The set up and monthly charges of ADSL –real estate services 1.1.2006 (kbit/s)

Telecommunications operator	Set up charge, euro	Monthly charges			
		Speed: 256/256, euro	Speed: 512/512, euro	Speed: 1000/512, euro	Speed: 2000/512, euro
Elisa Kotiportti Mini	50	16,9	18,9	22,9	29
KPY Palvelut Oy	40	24,9	24,9	30	45
Kymen Puhelin Oy	35	-	-	25	-
Lännen Puhelin Oy	54	15,4	16,4	20,4	-
MaxiSat Oy	10	15,9	22,9	-	-
NetSonic Oy	70	-	-	-	85
Oulun Puhelin Oyj	129	-	-	25	33
Pohjanmaan PPO Oy	78	-	25	29	43
Satakunnan Puhelin Oy	49	16,9	21,9	31,9	37,9

The real estate subscription is normally divided between the occupants and there must be at least 4-5 flats to join.

The Broadband Services**The set up and monthly charges of Cable Modems 1.1.2006 (kbit/s)**

Some major telephone and cable television operators

Teleyritys	Set Up charge, euro	Monthly charges			
		Speed: 256/128, euro	Speed: 512/128, euro	Speed: 1000/200, euro	Speed: 2000/300, euro
Elisa Oyj 1)	50	19,9	22,9	29	39
SW Television Oy / Welho	30	19,9	25	36	46
Jyväskylätintä Oy	49	-	21,9	33	45
KPY Kaapelitelevisio Oy	50	-	24,9	-	34
Kotkan Tietoruutu Oy	49	35	49	55	85
Lohjan Puhelin Oy	39	20	25	-	37,5
Lännen Puhelin Oy	59	19,4	24,4	-	34,4
Mikkelin Puhelin Oyj	49	-	23,9	31,9	44,9
Päijät -Visio Oy	80	18,5	21,5	28,9	42
Satakunnan Puhelin Oy	29	19,9	-	-	39,9
Sonera	49	19,9	25	29	38
	49	15,9	19,9	25	29

1) The service is offered in Helsinki, Tampere and Riihimäki

The monthly rentals of cable modems are varying between 5 and 9 euro

The fixed telephone network
The basic prices of local calls 1.1.2006

ANNEX 3/1

Telecommunications operator	During working hours		Other times		Remarks
	Every call, cents	Every minute, cents	Every call, cents	Every call, cents	
Alajärven Puhelinosuuskunta	9,2	1,4	9,2	1,2	
Auria Oy	9,9	1,43	9,9	1,43	
Elisa Oyj / Helsinki	12	1	12	1	1)
Elisa Oyj / Joensuu	12	1	12	1	
Elisa Oyj / Jyväskylä	11,57	0,94	11,57	0,94	
Elisa Oyj / Riihimäki	11,59	1,23	11,59	1,23	
Elisa Oyj / Tampere	12	1	12	1	
Etelä-Satakunnan Puhelin Oy	8,21	1,55	8,21	1,55	
Eurajoen Puhelin Osk	16,42	0	16,42	0	2)
Forssan Seudun Puhelin Oy	10	1,3	10	1,3	3)
Hämeen Puhelin Oy	12	1	12	1	4)
Härkätien Puhelin Oy	12,3	1,23	12,3	0,62	5)
Iisalmen Puhelin Oy	11	1,1	11	1,1	
Ikaalisten-Parkanon Puhelin Oy	8,2	1,23	8,2	1,23	
Jakobstadsnejdens Telefon Ab	8,21	1,33	8,21	1,33	
Kajaanin Puhelinosuuskunta	8,41	1,18	8,41	1,18	
Karjaan Puhelin Oy	8,21	1,48	8,21	1,48	
Keikyän Puhelinosuuskunta	10	1,5	10	1,5	
Kemiön Puhelinosakeyhtiö	8,21	2,05	8,21	2,05	
Kokkolan Puhelin Oy	8,21	1,38	8,21	1,38	
KPY Palvelut Oy	11,35	1,1	11,35	1,1	
Kymen Puhelin Oy	9,8	1,2	9,8	1,2	
Laitilan Puhelin Osk 1)	0	0	0	0	6)
Lohjan Puhelin Oy	8,21	1,06	8,21	1,06	
Lounet Oy	13,3	1,23	13,3	0	7)
Loviisan Puhelin Oy	10	1,5	10	1,5	
Lännen Puhelin Oy	10	1	10	0,7	8)
Mariehamns Telefon Ab	8,21	0,83	8,21	0,83	
Mikkelin Puhelin Oyj	10	1	10	1	
Oulun Puhelin Oyj	11	1,1	11	1,1	
Paraisten Puhelin Oy	9,8	1,67	9,8	1,67	
Pohjanmaan PPO Oy	8,21	1,22	8,21	1,22	
Pohjois -Hämeen Puhelin Oy	8,21	1,13	8,21	1,13	
Päijät -Hämeen Puhelin Oyj	8,6	1,2	8,6	1,2	
Salon Seudun Puhelin Oy	10	1,3	8,21	1,18	9)
Satakunnan Puhelin Oy	11,6	1,33	11,6	0,66	10)
Savonlinnan Puhelin Oy	10	1	10	1	11)
Sonera Oyj	12,2	1,22	12,2	1,22	
Telekarelia Oy	11,9	2,3	11,9	2,3	
Vaasan Läänin Puhelin Oy	8,21	1,34	8,21	1,34	
Vakka-Suomen Puhelin Oy	8,21	1,18	8,21	1,18	12)
Ålands Telefonandelslag	8,21	0,83	8,21	0,83	

See the remarks in ANNEX 4/2

Remarks:

In the previous table (Annex 4/1) there are the prices of near calls within the concession area. Here are the local calls prices destining elsewhere in the local telecommunications area of the following operators:

- 1) Elisa/ Helsinki: other 09 and 019-telecommunications area, 00-24: 12 cents/call + 1,7 cents /min
 - Joensuu: other 013- telecom area, 00-24: 12,4 cents/call + 1,7 cents/min
 - Jyväskylä: other 014 telecom area, 00-24: 11,57 cents/call + 1,12 cents /min
 - Riihimäki: other 03- telecom area, 00-24: 12,2 cents/call + 1,46 cents/min
 - Tampere: other 03- telecom area, 00-24: 12,4 cents/call + 1,7 cents/min
- 2) Eurajoen Puhelin: other 02-telecom area: 10 cents/call + 1 cents/min
- 3) Forssan Seudun Puhelin: other 02-telecom area, 00-24: 10 cents/call + 1,5 cents/min
- 4) Hämeen Puhelin: other 03-telecom area, 00-24: 13 cents/call + 1,6 cents/min
- 5) Härkätien Puhelin: other 02-telecom area: 00-24 12,3 cents/call + 1,23 cents/min
- 6) Laitilan Puhelin Osk: other 02-telecom area, 00-24: 8 cents/call + 1,33 cents /min
- 7) Lounet: 19-08 first 10 min 13,33 cents/call, exceeding minutes: 1,23 cents/min
- 8) Lännen Puhelin: other 02-telecom area: 10 cents/call + 1 cent/min
- 10) Salon Seudun Puhelin: other 02- telecom area, 07-20: 11 cents/call + 1,5 cents/min; 20-07: 9,21 cents/call + 1,38 cents/min
- 11) Satakunnan Puhelin: other 02-telecom area: 00-24 11,6 cents/call + 1,33 cents/min
- 12) Savonlinnan Puhelin: other 015- telecom area, 00-24: 13 cents/call + 1,6 cents/min
- 13) Tikka Com: other 13-telecom area, 00-24: 12,4 cents/call + 1,7 cents/min
- 14) Vakka- Suomen Puhelin: other 02- telecom area, 00-24: 8,21 cents/call + 1,77 cents/min

**The prices of international calls to fixed telephone network
1.1.2006 and 1.1.2005**

ANNEX 4/1

Country/country group Telecommunications operator	Price, cents/min, 1.1.2006		Price, cents/min 1.1.2005	
	Working hours 1)	Nights and weekends	Working hours 1)	Nights and weekends
Sweden 2)				
Elisa	13	13	13	13
Finnet 996	11	11	11	11
Sonera	17	12	17	12
Song	10	10	10	10
Norway, Denmark				
Elisa	13	13	13	13
Finnet 996	11/12	11/12	11/12	11/12
Sonera	17	12	17	12
Song	10	10	10	10
Estonia				
Elisa	23	23	23	23
Finnet 996	14	14	14	14
Sonera	27	19	27	19
Song	18	18	18	18
Russia				
Elisa	47	47	47	47
Finnet 996	35	35	35	35
Sonera	47	47	55	45
Song	35	35	35	35
Most EU-countries (Germany, UK, etc)				
Elisa	30	30	30	30
Finnet 996	28	28	28	28
Sonera	46	28	47	29
Song	28	28	28	28
Canada and the USA				
Elisa	30	30	30	30
Finnet 996	28	28	28	28
Sonera	47	29	47	29
Song	28	28	28	28
Japan				
Elisa	55	55	67	67
Finnet 996	62	62	62	62
Sonera	55	55	72	72
Song	65	65	65	65

1) Working hours:
Elisa International Mon-Sun 00-24
Sonera and Song Mon-Fri 08-22
and Fri 22-Mon 08

2) to Sweden, working hours:
Elisa International Mon-Sun 00-24
Sonera and Song Mon-Fri 08-20
and Fri 20-Mon 08

The prices of international calls to mobile phones 1.1.2006, cents

ANNEX 4/2

Country	Elisa Intern.	Finnet 996	Sonera 1)	Song
	Klo 0-24	Klo 0-24	Klo 08-22	Klo 0-24
Sweden 2)	33	28	39/ 34	32
Denmark, Norway	33	28	39/ 34	32
Denmark	33	29	39/ 34	32
Estonia	43	31	49/ 41	40
Russia	67	52	69/ 69	35
Germany	50	45	68/ 50	50
UK and most EU- countries	50	45	68/ 50	50
Japan	76	79	77/ 77	87

1) Time for reduced prices: Mon-Fri 22-08 and Fri 22-Mon 08

2) Reduced prices to Sweden: see annex 5/1

The price basket of local services for a household 1992-2006

ANNEX 5

Date Euro/year	Region					The whole of Finland	
	Southern Finland	Western and Central Finland	Eastern Finland	Northern Finland	Index		
15.11.1992	200	204	216	199	204	236	
15.11.1993	201	209	218	205	208	235	
15.11.1994	211	221	230	219	219	245	
15.11.1995	213	220	231	220	220	244	
15.11.1996	211	214	229	219	216	238	
01.01.1998	211	218	236	228	220	239	
01.01.1999	225	229	260	251	235	252	
01.01.2000	213	216	273	246	228	241	
01.01.2000	226	233	287	261	243	257	
01.01.2001	273	240	299	272	264	271	
01.01.2002	282	260	308	285	278	278	
01.01.2003	308	272	311	295	294	290	
01.01.2004	317	275	317	301	298	291	
01.01.2005	317	276	320	301	300	292	
01.01.2006	313	278	317	298	299	298	

Index = index adjusted (with consumer price index) to the price level of 2001

The price basket of local services for a household has been changed 1.1.2001 and it now is based on the most common subscription and includes:

- 12 monthly charges (a credit if a monthly charge includes local calls)
- 1000 four minute local calls made in the evening

The prices of long-distance calls 1998 – 2006

ANNEX 6

The development of prices in real values has been calculated with the consumer price index.

Date and operator	Prices according to the date, cents/min			Prices in real value (2001), cents/ min	
	Day	Evenings, weekends	Night	Day	Evenings, weekends
1.1.1998					
KV9	6,22	3,20	2,69	6,8	3,5
Sonera	6,39	3,06	2,66	7,0	3,3
Telia Finland	5,05	2,69	2,69	5,5	2,9
1.1.1999					
KV9	6,22	3,20	2,69	6,7	3,4
Sonera	6,39	3,06	2,66	6,9	3,3
Telia Finland	5,05	2,69	2,69	5,4	2,9
1.1.2000					
KV9	7,40	3,87/4,20	3,87	7,8	4,1/4,5
Sonera	7,40	4,04	3,70	7,8	4,3
Telia Finland	6,56	3,70	3,70	7,0	3,9
1.1.2001					
KV9	7,40	3,87/4,20	3,87	7,6	4,0/4,3
Sonera	7,40	4,04	3,70	7,6	4,1
Telia Finland	6,56	3,70	3,70	6,7	3,8
1.1.2002					
KV9	7,40	3,87/4,20	3,87	7,4	3,8/4,2
Sonera	7,40	4,04	3,70	7,4	4,0
Elisa	7,40	3,80	3,80	7,4	3,8
Song	6,56	3,70	3,70	6,6	3,7
1.1.2003					
KV9	7,40	3,87/4,20	3,87	7,3	3,8/4,1
Sonera	7,40	4,04	3,70	7,3	3,9
Elisa	7,40	3,80	3,80	7,3	3,7
Song	6,56	3,70	3,70	6,5	3,6
1.1.2004					
KV9	7,40	3,87/4,20	3,87	7,2	3,8/4,1
Sonera	7,40	4,04	3,70	7,2	3,9
Elisa	7,40	3,80	3,80	7,2	3,7
Song	6,56	3,70	3,70	6,4	3,6
1.1.2005					
KV9	7,40	3,87/4,20	3,87	7,2	3,8/4,1
Sonera	7,40	4,04	3,70	7,2	3,9
Elisa	7,40	3,80	3,80	7,2	3,7
Song	6,56	3,70	3,70	6,4	3,6
1.1.2006					
KV9	6,95	6,95	6,95	6,7	6,7
Sonera	7,40	4,04	3,70	7,2	3,9
Elisa	7,40	3,80	3,80	7,2	3,7
Song	6,56	3,70	3,70	6,3	3,6

See remark 1, Annex 5

The prices of international calls 1998-2005

ANNEX 7

The prices are based on the price basket of international calls. It includes calls to six countries, which have the most international traffic from Finland. The price development in real values has been calculated with the consumer price index. The periods of time when reduced prices are valid differ from case to case.

Date and operator	Prices according to the date, cents/min		Prices in real value (2001) cents/min	
	Working hours	Reduced	Working hours	Reduced
1.1.1998	41,5	30,4	45,2	33,1
Tele	37,5	29,6	40,8	32,2
FI	31,8	26,9	34,6	29,3
Telia Finland				
1.1.1999	33,3	27,8	35,7	29,8
Sonera	27,6	23,9	29,6	25,6
FI	31,8	24,7	34,1	26,5
Telia Finland				
1.1.2000	29,1	23,2	30,9	24,6
Sonera	26,9	23,2	28,5	24,6
FI	24,1	20,0	25,6	21,2
Telia Finland				
1.1.2001	26,7	20,9	27,5	21,3
Sonera	22,4	22,4	22,9	22,9
FI	24,1	20,0	24,7	20,5
Telia Finland				
1.1.2002	26,8	20,8	26,8	20,8
Sonera	22,1	22,1	22,1	22,1
FI	18,2	18,2	18,2	18,2
Song				
1.1.2003	26,8	20,8	26,4	20,5
Sonera	22,1	22,1	21,8	21,8
FI	18,2	18,2	17,9	17,9
Song				
1.1.2004	26,0	20,7	25,4	20,2
Sonera	22,0	22,0	21,5	21,5
FI	18,2	18,2	17,8	17,8
Song	18,7	18,7	18,3	18,3
Finnnet				
1.1.2005	26,0	20,7	25,3	20,2
Sonera	22,0	22,0	21,4	21,4
Elisa	18,2	18,2	17,7	17,7
Song	18,7	18,7	18,2	18,2
Finnnet				
1.1.2006				
Sonera	26,0	20,7	25,1	20,0
Elisa	22,0	22,0	21,3	21,3
TDC Song	18,2	18,2	17,6	17,6
Finnnet	18,7	18,7	18,1	18,1

1) See remark 1, Annex 5

The prices for mobile services 2004-2006

ANNEX 8/1

Standard subscriptions

The regular calls have equal prices despite of the direction of the call (standard subscription)

Ajankohta	Monthly charge, euro			Cents/min		
	DNA	Elisa	Sonera	DNA	Elisa	Sonera
1.1.2004	8,00	4,95	3,99	13,0	15,0	16,0
1.1.2005	0,66	6,95	3,99	6,9	8,5	13,0
1.1.2006	0,66	3,95	1,99	6,9	8,5	7,9

Subscriptions with different prices to the network of the same operator and to the network of another operator

The Date	Monthly charge, euroa			Cents/min to same network			Cents/min to another network 2)		
	DNA	Elisa	Sonera	DNA	Elisa	Sonera	DNA	Elisa	Sonera
1.1.2004	3,2	3,2	3,5	13	12	16,0	22 /17	26/17	19/16
1.1.2005	2,95	3,95	3,99	2	5	3,9 1)	9	14,0	11,9
1.1.2006	2,95	3,95	3,99	2	5	3,9 1)	9	9,9	11,9

1) Sonera's price (3,9) was valid only at evenings and week ends, other times 11,9 cents/min

2) In the year 2004 there were different peak and off peak prices to another network

The dual band prices

The prices are taken from the price lists. The prices are valid for private customers.

Types of subscriptions:

Sonera: Privat Duo-liittymä

Elisa: Tandem-liittymä

DNA: Perusliittymä

Operator and date	Monthly charge, euro/ 6 months	From mobile phone to mobile of the same operator, cents/min		From mobile phone to mobile of other operator, cents/min	
		At day time	Evenings	At day time Duo-area / non Duo-area	Evenings Duo-area / non Duo-area
Sonera Privat Duo					
1.1.1999	20,2	0,167	0,136	0,261/ 0,419	0,136/ 0,167
1.1.2000	20,2	0,167	0,136	0,261/ 0,419	0,136/ 0,167
1.1.2001	20,2	0,167	0,136	0,261/ 0,419	0,136/ 0,167
1.1.2002	22,0	0,17	0,13	0,26/ 0,41	0,13/ 0,17
1.1.2003	22,0	0,17	0,13	0,26/ 0,41	0,13/ 0,17
1.1.2004 1)	22,0	0,17	0,13	0,26	0,13
1.1.2005 2)	22,0	0,15	0,10	0,15	0,10
Elisa Tandem					
		At day time	Evenings/ at night	At day time	Evenings/ at night
1.1.1999	19,2	0,133	0,133/ 0,049	0,335	1,490/ 0,133
1.1.2000	19,2	0,121	0,121/ 0,049	0,335	0,167/ 0,167
1.1.2001	19,2	0,121	0,121/ 0,049	0,335	0,167/ 0,167
1.1.2002	19,2	0,12	0,12	0,33	0,17
1.1.2003	19,2	0,12	0,12	0,33	0,17
1.1.2004	19,2	0,12	0,12	0,26	0,17
1.1.2005 2)	19,2	0,12	0,12	0,26	0,17
DNA Perusliittymä					
		At day time	Evenings	At day time	Evenings
1.2.2002	19,2	0,13	0,13	0,22	0,17
1.1.2003	19,2	0,13	0,13	0,22	0,17
1.1.2004 2)	19,2	0,13	0,13	0,22	0,17
1.1.2005	19,2	0,13	0,13	0,22	0,17

1) Duo- areas were removed from Sonera pricing

2) The offering of new subscriptions has been closed down

The prices for mobile services 1993-2004

ANNEX 8/3

The prices are taken from the price lists. The prices are valid for national calls to the network of the other operator in Finland.

Types of subscription:

GSM / Sonera: Classic / Business (until 2001) / GSM2 (in 1993)

GSM / Elisa: usage subscription (before year 1996 rental subscription)

Network and date	Connection fee, euro	12 monthly charges, euro/a	Call charges, cents/min						
			From fixed telephone network to mobile phone			From mobile phone to mobile / fixed telephone network (not to mobile phones of the same operator)			
			Working hours		Other times	Working hours		Other times	
				Index			Index		
GSM Sonera									
1993	8,24	123,1	36,3	41,1	18,0	29,3	33,1	18,0	
11.93	8,24	123,1	29,3	33,1	16,7	29,3	33,1	16,7	
11.94	8,91	134,2	28,6	32,0	18,2	32,0	35,8	18,2	
11.95	8,91	134,2	28,6	31,7	18,2	32,0	35,5	18,2	
11.96	8,24	123,1	26,2	28,9	16,7	29,3	32,3	16,7	
01.98	8,24	123,1	26,2	28,5	16,7	29,3	31,9	16,7	
01.99	8,24	123,1	26,2	28,1	16,7	29,3	31,4	16,7	
01.00	8,24	123,1	26,2	27,8	16,7	29,3	31,1	16,7	
01.01	8,24	123,1	26,2	26,9	16,7	29,3	30,1	16,7	
01.02	8,21	40,4	27,0	27,0	17,0	32,0	32,0	17,0	
01.03	8,21	40,4	27,0	26,6	17,0	32,0	31,5	17,0	
01.04	8,21	40,4	24,0	23,4	16,0	32,0	31,2	17,0	
GSM Elisa									
1993	6,73	121,0	33,3	37,7	16,7	33,3	37,7	16,7	
11.93	6,73	121,0	25,6	29,0	15,8	30,8	34,8	16,7	
11.94	7,40	132,0	27,9	31,2	17,2	33,5	37,5	18,2	
11.95	21,90	132,0	27,9	30,9	17,2	33,5	37,1	18,2	
11.96 1)	20,20	121,1	25,7	28,3	15,8	30,8	34,0	16,7	
01.98	20,20	121,1	25,7	28,0	15,8	30,8	33,5	16,7	
01.99	7,90	121,1	25,7	27,6	15,8	30,8	33,0	16,7	
01.00	7,90	121,1	26,1	27,7	16,7	30,8	32,7	16,7	
01.01 2)	-	121,1	26,1	26,8	16,7	30,8	31,6	16,7	
01.02	-	121,1	26,0	26,0	17,0	31,0	31,0	17,0	
01.03.	-	121,1	26,0	25,6	17,0	31,0	30,5	17,0	
01.04	-	130,8	26,0	25,4	17,0	31,0	30,3	17,0	

1) Since March 1996 lower price from mobile phones to fixed telephone network.

2) Offering of new single band subscriptions has been closed down in 10.9.2000.

Index = index adjusted (with consumer price index) to the price level of 2001