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Prices of Mobile Calls in 2005

Abstract

The development of mobile call prices in 18 European countries from March 2004 to March 2005 is examined in this work. The comparison is made with the help of a price basket.

A country-specific basket price has been formed of mobile call prices. This basket price describes the expenses of household users when using an inexpensive post-paid subscription. The research focuses on the basic services of mobile networks: calls, SMS:s, subscription.

The average basket price has decreased 15 % during the research period in all countries included in the research. In March 2005 the most inexpensive price basket was found in Finland. The costs of the Finnish basket have decreased 35 % during the year. The comparison showed that other inexpensive countries in terms of the price basket were Luxembourg, Denmark and Greece. The most expensive price basket was found in Switzerland.

The basket prices of bigger countries are noticeably higher than those of the most inexpensive countries. The prices have gone down the fastest on small mobile markets.

The average basket prices in all countries have decreased about 25 % between 2001 and 2005.

Keywords

call charges, post-paid, pre-paid, price basket, SMS

Miscellaneous

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Table of contents

List of tables

List of figures

List of appendix

1 Introduction

This study concentrates on the prices of mobile calls and text messages (SMS in the report) within EU-countries prior to the expansion of the EU in May 2004. Iceland, Norway and Switzerland are also included in this study. The preliminary work of gathering the price information was done during March 2005.

This study concentrates only on network operators. Virtual and service operators are excluded from this study.

The price basket used in comparison does not display individual operator prices. Price basket is calculated from all individual countries' operators and therefore represents mean prices for each country. The weighted value for each operator is calculated by the market share. Therefore operators, which have bigger market share, represent bigger value within the country specific price baskets. The mobile phone subscriber connections included in this study are post-paid connections.

As the market share of pre-paid[1] subscriptions is considerably high in some EU-countries, this study also compares the most significant operators' pricing between the post-paid and pre-paid subscriptions.

The next generation (3G in the report) mobile phone service providers are excluded from the price basket because of their low market share.

The price baskets from previous years 2001-2004 have acted as the basic model for this study. Consequently the time series is extensive and the data is comparable with each year.

[1] Connection, where talking time is purchased in advance.

2 Focus of study

2.1 Target countries and operators

The focus of this study is on the EU-countries prior to the expansion of the EU in May 2004. Iceland, Norway and Switzerland are also included in this study. The study includes each of those operators, whose market share is at least four per cent (4%) in their market area. This study concentrates only on network operators. Virtual and service operators' (VMNO[2]) price information is excluded from this study.

In the beginning of the year 2005 there were a total of 360 million 2G generation mobile phone subscriptions in those countries, which were included in this study. Appendix 2 shows the countries included in this study as well as the operators and the amount of subscriptions in each individual country.

3G operators' services were excluded from this study, due the reason of slow development of 3G network. The estimation[3] is that by the end of 2004 there were a total of 16 million subscriptions globally, based on WDCMA –technology. Approximately a third of these were located in Europe.

2.2 Target services included in this report

This study contains basic pricing of mobile networks:

- calls
- SMS messages (SMS[4])
- subscription

The call prices are examined from the consumers' point of view and the evaluation includes the cheapest connections. Subscription price campaigns and discounts are excluded from the study.

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[2] VMNO= Virtual Mobile Network Operator.
[3] UMTS Forum, 5 January 2005, 3G/UMTS subscribers hit 16 million.
[4] SMS= Short Message Service.

The prices of pre-paid subscriptions are concluded only from the biggest operators in each country and they are compared to market situation in Sweden and Finland.

Multimedia messages (MMS[5]) are excluded from this study. The so called 2.5 G technology services have not yet developed significantly in consumer usage.

According to the study published by the Ministry of Transport and Communications Finland the weighted value of MMS in Finnish households does not reach the same level as SMS.[6]

Information about operators' services and pricing are based on www-pages. These addresses can be found from appendix 1. Different connections of the operators can be found from appendix 3.

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[5] MMS, Multimedia Message Service.
[6] Ministry of Transport and Communications Finland 34/2005, Mobile service markets in Finland 2004.

3 Price basket and its structure

3.1 Definition of price basket

The price basket used in this study is defined by the group representing different operators. This group was defined by the Ministry of Transport and Communications Finland in the year 2002.[7]

This study concentrates on consumer subscriptions, prices of mobile calls and SMS. Quantity of calls is 150 minutes per month and the length of each call is 3 minutes. 25 SMS messages are sent per month.

The calls are assumed to be divided between daytime, evenings and weekends: 35% of calls are made during daytime and in the evenings and night-times 65%. On top of this, all the calls are assumed to be domestic calls.

In the basic model of price basket there is a definition, whereby operators with major market shares have a bigger share in domestic calls compared to the operators holding smaller market shares.

Price basket weights the direction of mobile calls by the market share. Operators' domestic call quantity is operators' market share added by 15%.

SMS text messages are also included in the price basket. Their quantity is set to 25 messages per month and they are assumed to be oriented in the same way as the calls are oriented. On-net internal SMS quantity is operator's market share added by 15%.

Price basket includes either monthly subscription fees or subscriptions' service packet fees. If some operator's monthly fee contains call time, it is noticed to the appropriate extent within the price basket. The same procedure is done with SMS.

Price baskets are constructed for each country separately. Each individual country specific price basket consists of different operators in the way that operators' weighted value is

[7] Prices for digital mobile phones, Ministry of Transport and Communications Finland 33/2002.

defined by their market share. The cheapest subscription is selected from each individual operator which is suitable for the assumptions described earlier. The price baskets are shown in euros, including taxes.

Table 1. The structure of price basket used in this study

Price basket	
<u>Cost factors</u>	
The cheapest subscription connection for households	
Total amount of calls 150 minutes, including 50 calls, 3 minutes per call	
SMS, 25 messages per month	
Monthly subscription fee	
All prices with taxes	
<u>Direction of calls</u>	
Mobile networks	75%, which means 112.5 minutes
Within mobile operators internal network	15% plus own market share
To other networks	rest of the calls
Fixed network	25%, which means 37.5 minutes
<u>Time of calls</u>	
Daytime, weekdays	35% of calls
Other times	65% of calls

3.2 Choice of mobile subscriptions

Mobile markets are in constant development within the countries included in this study. Competition also changes the service supply. Many operators have changed their subscription types during one year's period. However, the starting point when the subscription was chosen for the price basket, has been a standard connection used in each country. Specific new service supply is excluded from the study.

The pricing strategies between operators vary significantly from each other. Generally the prices of internal calls within one operator are the cheapest whereas the calls to other operators' networks are more expensive. Calls made during the evening or on weekends are also typically cheaper. However, increasingly more and more operators are pricing their subscriptions with flat fees, where all calls cost the same.

Reviewing the Finnish domestic market situation gives a good perspective on the development of mobile markets. In Finland, the subscriptions supply has changed significantly from the year 2004. Using the mobile comparison counters in Internet pages[8] one can produce a figure of Finnish mobile subscription supply in April 2005, shown in appendix 4. The criteria used in this calculation were based on the starting values of price baskets in 2005.

It can be seen from appendix 4 that there is a total of 45 different subscription options at the moment. The price range is significant. The location of subscriptions included in the Finnish price basket in 2005 is marked in the figure, showing the different subscriptions supply.

3.3 The meaning of the price basket

Price basket used in this study is defined as the average expense of a household user. By weighting the subscriptions of different operators (in the countries which are chosen for this study) to one price basket per each country it is possible to understand the cost level of mobile calls in each case.

One has to recognize that basket calculus works only as an expense indicator, which measures the situation at a certain moment, in this study in March 2005.

The basket calculus profile has been determined already in the year 2002 and considerable changes for example in usage of calls and SMS have occurred all the time. In addition, the using habits of mobile phone customers also vary significantly from country to country[9]. However, the time series from 2001-2004 support the usage of this certain kind of price basket in order to achieve comparable information.

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[8] www.vaihtovirta.fi.
[9] Ministry of Transport and Communications Finland 34/2005, Mobile service markets in Finland 2004.

From the view point of operators, the price basket only describes the development of the mobile business in a suggestive way. The behaviour of customers, subscription selection as well as market situation will solve the billing level of mobile business.

If Finnish operators' price baskets and ARPU[10] in spring 2004 are put side by side, the magnitude can be seen (Table 2.) Operators' ARPU – values are approximately 15% higher than the Finnish country basket.[11]

Table 2. Finnish price basket and operators' ARPU in 2004

	ARPU, euros per month	Price basket 2004, euros per month
Elisa	37	30.6
Sonera	35	

[10] ARPU= Average Return Per User.
[11] Annual reports of Elisa and TeliaSonera in 2004.

4 Information about mobile markets

4.1 Information about countries involved in the study

Table 3 contains information about mobile subscriptions of each country, description about population density and description of GNP corrected with purchasing power parity.[12] [13]

Germany's mobile market is the most significant in this study. Finland has about 1.4% from the total amount of subscriptions included in the study. When compared to other Nordic countries Finland has about 20% of the total subscriber base of the Nordic countries (Finland, Sweden, Norway, Denmark and Iceland).

The population density is the lowest in the Nordic countries. The lowest GNP figures are in Southern European countries.

Table 3. Information about European mobile markets on the 1st of February 2005

Country	Subscriptions, millions	Population density, inhabitants/km2	GNP 2003 1 000 euros/ inhabitant
Germany	68.6	231	23
Italy	61.3	192	20
Great Britain	61.0	242	24
France	44.1	109	23
Spain	38.5	81	16
Netherlands	15.2	386	25
Portugal	10.7	110	12
Greece	10.4	81	13
Sweden	9.7	20	26
Belgium	8.6	341	23
Austria	7.9	96	24
Switzerland	6.3	177	33
Denmark	5.1	125	31
Finland	**5.0**	**15**	**24**
Norway	4.2	14	38
Ireland	3.7	57	29
Luxembourg	0.6	181	46
Iceland	0.3	3	25
Total amount	361.2		

[12] Mobile Communications 1 March 2005.
[13] The Yearbook of Western European Telecommunications 2005.

Even though VMNO's are not included in the study, it has been estimated that the number of VMNO's does affect country-specific competition as well as price development.

Newly published study contains information about changes in mobile operations in different countries in 2000-2003[14] [15] [16]. The number of network operators and VMNO's has increased in the study period, especially in Denmark, Sweden and Finland. Due to the increasing number of VMNO's there has been a growth in so called cheap brands mainly owned by the large network operators especially in the Nordic countries. Table 4 describes the operators' market shares of the whole number of subscribers.

Table 4. Examples of the changes in the operator field in the years 2000-2004

Country	Total amount of operators 2000	Total amount of operators 2003	Number of network operators, 2003	Subscriptions per operator, millions, 2003	New service operators, %, 2004
Sweden	5	20	5	0.5	4.0
Denmark	12	18	5	0.3	22.0
Finland	**10**	**15**	**4**	**0.3**	**10.0**
France 1)	6	12	3	3.7	
Austria	4	6	5	1.3	0.7

1) Information from the year 2002.

It can be presumed that one factor influencing the price changes has been mobile number portability. In this respect Finland has reached the top level of development. During one year about 20% of the population with mobile phones has changed operators. In Europe this change has been under 10% in one year.[17]

4.2 3G network development in the years 2004-2005

3G network development has been slower than expected. In the beginning of 2005 it was estimated that globally there were 16 million subscribers based on WCDMA technology. About one third of these was estimated to be in Europe.[18] The share of 3G subscriptions of all mobile subscriptions in the study area is about 1.5%. Because of this situation the figures are not included in the price basket comparison.

[14] Eurostat, Statistics in Focus Industry, Trade and Services 8/2005.
[15] The Yearbook of Western European Telecommunications 2005.
[16] Telecommunications, May 2005 Beyond the Brand.
[17] Analysys, April 2005, Mobile Number Portability (MNP) does not always increase the churn.
[18] UMTS Forum, 5 January 2005, 3G/UMTS subscribers hit 16 million.

Information about 3G operators which have a significant impact in their own home market area can be found in table 5. Most 3G mobile subscriptions belong to Hutchison Whampoa corporation. These operators have the biggest market share in the UK, Italy and Sweden. It is shown in table 5 that the number of customers in Finland is not remarkably high.[19] [20]

Table 5. The most significant 3G operators on the 1st of January 2005

Country	Total amount of mobile subscriptions	3G operator	Amount of 3G subscriptions	Market share of 3G operators, %
Netherlands	15,208,000			
Belgium	8,601,000			
Great Britain	60,955,000	H3G	2,765,000	4.5
Spain	38,490,000			
Ireland	3,738,000			
Iceland	293,300			
Italy	61,288,000	H3G	2,035,000	3.3
Austria	7,890,000	3 Austria	190,000	2.4
Greece	10,405,000			
Luxembourg	574,900			
Norway	4,207,000			
Portugal	10,668,000			
France	44,086,000			
Sweden	9,709,000	Hi3G	305,500	3.1
Germany	68,603,000			
Finland	**4,956,000**	**Sonera, Elisa**	**14,000**	**0.3**
Switzerland	6,339,000			
Denmark	5,148,000	Hi3G	130,000	2.5

[19] Mobile Communications, March 23, 2005.
[20] The Yearbook of Western European Telecommunications 2005.

5 Price basket of post-paid subscriptions 2005

5.1 Price basket in 2005

In the previous study price baskets were defined with and without set-up cost.[21] In this year's survey price baskets are compared by using only set-up costs.

Table 6. Price baskets in 2004 and 2005, euros/month

Country	2005, euros/month	2004, euros/month	Change-%
Netherlands	34.5	42.4	-18.6
Belgium	42.1	43.1	-2.2
Great Britain	44.1	51.3	-14.0
Spain	33.8	38.6	-12.3
Ireland	46.9	51.9	-9.5
Iceland 1)	32.9	33.9	-2.9
Italy	36.8	48.0	-23.4
Austria	32.7	36.6	-10.7
Greece	23.6	31.6	-25.2
Luxembourg	21.2	27.1	-21.9
Norway	38.3	41.0	-6.5
Portugal	33.3	46.4	-28.2
France	39.7	40.7	-2.5
Sweden	30.5	42.4	-28.0
Germany	48.3	56.5	-14.6
Finland	**19.9**	**30.6**	**-35.0**
Switzerland	56.5	56.2	+0,5
Denmark	22.5	27.1	-17.1
Weighted mean	39.5	46.5	-15.0

1) Iceland's figure is estimated.
Price baskets are calculated with set-up costs.

Table 6 describes the weighted mean of the price baskets of mobile subscriptions in those countries involved in this survey. This figure has decreased by 15%. The highest country-specific price decreases have taken place in Finland, Sweden, Portugal and Greece.

The price basket of Finland has decreased by 35% when compared to the year 2004. Other price decreases have occurred in Portugal and Sweden. The results of the study confirm that the price level in Switzerland remains the same as in 2004. One has to recognize that there are significant differences in prices between countries compared because the cheapest price basket is about one third of the most expensive one.

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21 Ministry of Transport and Communications Finland 41/2004, Mobile Calls in 2004.

Table 7. Price baskets in 2004 and 2005 from the cheapest country to the most expensive one, monthly fee in euros

Country	2005, euros/month	2004, euros/month
Finland	**19.9**	**30.6**
Luxembourg	**21.2**	27.1
Denmark	**22.5**	27.1
Greece	**23.6**	31.6
Sweden	**30.5**	42.4
Austria	**32.7**	36.6
Iceland	**32.9**	33.9
Portugal	**33.3**	46.4
Spain	**33.8**	38.6
Netherlands	**34.5**	42.4
Italy	**36.8**	48.0
Norway	**38.3**	41.0
France	**39.7**	40.7
Belgium	**42.1**	43.1
Great Britain	**44.1**	51.3
Ireland	**46.9**	51.9
Germany	**48.3**	56.5
Switzeland	**56.5**	56.2

As shown in table 7, Finland is the cheapest country in 2005 when in 2004 Denmark and Luxembourg were cheaper. In the year 2004 Finland was the third in the price comparison. A conclusion of Table 7 is that the biggest countries are more expensive than smaller ones.

5.2 Estimation of the development

The Ministry of Transport and Communications Finland has made international comparisons concerning mobile call prices since 2001 and that is why changes in the figures can be evaluated by extensive time series. In this time series, the information from years 2001 to 2003 is made comparable by estimating the starting cost meaning with the price baskets of those countries where the starting cost is included. These countries and operators are introduced in appendix 3.

Table 8. Development of price baskets between 2001-2005, euros/month

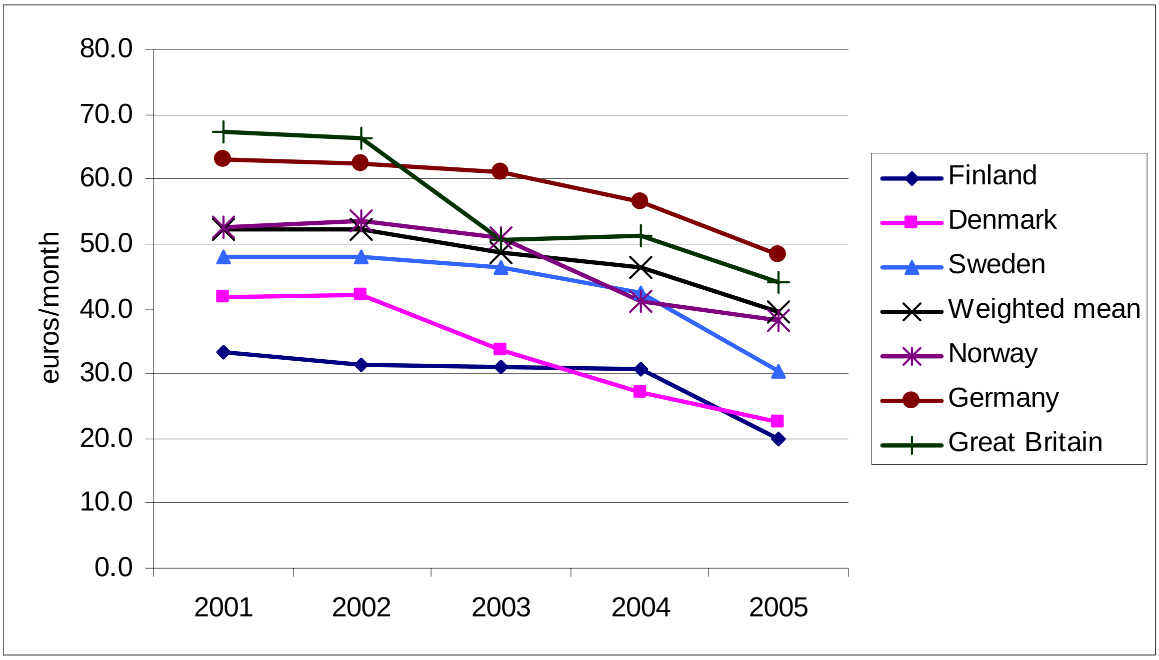
Country	2001	2002	2003	2004	2005	Change-% 2001-2005
Netherlands	48.9	48.7	49.6	42.4	**34.5**	*-29.5*
Belgium	43.8	47.4	47.0	43.1	**42.1**	*-3.8*
Great Britain	67.3	66.2	50.5	51.3	**44.1**	*-34.4*
Spain	41.0	42.1	39.2	38.6	**33.8**	*-17.5*
Ireland	55.8	57.0	60.9	51.9	**46.9**	*-15.9*
Iceland	32.5	31.0	33.0	33.9	**32.9**	*+1,2*
Italy	45.1	44.5	46.9	48.0	**36.8**	*-18.5*
Austria	46.2	51.0	46.3	36.6	**32.7**	*-29.2*
Greece	51.1	50.0	40.9	31.6	**23.6**	*-53.8*
Luxembourg	30.0	29.6	29.4	27.1	**21.2**	*-29.5*
Norway	52.4	53.7	51.1	41.0	**38.3**	*-26.9*
Portugal	51.8	53.0	51.2	46.4	**33.3**	*-35.7*
France	43.0	42.4	41.6	40.7	**39.7**	*-7.6*
Sweden	48.1	47.9	46.4	42.4	**30.5**	*-36.5*
Germany	63.0	62.3	61.1	56.5	**48.3**	*-23.4*
Finland	**33.2**	**31.4**	**31.1**	**30.6**	19.9	***-40.1***
Switzerland	59.7	62.3	63.3	56.2	**56.5**	*-5.4*
Denmark	41.8	42.1	33.5	27.1	**22.5**	*-46.2*
	1)	1)	1)			
Weighted mean	52.4	52.2	48.8	46.5	**39.5**	*-24.5*

1) Between 2001-2003 estimated influence of set-up costs has been added.

When contemplating the years between 2001 and 2005, it can be seen that the most significant changes have occurred in Greece, Denmark, Finland and Sweden. Middle Europe (Belgium, France and Switzerland) have faced only minor changes.

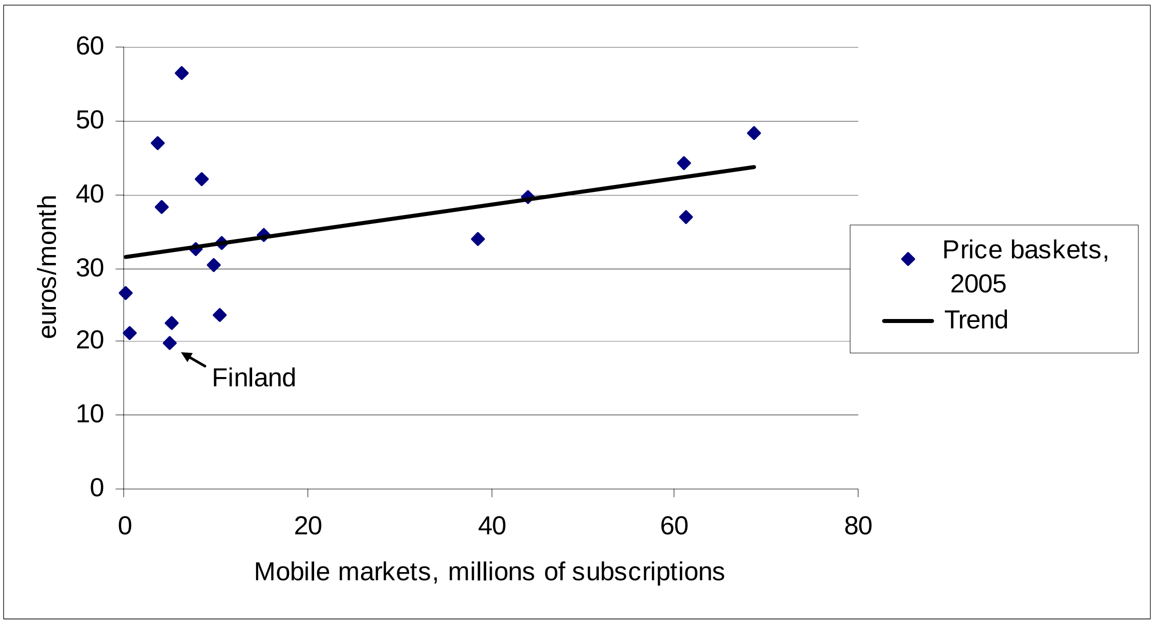
The average weighted by all subscriptions in each country has decreased by 25% from 2001 to 2005 which means 6% per year. Prices in Finland have decreased by 9% per year.

Figure 1. Development of price baskets in 2001-2005 in certain countries



In figure 1 the development in the Nordic countries is compared to major mobile countries like Germany and the UK as well as to the weighted mean of all countries. In this group Finland is the cheapest in 2005 but the development of other Nordic countries is more or less similar.

Figure 2. Price baskets in 2005 and the size of mobile markets



The figure 2 describes the level of price baskets in proportion to the county's mobile markets. The result can be explained so that the price competition in big mobile countries is more even and more controllable than in less significant mobile markets. In smaller markets the basket deviation is significant. Finland holds the lowest point in the figure.

Figure 3. Price baskets in 2005 and density of population

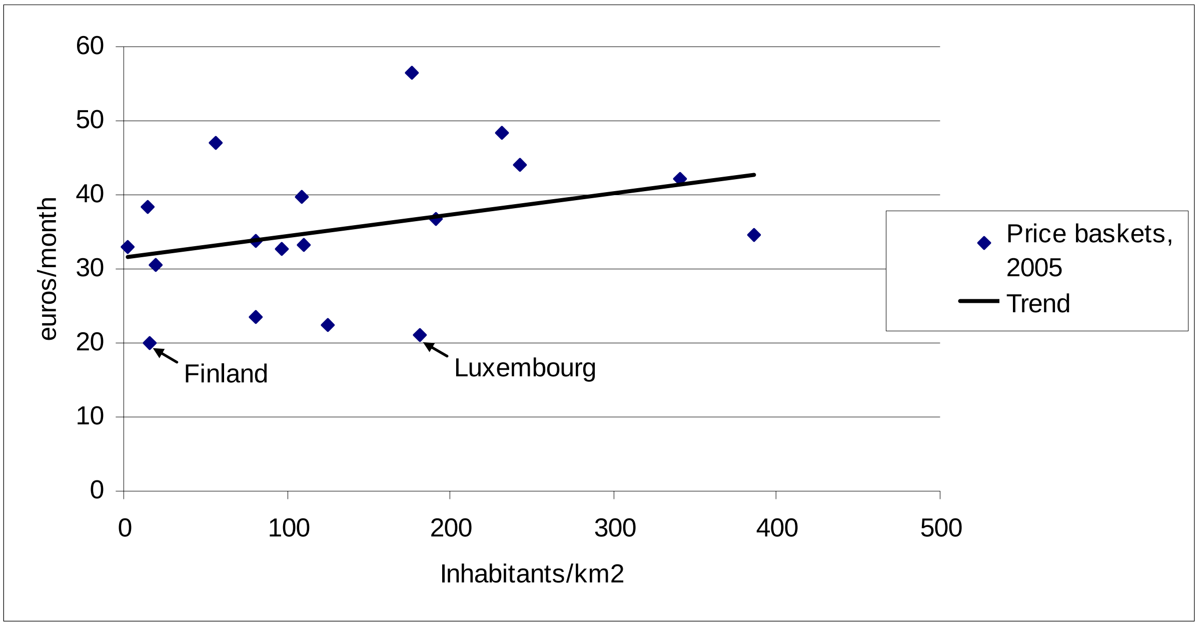
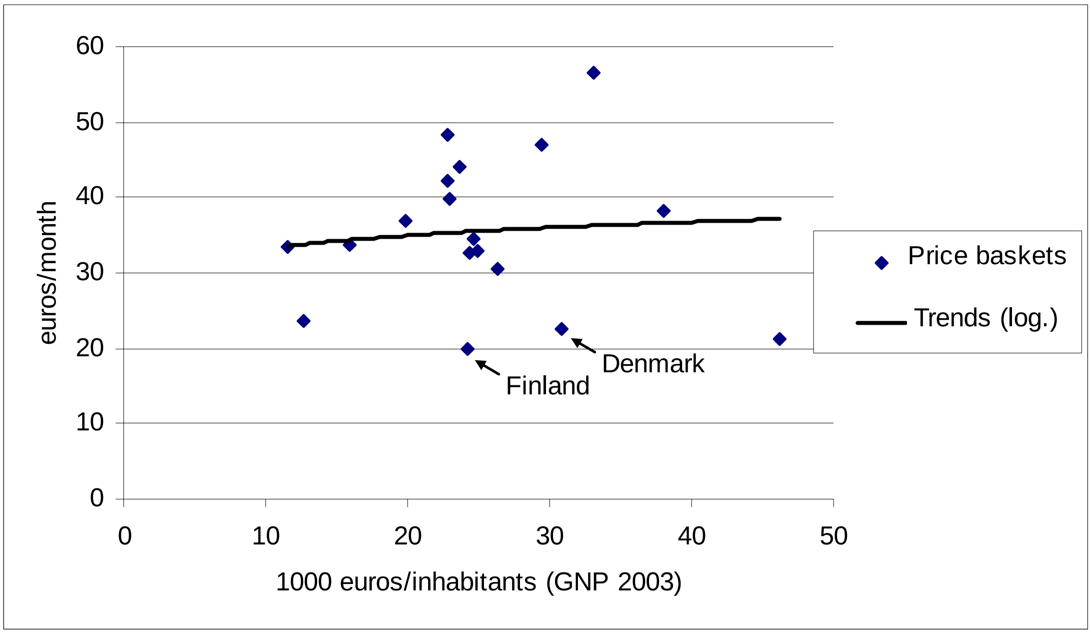


Figure 3 represents the connection between the price baskets and the density of population. In countries where the density of population and the mobile market are more significant, the price baskets are more expensive. However, the correlation between these factors is not tough.

Figure 4. Price baskets in 2005 and GNP per inhabitant



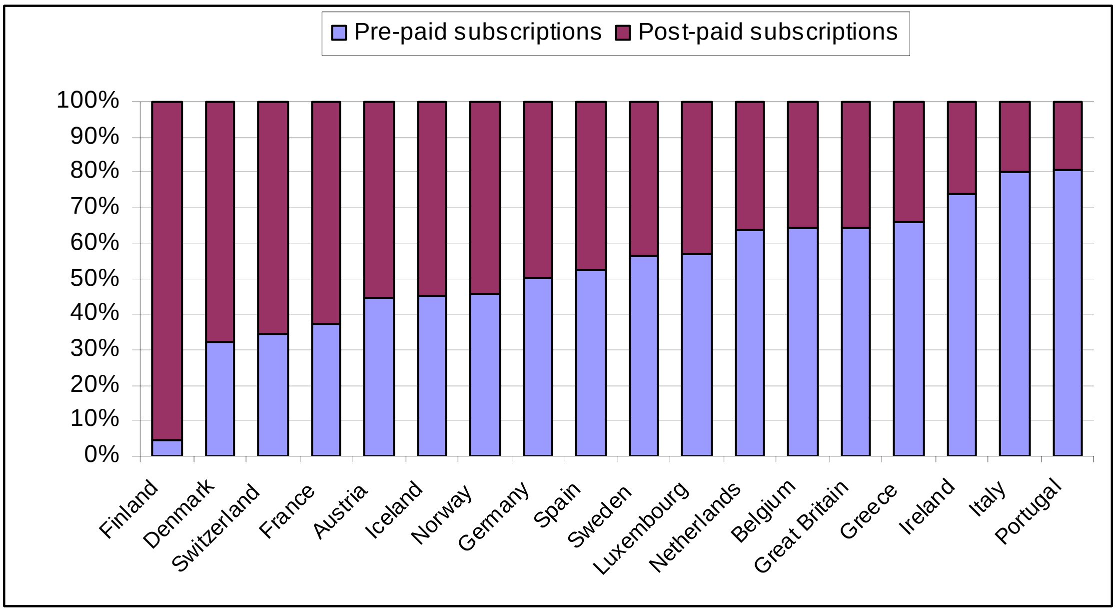
When the price basket of each country and the GNP per capita are shown, the situation can be seen in figure 4. Finland, Luxembourg, Denmark and Greece can be identified with the help of cheap baskets in the figure. Values of price baskets do not strongly depend on the level of GNP.

6 Examination of pre-paid subscriptions

6.1 Pre-paid subscriptions in certain countries

The situation of pre-paid subscriptions above all in Southern Europe seems to be on a firm basis. This situation affects the subscription choices of some countries, when there are significantly more pre-paid than post-paid alternatives. In figure 5 a description of the statue of pre-paid situation based on the information in appendix 5 can be found. It must be noticed that in countries with tough competition such as Finland and Denmark, the proportion of pre-paid subscriptions is low when compared to the mean of other countries involved in the study. However, the statistics on pre-paid subscriptions are not as reliable as they are in post-paid.

Figure 5. The proportion of pre-paid subscriptions to the total number of subscriptions in the beginning of 2005

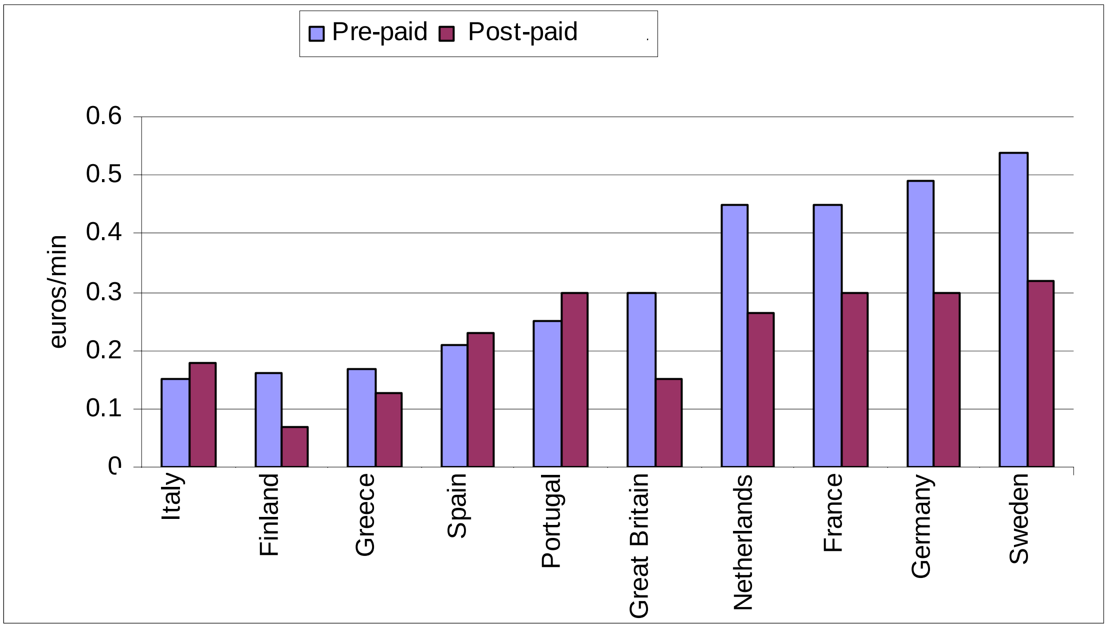


6.2 Price level of pre-paid subscriptions

It should be noticed that Southern European operators are more focused on pre-paid subscriptions. They are favoured because of the market situation, for example distribution process and because of user experience. In many countries price differences between pre-paid and post-paid alternatives are almost non-existent, which partly explains the popularity of pre-paid -subscriptions.

To describe the situation, information about the most significant operators' pre-paid prices of those countries with population over 10 million has been collected in figure 6. Also this figure consists of information about the price level of Finland and Sweden although subscription numbers of these two countries are not above the criteria. All the prices included in the figure are on-net prices. Price differences between Italy, Greece, Spain and Portugal are minimal.

Figure 6. Price comparison of calls of pre-paid and post-paid subscriptions in the beginning of 2005, on-net calls in daytime



7 Conclusion

The study contains information on mobile call prices in 18 European countries from 2004 to 2005. To some extent this study also contains information from earlier years. The country specific basket price contains a definition which describes the costs of private household users, when selecting the cheapest post-paid subscription. Information contains data on basic services of mobile operators, such as prices of calls and SMS and monthly fees.

Country specific call prices, when calculated with the method of using price baskets, have decreased as shown in figure 1. In March 2005 the cheapest price basket was in Finland.

The cost to the user in Finland has decreased by 35% when compared to the price of the previous year. Luxembourg is the second cheapest before Denmark and Greece. Weighted mean of subscriptions of all countries has decreased by 15% compared to the year 2004. Price basket of the cheapest country (Finland) is one third of the price of the most expensive one (Switzerland).

When the time series in 2001-2005 are examined, it can be seen that the price basket prices of bigger countries are remarkably higher than those of smaller countries. The decrease in prices has been less significant in big countries than in smaller mobile telecommunication markets.

The study also contains information on pre-paid subscriptions and these subscriptions have been compared to the situation of post-paid subscriptions. Especially in Southern European countries pre-paid subscriptions are more common than post-paid.

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Analysys, April 2005, Mobile Number Portability (MNP) does not always increase the churn

Operators’ www-pages, fact sheets and annual reports

Appendix 1. The www-pages of operators included in this study

Netherlands	KPN Mobile	www.kpn.com
	Vodafone	www.vodafone.nl
	T-Mobile	www.t-mobile.nl
	Telfort	www.telfort.nl
	Orange	www.orange.nl
Belgium	Belcacom Mobile	www.proximus.be
	Mobistar	www.mobistar.be
	Base	www.base.be
Great Britain	T-Mobile	www.t-mobile.co.uk
	O2	www.o2.co.uk
	Orange	www.orange.co.uk
	Vodafone	www.vodafone.co.uk
Spain	Telefonica Moviles	www.movistar.es
	Vodafone	www.vodafone.es
	Amena	www.amena.es
Ireland	Vodafone	www.vodafone.ie
	O2	www.02.ie
	Meteor	www.meteor.ie
Iceland	Iceland Telecom/Siminn	www.siminn.is
	Og Vodafone	www.vodafone.is
Italy	TIM	www.privati.tim.it
	Vodafone Omnitel	www.vodafone.it
	Wind	www.wind.it/it
Austria	Mobilkom	www.a1.net
	T-Mobile	www.t-mobile.at
	One	www.one.at
	Tele.ring	www.telering.at
Greece	Cosmote	www.cosmote.gr
	Vodafone	www.vodafone.gr
	TIM Hellas	www.tim.com.gr
	Q-Telecom	www.q-telecom.gr
Luxemburg	Mobilux	www.mobilux.lu
	Tele2	www.tango.lu/
Norway	Telenor Mobil	www.telenormobil.no
	NetCom	www.netcom.no
Portugal	TMN	www.tmn.pt
	Vodafone	www.vodafone.pt
	Optimus	www.optimus.pt
France	Orange	www.orange.fr
	SFR	www.sfr.fr
	Bouygues Telecom	www.bouyguestelecom.fr

Sweden	TeliaSonera	www.telia.se
	Tele2 Mobil	www.comviq.se
	Vodafone	www.vodafone.se
Germany	T-Mobile	www.t-mobile.de
	D2 Vodafone	www.vodafone.de
	E-Plus	www.eplus.de/
	O2	www.o2online.de
Finland	TeliaSonera	www.sonera.fi
	Elisa	www.elisa.fi
	DNA Finland	www.dnafinland.fi
Switzerland	Swisscom/Natel	www.swisscom-mobile.ch
	Sunrise	www. mobile.sunrise.ch
	Orange Comms	www.orange.ch
Denmark	TDC Mobile	www.tdcmobil.dk
	Sonofon	www.sonofon.dk
	Telia Mobile	www.teliamobile.dk

Appendix 2. List and information of operators included in this study

Country	Subscriptions	Operator	Operators' subscriptions 1)	Operators' market share
Netherlands	15,208,000	KPN Mobile	5,617,000	37
		Vodafone	3,475,000	23
		T-Mobile	2,263,000	15
		Telfort	2,139,000	14
		Orange	1,714,000	11
Belgium	8,601,000	Belcacom Mobile	4,284,000	50
		Mobistar	2,869,000	33
		Base	1,448,000	17
Great Britain	60,955,000	T-Mobile	15,845,000	26
		O2	14,297,000	23
		Orange	14,296,000	23
		Vodafone	13,807,000	23
Spain	38,490,000	Telefonica Moviles	19,032,000	49
		Vodafone	10,110,000	26
		Amena	9,348,000	24
Ireland	3,738,000	Vodafone	1,915,000	51
		O2	1,526,000	41
		Meteor	297,000	8
Iceland	293,300	Iceland Telecom/Siminn	200,300	68
		Og Vodafone	93,000	32
Italy	61,288,000	TIM	26,388,000	43
		Vodafone Omnitel	20,470,000	33
		Wind	11,630,000	19
Austria	7,890,000	Mobilkom	3,233,000	41
		T-Mobile	2,012,000	26
		One	1,508,000	19
		Tele.ring	927,000	12
Greece	10,405,000	Cosmote	4,127,000	40
		Vodafone	3,209,000	31
		TIM Hellas	2,330,000	22
		Q-Telecom	739,000	7
Luxembourg	574,900	Mobilux	378,000	66
		Tele2	197,000	34
Norway	4,207,000	Telenor Mobil	2,644,000	63
		NetCom	1,542,000	37
Portugal	10,668,000	TMN	5,030,000	47
		Vodafone	3,490,000	33
		Optimus	2,148,000	20
France	44,086,000	Orange	20,830,000	47
		SFR	15,810,000	36
		Bouygues Telecom	7,446,000	17
Sweden	9,709,000	TeliaSonera	4,284,000	44
		Tele2 Mobil	3,450,000	36
		Vodafone	1,505,000	16
Germany	68,603,000	T-Mobile	27,501,000	40
		D2 Vodafone	24,900,000	36
		E-Plus	8,692,000	13
		O2	7,510,000	11
Finland	4,956,000	TeliaSonera	2,874,000	58
		Elisa	1,388,000	28
		DNA Finland	694,000	14
Switzerland	6,339,000	Swisscom/Natel	4,000,000	63
		Sunrise	1,200,000	19
		Orange Comms	1,139,000	18
Denmark	5,148,000	TDC Mobile	2,417,000	47
		Sonofon	1,477,000	29
		Telia Mobile	1,119,000	22

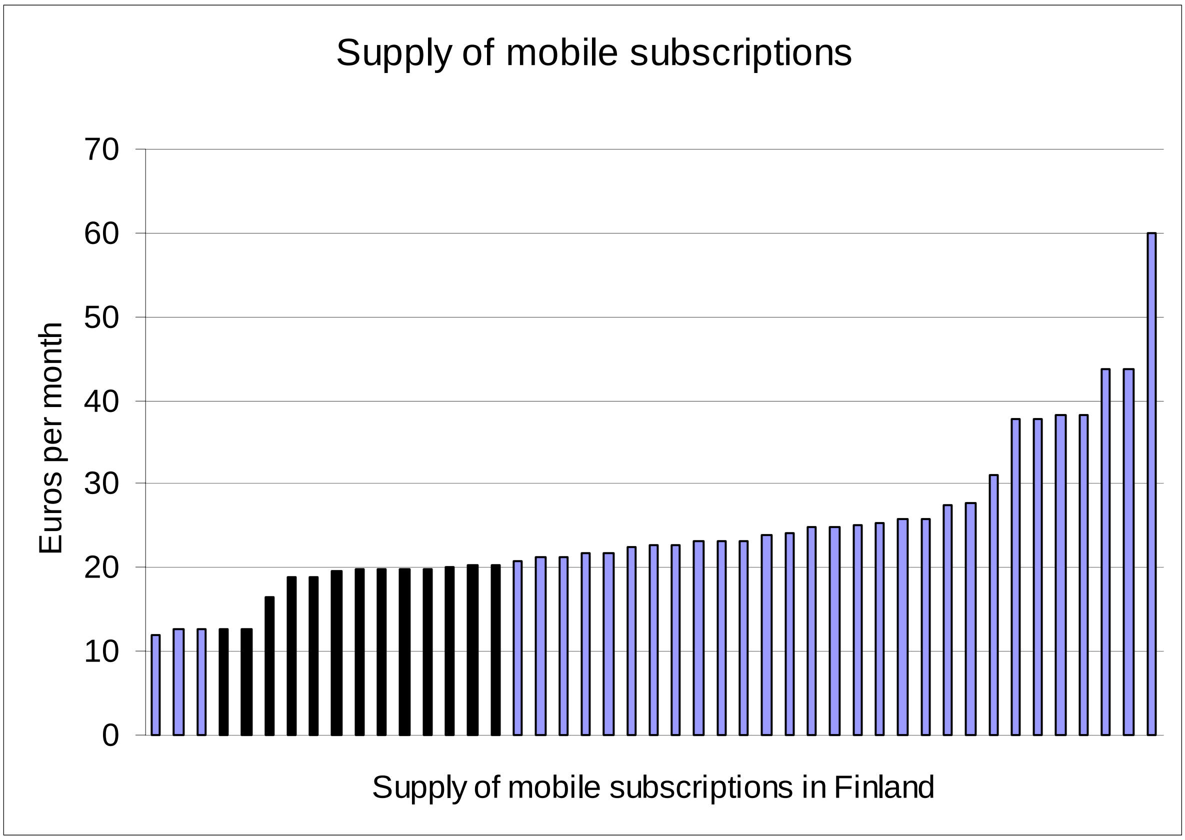
1) Number of connections mainly includes also virtual operators.
Source: Mobile Communications, March 15, Mobile Communications, March 23, 2005.

Appendix 3. Operators and subscriptions included in this study

Country	Operator	Chosen subscription 1)	Packet-pricing 2)	Starting fee 3)
Netherlands	KPN Mobile	Mobieplus	x	
	Vodafone	50	x	
	T-Mobile	Relax 50	x	x
	Telfort	Telfort 100	x	
	Orange	Free	x	x
Belgium	Belcacom Mobile	Proxi Fun		
	Mobistar	Optimum for me	x	
	Base	Postpaid 2	x	
Great Britain	T-Mobile	Relax 50	x	
	O2	Online 50	x	
	Orange	Any time any network	x	
	Vodafone	Anytime 100	x	
Spain	Telefonica Moviles	Plus eleccion tarde	x	x
	Vodafone	Universal 25	x	x
	Amena	Joven	x	x
Ireland	Vodafone	Perfect fit 100	x	
	O2	Five +	x	
	Meteor	Anytime Plus	x	
Iceland	Iceland Telecom/Siminn	Almenn		x
	Og Vodafone	Einn Simi		x
Italy	TIM	Flash TIM 24h		
	Vodafone Omnitel	Italy New		x
	Wind	Wind 10		x
Austria	Mobilkom	Xcite Remix		
	T-Mobile	Relax	x	
	One	All in ONE 2	x	
	Tele.ring	180	x	
Greece	Cosmote	150	x	
	Vodafone	120	x	
	TIM Hellas	130	x	
	Q-Telecom	Q1		
Luxembourg	Mobilux	Fresh		
	Tele2	Twist	x	
Norway	Telenor Mobil	Privat +		x
	NetCom	Activ Talk		x
Portugal	TMN	Spik 60	x	
	Vodafone	Plano Best	x	
	Optimus	Avantage	x	
France	Orange	Ffortait 2h	x	
	SFR	Formule Perso 2 h	x	
	Bouygues Telecom	Forfait integral 2H	x	
Sweden	TeliaSonera	Mobil 30		x
	Tele2 Mobil	Kväll	x	
	Vodafone	Fria 60	x	x
Germany	T-Mobile	Relax 100	x	
	D2 Vodafone	Fun		
	E-Plus	Time&More 100	x	
	O2	Genion	x	
Finland	TeliaSonera	One		
	Elisa	Aina Plus		
	DNA Finland	Onni		
Switzerland	Swisscom/Natel	Swiss		
	Sunrise	75	x	
	Orange Comms	Optima 100	x	
Denmark	TDC Mobile	MobilExtra 100	x	x
	Sonofon	Debillos		x
	Telia Mobile	Telia Go		x

1) Connection chosen is the one, which fills out the criteria of cheapest connection.
2) Monthly subscription fee includes calls, SMS text messages or the fee is compensated in billing.
3) Prices when starting a call.
Source: Mobile Communications, March 15, Mobile Communications, March 23, 2005.

Appendix 4. An example of Finnish subscription supply in April 2005



Usage per month: 150 minutes, 50 calls, 25 SMS.

Subscriptions of the Finnish price basket are presented in the marked area. Alternatives shown in the figure include also different kinds of packet offerings, which are ment to heavier use than the chosen criteria represents.

(Source: www.vaihtovirta.fi, April 2005)

Appendix 5. The number of pre-paid subscriptions in the target countries

Country	All mobile subscriptions	Share of pre-paid in each country, %	Operator	Share of pre-paid in each operator, %	Included within the pre-paid price comparison	Subscription type
Netherlands	15,208,000	64	KPN Mobile	64	x	KPN PrePay
Netherlands			Vodafone	56		
Netherlands			T-Mobile	60		
Netherlands			Telfort	75		
Netherlands			Orange	70		
Belgium	8,601,000	65	Belcacom Mobile	59		
Belgium			Mobistar	65		
Belgium			Base	80		
Great Britain	60,955,000	65	T-Mobile	58		
Great Britain			O2	67		
Great Britain			Orange	66		
Great Britain			Vodafone	81	x	Smartplus
Spain	38,490,000	53	Telefonica Moviles	51	x	Activa Total
Spain			Vodafone	54		
Spain			Amena	54		
Ireland	3,738,000	74	Vodafone	72		
Ireland			O2	74		
Ireland			Meteor	90		
Iceland	293,300	45	Iceland Telecom/Siminn	45		
Iceland			Og Vodafone	46		
Italy	61,288,000	80	TIM	75	x	Prepagado
Italy			Vodafone Omnitel	92		
Italy			Wind	90		
Austria	7,890,000	45	Mobilkom	46		
Austria			T-Mobile	58		
Austria			One	44		
Austria			Tele.ring	21		
Greece	10,405,000	66	Cosmote	61	x	Cosmote basic
Greece			Vodafone	66		
Greece			TIM Hellas	65		
Greece			Q-Telecom	95		
Luxembourg	574,900	57	Mobilux	ei tietoa		
Luxembourg			Tele2	57		
Norway	4,207,000	46	Telenor Mobil	47		
Norway			NetCom	45		
Portugal	10,668,000	81	TMN	84	x	Mimo
Portugal			Vodafone	74		
Portugal			Optimus	85		
France	44,086,000	38	Orange	38	x	Classique
France			SFR	39		
France			Bouygues Telecom	33		
Sweden	9,709,000	57	TeliaSonera	54	x	Telia Refill
Sweden			Tele2 Mobil	75		
Sweden			Vodafone	39		
Germany	68,603,000	50	T-Mobile	52	x	XtraGO
Germany			D2 Vodafone	50		
Germany			E-Plus	51		
Germany			O2	44		
Finland	4,956,000	5	TeliaSonera	2		
Finland			Elisa			
Finland			DNA Finland	24	x	DNA Prepaid
Switzerland	6,339,000	34	Swisscom/Natel	37		
Switzerland			Sunrise	30		
Switzerland			Orange Comms	30		
Denmark	5,148,000	32	TDC Mobile	28		
Denmark			Sonofon	36		
Denmark			Telia Mobile	41		

Sources: Mobile Communications, March 15, 2005, Mobile Communications, March 23, 2005.