



COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 24.3.2009
SEC(2009) 376

VOLUME 2

COMMISSION STAFF WORKING DOCUMENT

ANNEX TO THE

**COMMUNICATION FROM THE COMMISSION TO THE EUROPEAN
PARLIAMENT, THE COUNCIL, THE EUROPEAN ECONOMIC AND SOCIAL
COMMITTEE AND THE COMMITTEE OF THE REGIONS**

**PROGRESS REPORT ON THE SINGLE EUROPEAN ELECTRONIC
COMMUNICATIONS MARKET 2008 (14th REPORT)**

{COM(2009) 140 final}

ANNEX 2

MARKET OVERVIEW

METHODOLOGICAL NOTE

The main sources for the data presented in this Annex are National Regulatory Authorities (NRAs), exceptions are noted. A validation meeting with representatives from NRAs took place in November 2008. Furthermore, draft versions of the charts in this annex (excluding data on tariffs) were distributed to the NRAs before this report was finalised for their comments.

The source for the population figures is Eurostat.

The source for the exchange rates is the European Central Bank. Prices are portrayed in euros in current prices. Purchase power parity methodology is, in principle, not used for the specific objective of this Report.

In each Report figures from previous years are revised, therefore the figure for a certain date may diverge from previous Reports.

Precisely:

Figures about the market in sections 1 (mobile interconnection, mobile operators, mobile number portability), 2 (fixed market, fixed number portability), 3 (prices for LLU), 4 (bundled offers), and 5 (broadcasting) were provided by the National Regulatory Authorities (NRAs) in response to a questionnaire on regulatory market data sent by the Commission in July 2008. Data on mobile subscribers (section 1) refer to October 2008 and come from the NRAs unless otherwise specified.

Data in section 3 on broadband access are provided by the NRAs and the national ministries through the Electronic Communications Committee (COCOM). Data have been collected from July 2002 to July 2007 three times a year, in January, June and October, whereas from July 2007 onwards they will be collected in January and July only. The latest figures in this report refer to 1 January 2009 unless otherwise specified.

Price information in sections 1 (mobile tariffs), 2 (PSTN tariffs) and 6 (retail leased lines prices) and partly in section 3 is taken from a study carried out for the Commission by Telingen, Strategy Analytics Ltd. These data are collected from primary sources (i.e. directly from the incumbent operators and new entrants) and checked by the NRAs.

TABLE OF CONTENTS

1. MOBILE MARKET	14
1.1. MOBILE PENETRATION	12
1.2. PLAYERS IN THE MOBILE MARKET	17
1.3. MOBILE OPERATORS' MARKET SHARES	20
1.4. MOBILE NUMBER PORTABILITY	23
1.5. MOBILE TARIFFS	25
1.6. CALL TERMINATION ON MOBILE NETWORKS	37
2. FIXED MARKET	44
2.1. PLAYERS IN THE FIXED MARKET	41
2.2. INCUMBENTS' MARKET SHARE IN THE FIXED VOICE TELEPHONY MARKET	45
2.3. CONSUMERS' CHOICE OF FIXED OPERATORS	57
2.4. FIXED NUMBER PORTABILITY	65
2.5. PUBLIC VOICE TELEPHONY TARIFFS	68
2.6. CALL TERMINATION ON INCUMBENT'S FIXED NETWORK	96
2.7. CALL TERMINATION ON ALTERNATIVE OPERATORS' FIXED NETWORKS	100
3. BROADBAND ACCESS AND PRICING	104
3.1. BROADBAND ACCESS DEFINITIONS	101
3.2. WHOLESALE ACCESS	103
3.3. RETAIL FIXED BROADBAND ACCESS	104
3.4. PRICES FOR UNBUNDLED LOCAL LOOP	121
4. CONVERGED SERVICES - BUNDLED OFFERS	130
5. BROADCASTING	133
6. LEASED LINES RETAIL TARIFFS	136
6.1. INCUMBENTS' NATIONAL LEASED LINES	134
6.2. NATIONAL LEASED LINES PRICE TRENDS (1 AUGUST 1998 - 15 SEPTEMBER 2008)	139
7. EXCHANGE RATES AND POPULATION	142
7.1. EXCHANGE RATE USED FOR 2007 DATA	141
7.2. EXCHANGE RATE USED FOR RETAIL TARIFFS	143
7.3. POPULATION	145

7.4. POPULATION BROADBAND DATA (SECTION 3)	146
8. OECD TELECOMMUNICATIONS BASKET DEFINITIONS	145
8.1. COMPOSITE NATIONAL – INTERNATIONAL BASKET	147
8.2. NEW OECD BASKETS FOR PSTN 2006	149
8.3. INTERNATIONAL PSTN BASKET	150
8.4. OECD MOBILE BASKETS	152

TABLE OF FIGURES

Figure 1: Telecom Revenue and Investment over GDP, 2007	8
Figure 2: Total Investment variation and revenues variation	10
Figure 3: Mobile subscribers penetration in the EU	12
Figure 4: Mobile penetration by subscribers map 2008	13
Figure 5: Mobile subscribers and penetration rate 2008	14
Figure 6: Mobile penetration rate 2007-2008 by Member State	14
Figure 7: Mobile subscribers: prepaid and monthly paid split 2008	16
Figure 8	17
Figure 9: Mobile network operators 2008	18
Figure 10: UMTS licences, July 2008	18
Figure 11: UMTS operators offering commercial services, July 2008	20
Figure 12: EU average mobile operators market share	21
Figure 13: Market share of the leading operator in the market, October 2008	22
Figure 14: Mobile market share based on subscribers, October 2008	23
Figure 15: Mobile ported numbers and price per number ported. Time taken for mobile portability, October 2008	24
Figure 16: Percentage of Mobile ported numbers over total mobile subscribers, October 2008	25
Figure 17: Low usage basket post-paid	28
Figure 18: Low usage basket pre & post-paid	28
Figure 19: Medium usage basket post-paid	30
Figure 20: Medium usage basket pre & post-paid	30
Figure 21: High usage basket post-paid	32
Figure 22: High usage basket pre & post-paid	32
Figure 23: Average 2006-2008 Low usage basket post-paid	34
Figure 24: Average 2006-2008 Low usage basket pre & post-paid	34
Figure 25: Average 2006-2008 Medium usage basket post-paid	35
Figure 26: Average 2006-2008 Medium usage basket pre & post-paid	35
Figure 27: Average 2006-2008 High usage basket post-paid	36
Figure 28: Average 2006-2008 High usage basket pre & post-paid	36
Figure 29: EU average interconnection charges for call termination on mobile networks	38
Figure 30: Interconnection charges for call termination on mobile networks	38
Figure 31: Interconnection charges for call termination on mobile networks (peak)	39
Figure 32: Estimated number of fixed operators offering publicly available telephony services in the EU, 2008	42
Figure 33: Estimated number of fixed operators actually offering public voice telephony 2008	43
Figure 34: Estimated number of VoIP operators actually offering public voice telephony 2008	44
Figure 35: EU incumbents' overall average market share on the fixed voice telephony market (all types of calls)	45
Figure 36: EU incumbents' average market share on the voice telephony market (based on retail revenues)	46
Figure 37: Fixed telephony market concentration (Herfindahl-Hirschman Index), 2007	47
Figure 38: Map of the fixed incumbents' revenues market share in the EU	48
Figure 39: Incumbent market share in the fixed telephony market	49
Figure 40: Incumbents' market share in the national fixed telephony market by retail revenue and minutes of traffic	51
Figure 41: Incumbents' market share in the international calls market (by revenues)	53
Figure 42: Incumbents' market share in the fixed telephony market (calls to mobile) by retail revenue and minutes of traffic	55

Figure 43: Market share of VoIP operators on the basis of volume of traffic 2007	56
Figure 44: EU subscribers using an alternative provider	58
Figure 45: Subscribers using the Incumbent for direct access, 2008: Subscribers using an alternative provider for direct access, July 2007	60
Figure 46: Number of alternative operators offering public voice telephony through direct access, 2008	61
Figure 47: Number of alternative operators using full unbundled local loop as a % of active alternative operators, July 2008	62
Figure 48: Number of alternative operators using shared access as a % of active alternative operators, July 2008	63
Figure 49: Number of operators using proprietary infrastructure as a % of alternative operators, July 2008	64
Figure 50: Fixed ported numbers and price per number ported, October 2008	66
Figure 51 Residential monthly rental	69
Figure 52: Business monthly rental: Business monthly rental	70
Figure 53: Residential rental per month	70
Figure 54: Business rental per month	70
Figure 55: Average monthly expenditure (composite basket) residential users	74
Figure 56: Average monthly expenditure (composite basket) business users	74
Figure 57: OECD baskets for PSTN, 2008. Low usage residential basket	75
Figure 58: OECD baskets for PSTN, 2008. Medium usage residential basket	75
Figure 59: OECD baskets for PSTN, 2008. High usage residential basket	77
Figure 60: OECD baskets for PSTN, 2008. SOHO business basket	77
Figure 61: OECD baskets for PSTN, 2008. SME business basket	78
Figure 62: OECD Residential composite basket	79
Figure 63: OECD Business composite basket	80
Figure 64: EU composite basket development	81
Figure 65: Average price for an international call, residential user	82
Figure 66: Average price for an international call, business user	82
Figure 67: EU 27 international basket development	83
Figure 68: Local call charge, 3 min	84
Figure 69: Local call charge, 10 min	85
Figure 70: National call charge, 3 min	85
Figure 71: National call charge, 10 min	86
Figure 72: Local and National call charge, 3 min, EU27 weighted average	86
Figure 73: Local and National call charge, 10 min, EU27 weighted average	87
Figure 74: 3 min calls, incumbent and competitor's price	89
Figure 75: 10 min local calls, incumbent and competitor's price	89
Figure 76: 3 min national calls, incumbent and competitor's price	90
Figure 77: 10 min national calls, incumbent and competitor's price	90
Figure 78: 10 min call to near EU country	92
Figure 79: 10 min call to distant EU country	92
Figure 80: 10 min call to USA	93
Figure 81: 10 min call to Japan	93
Figure 82: 10 min call to near EU country, incumbent's and competitor price	94
Figure 83: 10 min call to distant EU country, incumbent's and competitor price	95
Figure 84: 10 min call to USA, incumbent and competitor's price	95
Figure 85: 10 min call to Japan, incumbent and competitor's price	96
Figure 86: EU fixed interconnection charges for call termination on incumbents' network, EU weighted average	97

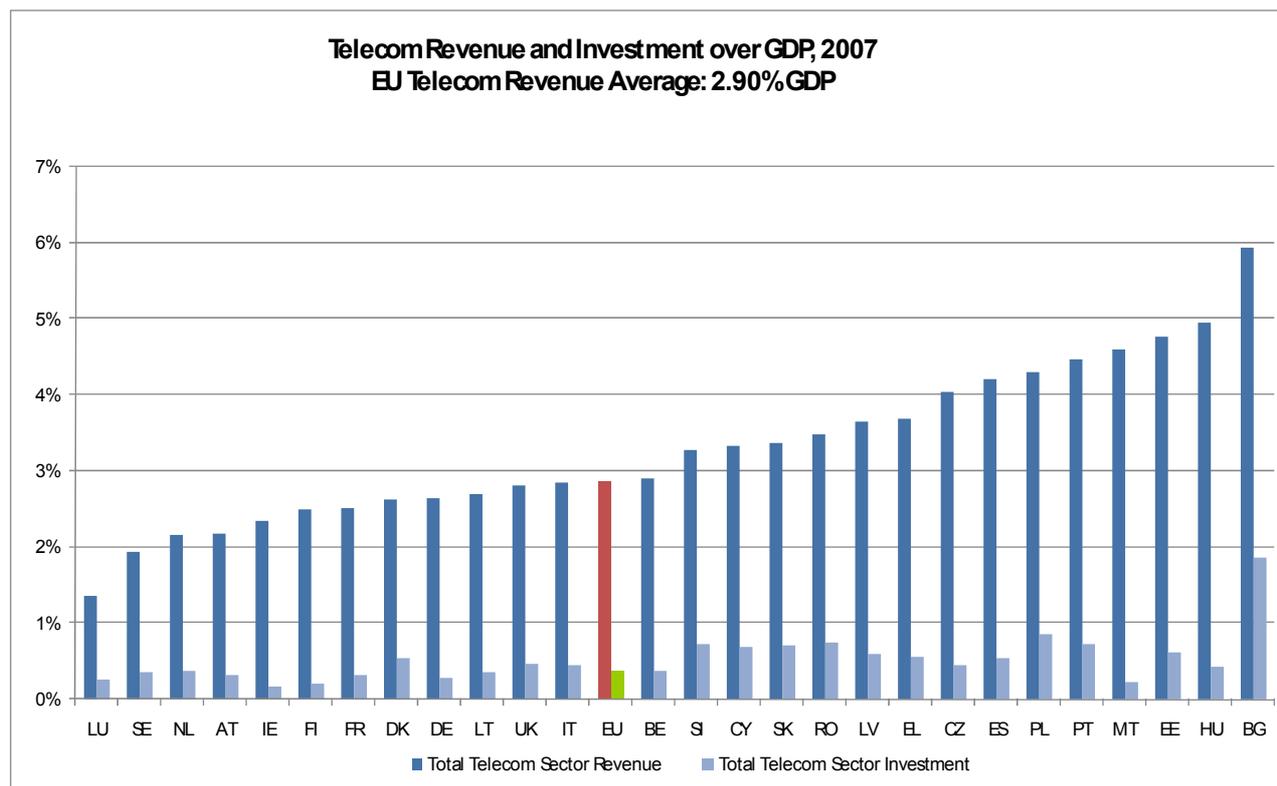
Figure 87: Interconnection charges for terminating calls on Incumbents' fixed network, local level, October 2008	97
Figure 88: Interconnection charges for terminating calls on Incumbents' fixed network, single transit, October 2008	98
Figure 89: Interconnection charges for terminating calls on Incumbents' fixed network, double transit, October 2008	99
Figure 90: call termination in main alternative fixed networks 2008	100
Figure 91: Number of lines and agreements for fully unbundled local loop, shared access, bitstream access and resale on 1 January 2009	103
Figure 92: Number of fixed broadband lines by operator and technology on 1 January 2009	105
Figure 93: EU fixed broadband lines by Member States, January 2009	106
Figure 94: Total fixed broadband retail lines	107
Figure 95: Total DSL retail lines	109
Figure 96: Total fixed broadband retail lines with technologies other than DSL	109
Figure 97: Fixed broadband lines by technology (January 2009)	110
Figure 98: Fixed broadband access lines by operator (January 2009)	111
Figure 99: Incumbent's broadband market share excluding/including resale lines of alternative operators (January 2009)	111
Figure 100: DSL access lines per operator (January 2009)	111
Figure 101: Trends in the fixed broadband retail lines market share: New entrants	112
Figure 102: Trends in DSL retail lines market share: New entrants	112
Figure 103: Trends in the DSL retail lines as % of total broadband access lines	114
Figure 104: EU broadband penetration rate (January 2009)	114
Figure 105: Fixed broadband lines by speeds in the EU by country	115
Figure 106 EU countries by speeds – retail fixed broadband lines	116
Figure 107 EU countries by speeds – retail fixed broadband lines	117
Figure 108 Retail mobile broadband lines in the EU by country	118
Figure 109 EU countries by number of mobile broadband lines (active users/subscribers)	119
Figure 110 EU countries by number of mobile broadband users per 100 population	119
Figure 111 EU countries by number of dedicated data service cards/modems/keys per 100 population	119
Figure 112: LLU monthly average total cost in EU (October 2008)	121
Figure 113: Monthly average total cost in EU for full LLU (October 2008)	123
Figure 114: Monthly average total cost for shared access, October 2008	123
Figure 115: Prices per full unbundled loop - connection	124
Figure 116: Prices per full unbundled loop – monthly rental	125
Figure 117: Prices per shared access – Connection	126
Figure 118: Prices per shared access – monthly rental	127
Figure 119: Bundled offer subscribers as a % of population 2008	129
Figure 120: Bundled offer per type as % of population, 2008	130
Figure 121: Bundled offer operators, 2008	131
Figure 122: Number of TV connections as % of population, July 2008	132
Figure 123: Number of IPTV subscriptions as % with the population, July 2008	133
Figure 124: Prices for 2M/s, 2 km circuits	136
Figure 125: Prices for 2MB/s, 200 km circuits	136
Figure 126: Prices for 34 Mb/s, 2 km circuits	137
Figure 127: Prices for 34 Mb/, 200 km circuits	137
Figure 128: EU average price variation since 1998, 2Mb/s	139
Figure 129: EU average price variation since 1998, 34 Mb/s	139

INTRODUCTION: MARKET INDICATORS

In this introduction, for the first time some economic indicators in the market are presented.

The first graph is the telecom revenue and investment over GDP (constant prices) for 2007 in the EU. The total telecom sector revenue for 2007 represents 3% of the European GDP at constant prices for 2007. Investment in the telecom sector represents 14.74% of the revenues in the market. Alternative fixed operators are responsible of 45.78% of the investment in the fixed market. The fixed market accounts for 58% of the total investment in the sector while it accounts for 49% of the market in terms of revenues.

Figure 1: Telecom Revenue and Investment over GDP, 2007



Belgium: Change in revenues definition compared to last year: resellers are also included

Change in investment definition compared to last year: resellers are also included

Bulgaria: Total Revenue from Fixed market revenue from ADSL is not included

Investment by alternative operators Investments in payphones are included

Denmark: Total investment: Incumbent incl. Subsidiaries. Regarding investment by mobile operators, the companies undertaking tangible investments are involved in other activities than mobile communication and hence by our definition the investments cannot be confined to the market of mobile communication. Furthermore the provided figure comprises only TDC, Sonofon, Telia and Hi3G i.e. the companies who own a mobile network thereby excluding service providers.

Greece: 'Total revenue from fixed market' is defined as the total revenue (receipts and payments)

Investments: 'Total value of tangible investments in telecommunication networks' denotes the total gross investment

Ireland: The data that ComReg supplied was a limited sample as mentioned in the questionnaire and does not reflect total investment in the market.

Luxembourg: SEE Rapport stat. Annual 2007 at www.ilr.lu for definitions. Investment figures: provisional values.

The Netherlands: Total Revenue from Fixed market excluding all broadcast revenues (cable, satellite, terrestrial, IpTV together was 1.063). Investment: OECD estimates.

Austria: Total Revenue from Fixed market revenues from leased lines and interconnection services included. Total Revenue from Mobile market revenues from interconnection services and international roaming included

Investments in acquiring property (land and building) not included

Portugal: Investment figures for alternative and mobile operators are estimates. Total revenue from fixed market does not include leased lines services and internet services provision (ADSL, cable modem, etc.)

Poland: turnover in the telecommunications sector not available: only data concerning the total revenues from telecommunications activity.

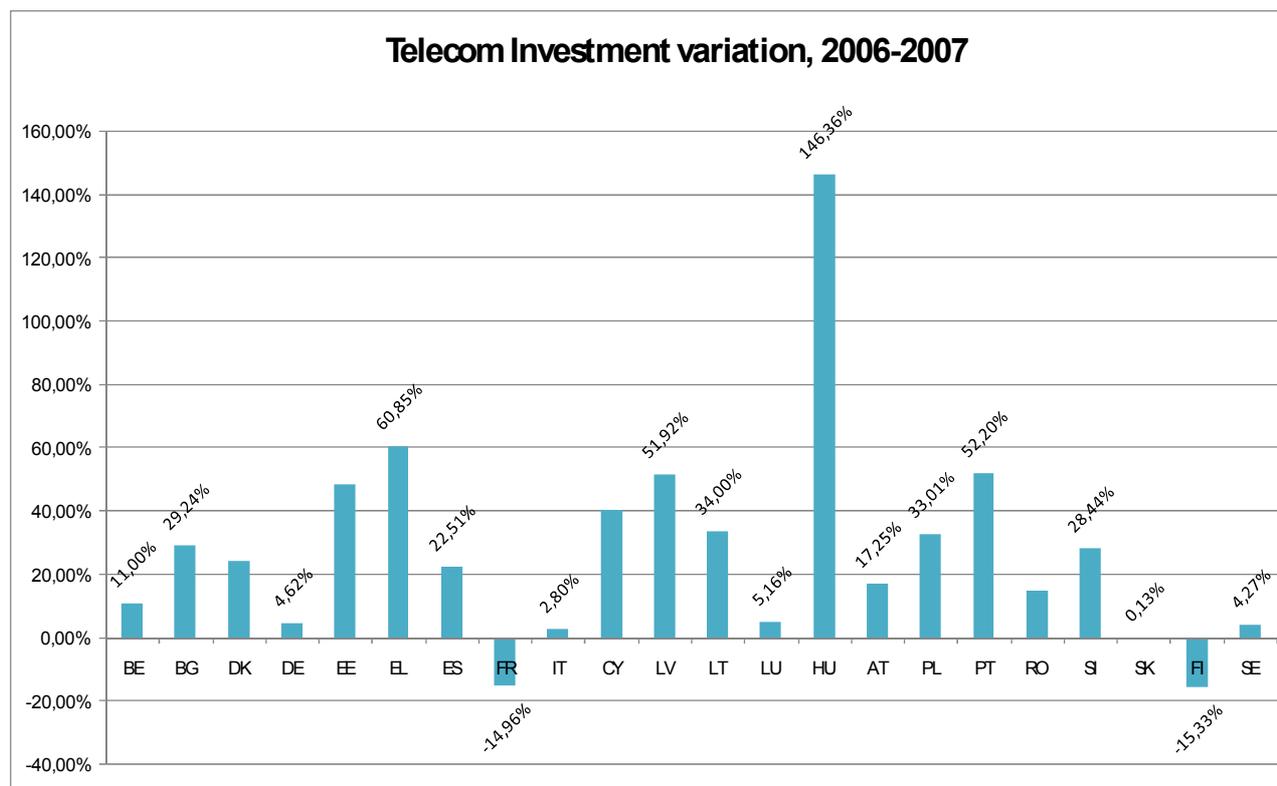
Finland Statistics Finland

Sweden: Turnover of the telecommunication sector includes revenues from end-users of fixed call services, mobile call services, Internet services, data communications services and mobile data traffic and MMS as well as revenues from interconnections in fixed and mobile networks and data communication services to operator. Revenues from TV-services are not included.

United Kingdom : Total Revenue from Fixed market: Revenues from services for which Ofcom collects data - includes retail and wholesale revenues; The Office for National Statistics estimates telecoms revenue at £61.5bn; data not comparable to that submitted previously as it no longer includes an estimate of non-regulated retail turnover (which contributed £10.0bn in the figures submitted for 2006); data are as appears in Ofcom's 2008 Uk Communications Market Report and is for the calendar year 2007.

Investments: OECD estimates

Figure 2: Total Investment variation and revenues variation



Belgium: Change in investment definition compared to last year: resellers are also included

Bulgaria: Investment by alternative operators Investments in payphones are included

Denmark: Total investment: Incumbent incl. Subsidiaries. Regarding investment by mobile operators, the companies undertaking tangible investments are involved in other activities than mobile communication and hence by our definition the investments cannot be confined to the market of mobile communication. Furthermore the provided figure comprises only TDC, Sonofon, Telia and Hi3G i.e. the companies who own a mobile network thereby excluding service providers.

Greece: 'Total value of tangible investments in telecommunication networks' denotes the total gross investment

Ireland: The data that ComReg supplied was a limited sample as mentioned in the questionnaire and does not reflect total investment in the market.

Luxembourg: Investment figures: provisional values.

The Netherlands: OECD estimates.

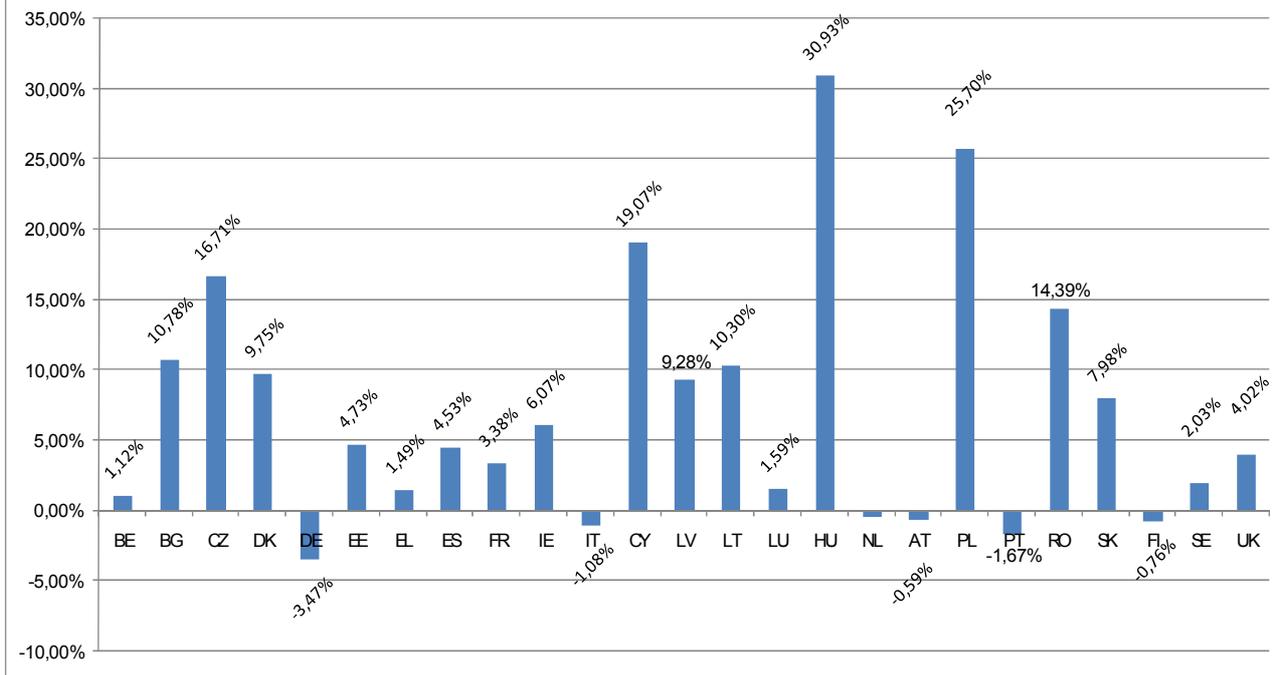
Austria: Investments in acquiring property (land and building) not included

Portugal: Investment figures for alternative and mobile operators are estimates.

Finland Statistics Finland

United Kingdom : Investments: OECD estimates

Telecom Revenues variation, 2006-2007



Belgium: Change in revenues definition compared to last year: resellers are also included

Bulgaria: Total Revenue from Fixed market revenue from ADSL is not included

Denmark: Total investment: Incumbent incl. Subsidiaries. Regarding investment by mobile operators, the companies undertaking tangible investments are involved in other activities than mobile communication and hence by our definition the investments cannot be confined to the market of mobile communication. Furthermore the provided figure comprises only TDC, Sonofon, Telia and Hi3G i.e. the companies who own a mobile network thereby excluding service providers.

Greece: 'Total revenue from fixed market' is defined as the total revenue (receipts and payments)

Ireland: The data that ComReg supplied was a limited sample as mentioned in the questionnaire and does not reflect total investment in the market.

Luxembourg: SEE Rapport stat. Annual 2007 at www.ilr.lu for definitions.

The Netherlands: Total Revenue from Fixed market excluding all broadcast revenues (cable, satellite, terrestrial, IpTV together was 1.063).

Austria: Total Revenue from Fixed market revenues from leased lines and interconnection services included. Total Revenue from Mobile market revenues from interconnection services and international roaming included

Portugal: Total revenue from fixed market does not include leased lines services and internet services provision (ADSL, cable modem, etc.)

Poland: turnover in the telecommunications sector not available: only data concerning the total revenues from telecommunications activity.

Finland Statistics Finland

Sweden: Turnover of the telecommunication sector includes revenues from end-users of fixed call services, mobile call services, Internet services, data communications services and mobile data traffic and MMS as well as revenues from interconnections in fixed and mobile networks and data communication services to operator. Revenues from TV-services are not included.

United Kingdom : Total Revenue from Fixed market: Revenues from services for which Ofcom collects data - includes retail and wholesale revenues; The Office for National Statistics estimates telecoms revenue at £61.5bn; data not comparable to that submitted previously as it no longer includes an estimate of non-regulated retail turnover (which contributed £10.0bn in the figures submitted for 2006); data are as appears in Ofcom's 2008 Uk Communications Market Report and is for the calendar year 2007.

1. MOBILE MARKET

This section provides information on the number of mobile subscribers and the penetration rate for mobile telephony services. It also shows the number of both mobile network operators and mobile service providers as well as the market share of the main players in each Member State.

1.1. MOBILE PENETRATION

This section provides information on the number of mobile subscribers and the penetration rate for mobile telephony services in each Member State. The growth in the penetration rate since October 2004 is also shown.

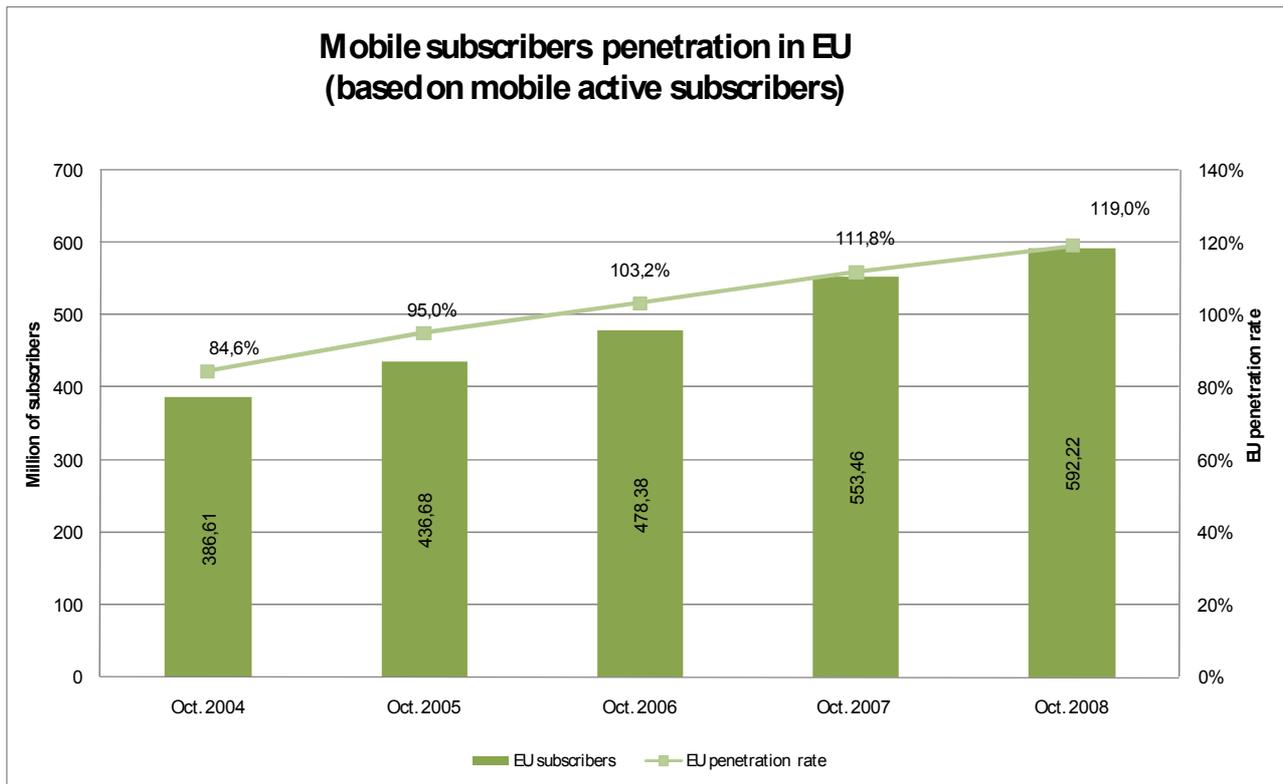
Where available, data have been provided by the National Regulatory Authorities (NRAs).

The EU average is a weighted average by the number of subscribers.

It should be noted that operators and regulators use different methods to count the number of subscribers. Some regulators distinguish between the overall number of mobile subscribers and the number of active subscribers. The table indicates where this information is available. Some operators consider the total number of users that have made or received a call or sent an SMS in the last 9 or 6 months, whereas others only consider the active users of the last 3 months. This has an impact on the penetration rate, especially in small countries

The chart below displays the number of mobile subscribers in the EU between 2004 and 2008. In October 2008 there were around 592.22 million mobile subscribers, with an increase of around 40 million since October 2007 (+15.69%). Penetration rate is 119% of EU population (+7.2 percentage points since last year).

Figure 3: Mobile subscribers penetration in the EU



Data include 2G and 3G mobile network operators' subscribers as well as mobile service providers' subscribers. Data are not comparable with previous reports (updated figures for previous years have been provided by some NRAs).

The following map shows the mobile penetration rate in the EU countries and the next chart shows the absolute number of mobile subscribers in each Member States (columns) and the penetration rate (dots), measured as the number of

subscribers per 100 inhabitants. Where available figures include 2G and 3G subscribers for both mobile network operators and mobile service providers.

Penetration rate is above 100% in 23 Member States; Italy (152%), Lithuania (149%) and Latvia (142%) have the highest values.

Figure 4: Mobile penetration by subscribers map 2008

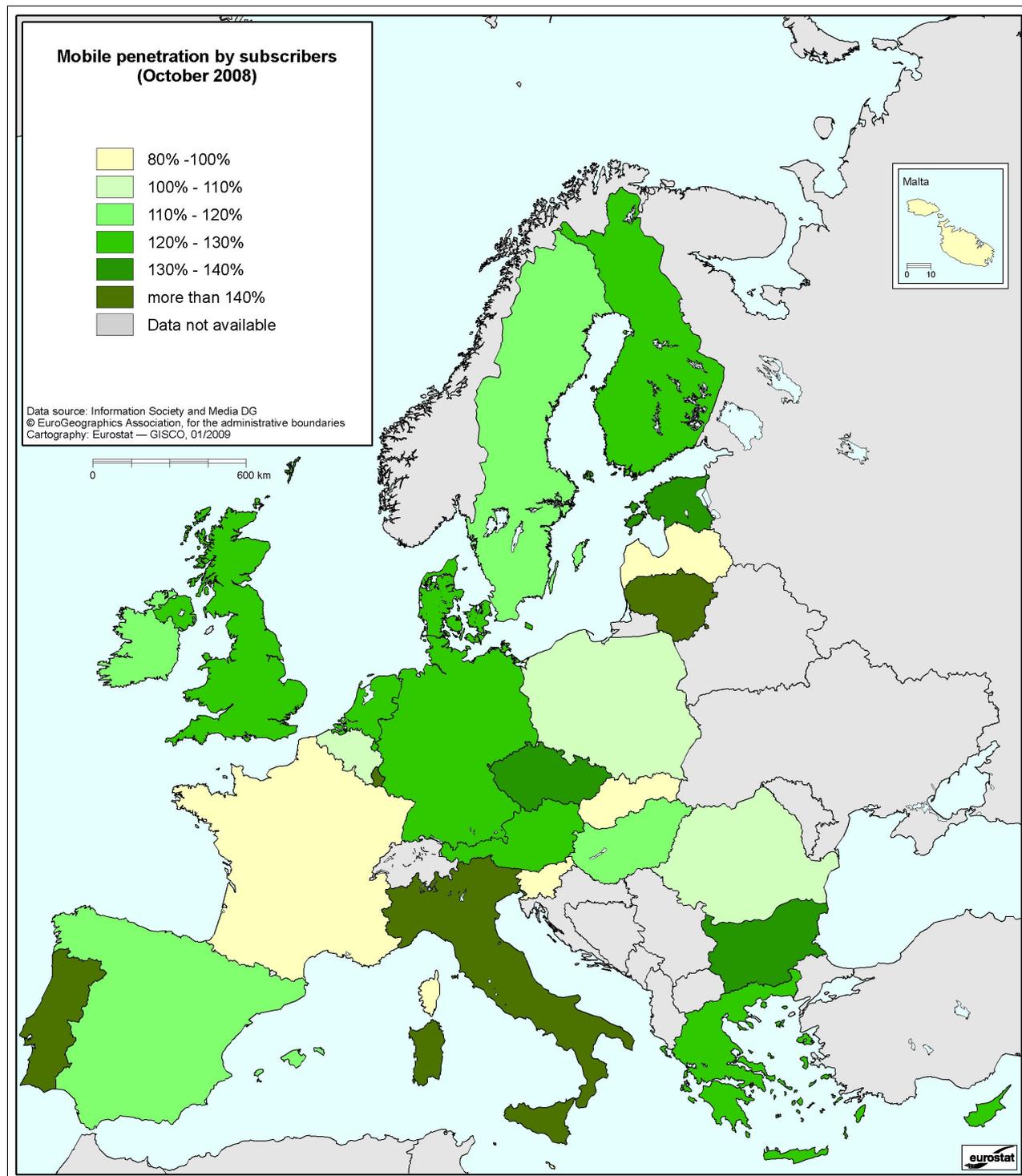
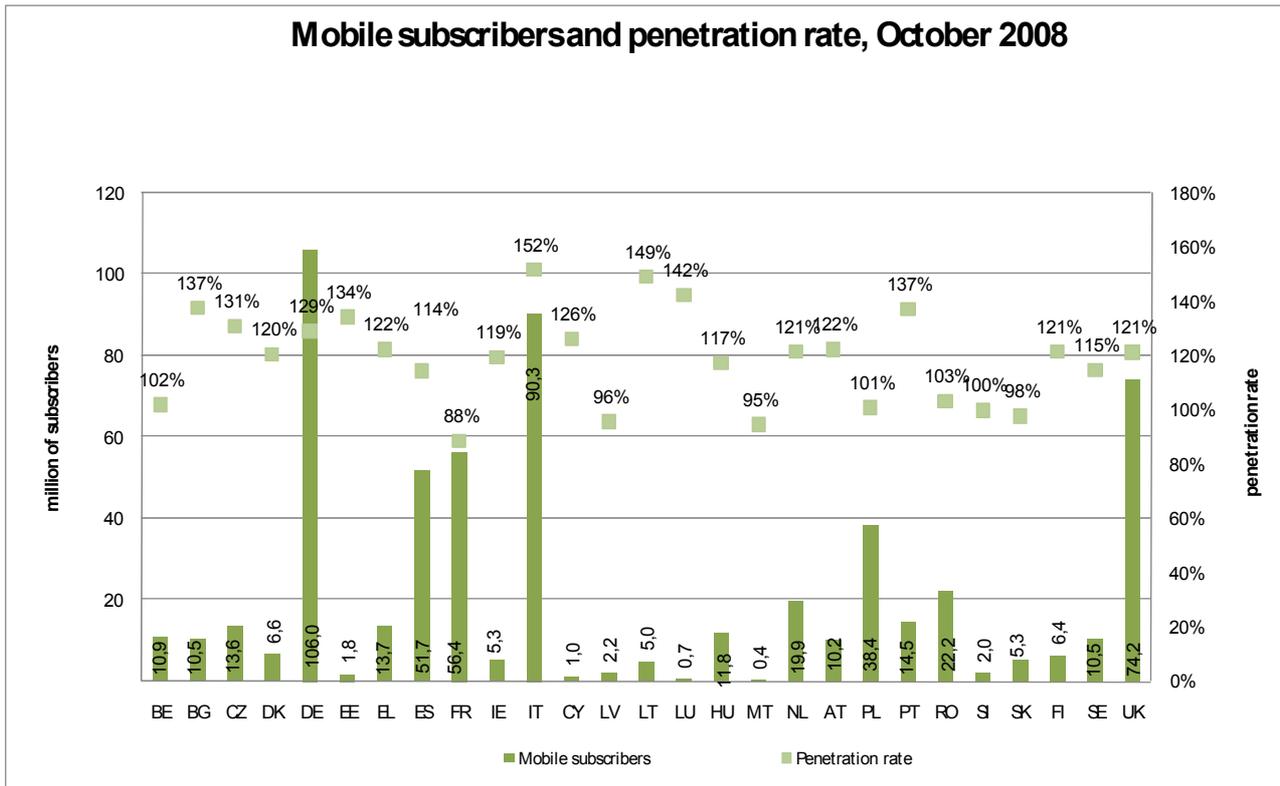


Figure 5: Mobile subscribers and penetration rate 2008



Austria: numbers as of 30.06.2008

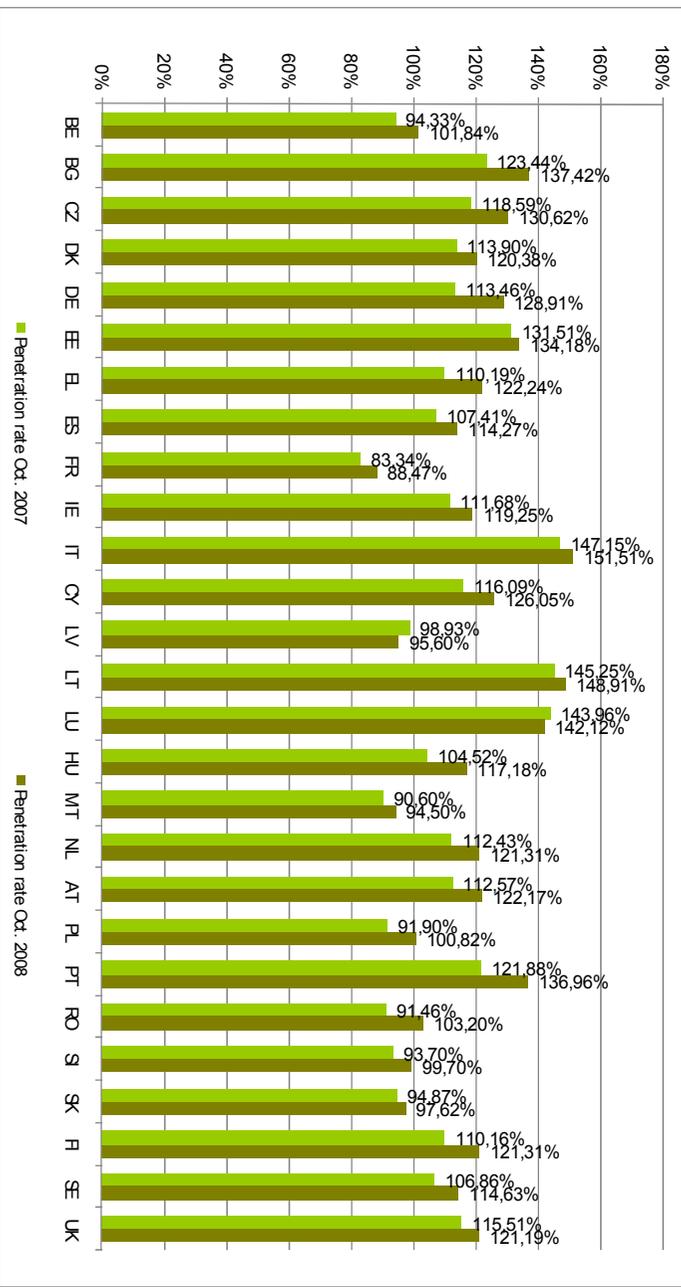
Finland: amount of subscriptions on 30.6.2008

United Kingdom: Data as of July 2008

The following chart displays for each Member State the growth of the mobile penetration rate between October 2007 and October 2008, unless otherwise indicated. Penetration rate has grown significantly in Germany (+15 percentage points (p.p.)), Portugal (+15 percentage points (p.p.)), and Bulgaria (around +14 p.p.).

Figure 6: Mobile penetration rate 2007-2008 by Member State

Mobile penetration rate (based on mobile active subscribers) 2007-2008



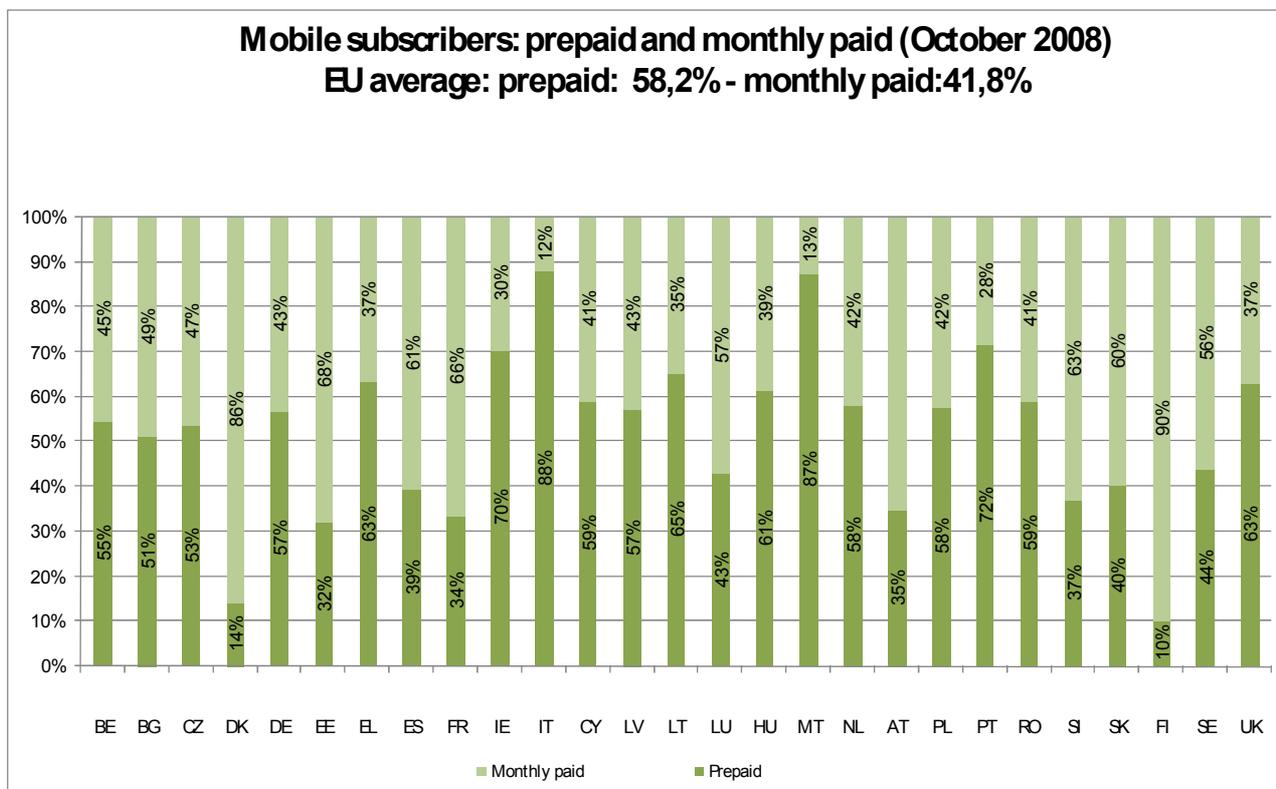
Austria: numbers as of 30.06.2008

Finland: amount of subscriptions on 30.6.2008

United Kingdom: Data as of July 2008

The following chart shows, for each Member State split between post-paid and pre-paid subscribers. At EU level, 58.2% of subscribers use a pre-paid system. In four countries pre-paid subscribers are more than 70% and in Italy and Malta they are above 85%.

Figure 7: Mobile subscribers: prepaid and monthly paid split 2008



Austria: numbers as of 30.06.2008

Finland: amount of subscriptions on 30.6.2008

United Kingdom: Data as of July 2008

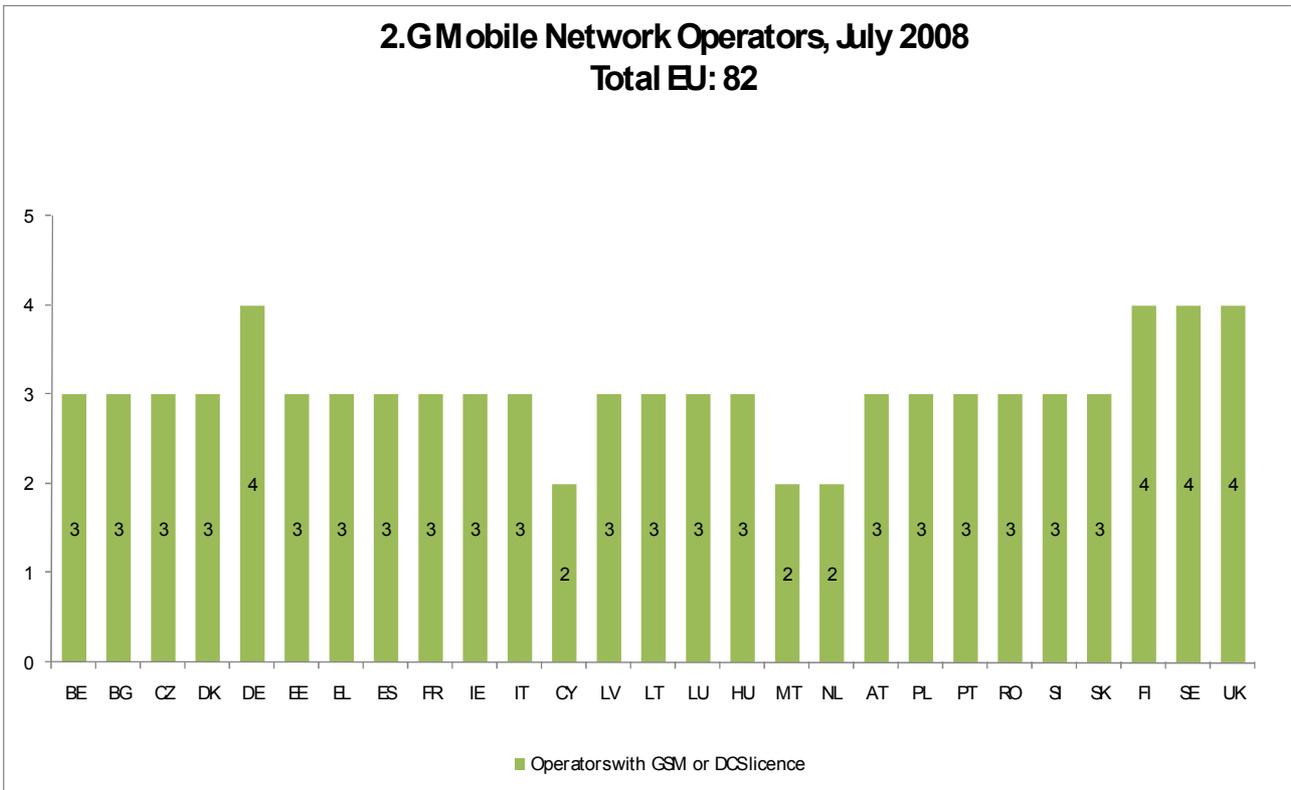
1.2. PLAYERS IN THE MOBILE MARKET

This section shows the number of mobile licenses granted in each Member State for the provision of mobile services (2G/3G mobile network operators and mobile service providers). License for analogue mobile service are not phased out in Poland (phasing out: 17-12-2016).

Data have been provided by the national regulatory authorities and refer to the situation in July 2008.

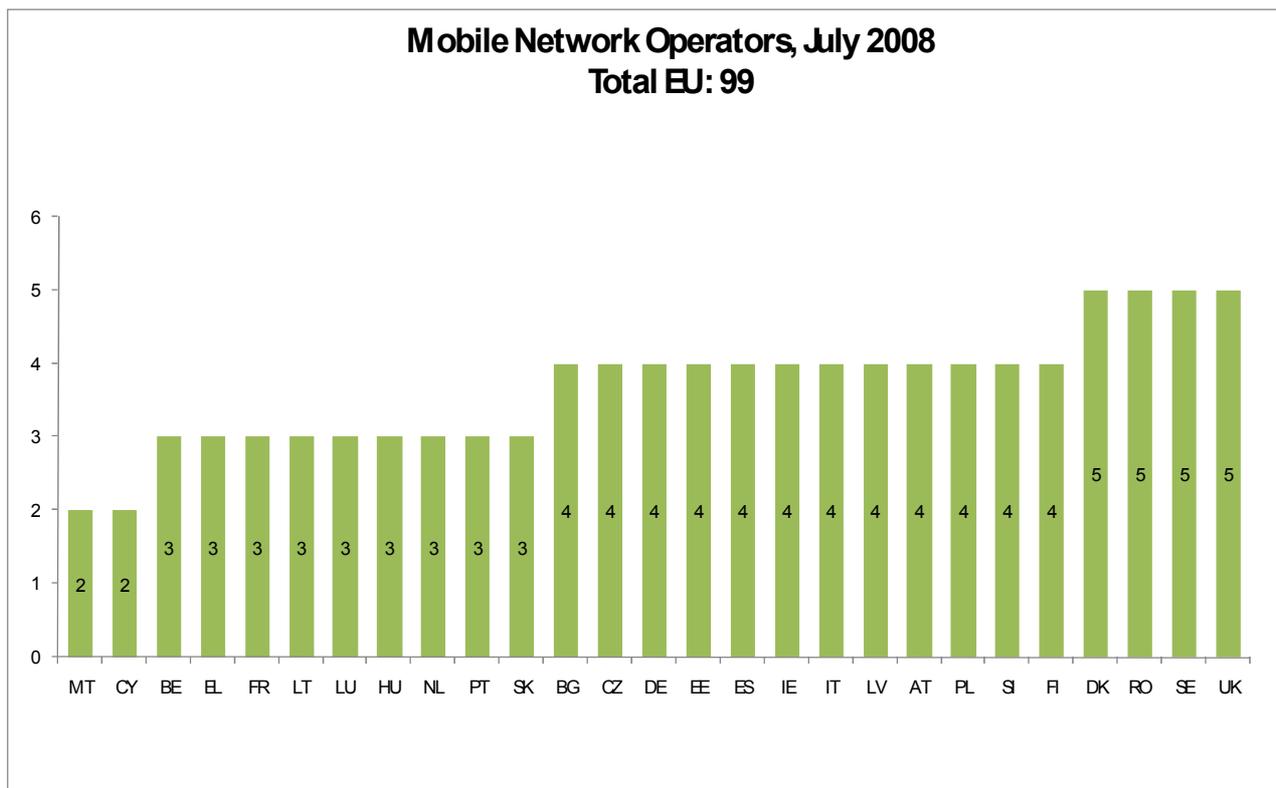
The following chart shows the number of mobile network operators licensed to provide digital mobile services (second-generation). The number of operators indicates the real magnitude of the choice of operators for customers of digital mobile services, since very often operators have licences for both GSM 900 and DCS 1800. Mobile network operators have been identified as having only GSM 900 or only DCS 1800 frequencies, or both (in which case they have usually been granted a GSM 900 licence which has subsequently been extended to the DCS 1800 band).

Figure 8: 2.G Mobile Network Operators



France: Mobile national operators for mainland France only. Overseas departments are excluded.

Figure 9: Mobile network operators 2008



The following two figures indicate the number of UMTS licenses granted in each Member State and the status of the launch of 3G services: trial (tests with a closed group of selected users) or commercial (fully commercial services open to any users at standard tariffs).

Figure 10: UMTS licences, July 2008

UMTS licences, July 2008

Total EU: 93

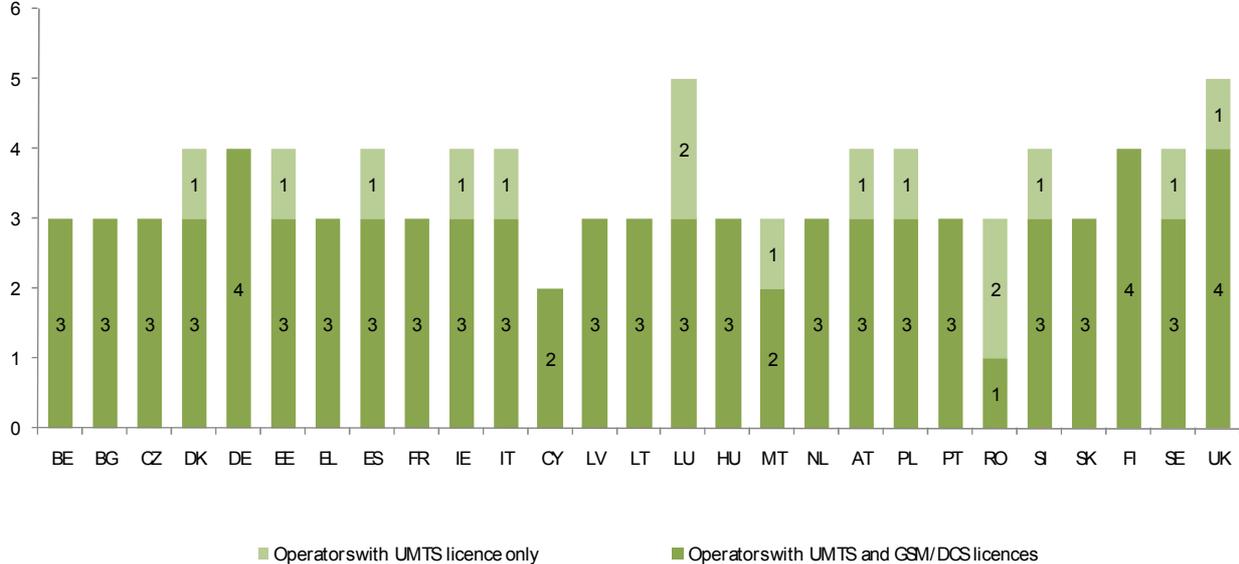
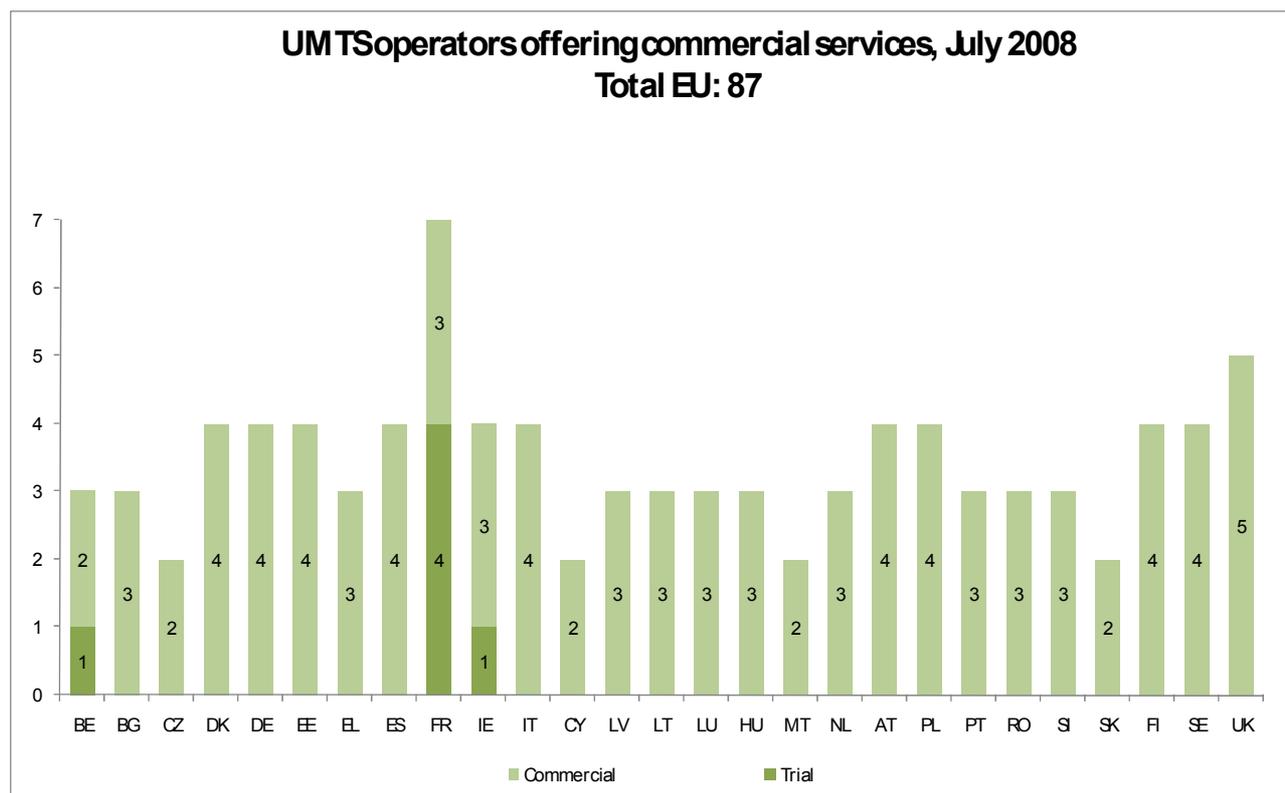


Figure 11: UMTS operators offering commercial services, July 2008



1.3. MOBILE OPERATORS' MARKET SHARES

The following charts present the market shares, based on subscribers, of the leading operator, the main competitor and the other competitors in the mobile market. Operators' market shares have been calculated for the overall mobile market (including DCS 1800/GSM 900 and UMTS subscribers).

Data concerning market shares are based on the data supplied by the NRAs except for where they are confidential. Data for these countries are estimates from European Mobile Communications and refer to 3Q 2008.

In Cyprus one operator largely dominates the market with more than 85%. In Slovenia the leading operator retains more than 60% of the market. In 15 Member States the leading operators have between 40% and 55%. The lowest market share of the leading operator is in the United Kingdom, with 25%. EU average has been weighted using mobile subscribers for each country. At EU level, the market share of the leading operator and its competitors decreased on average compared to 2007.

Figure 12

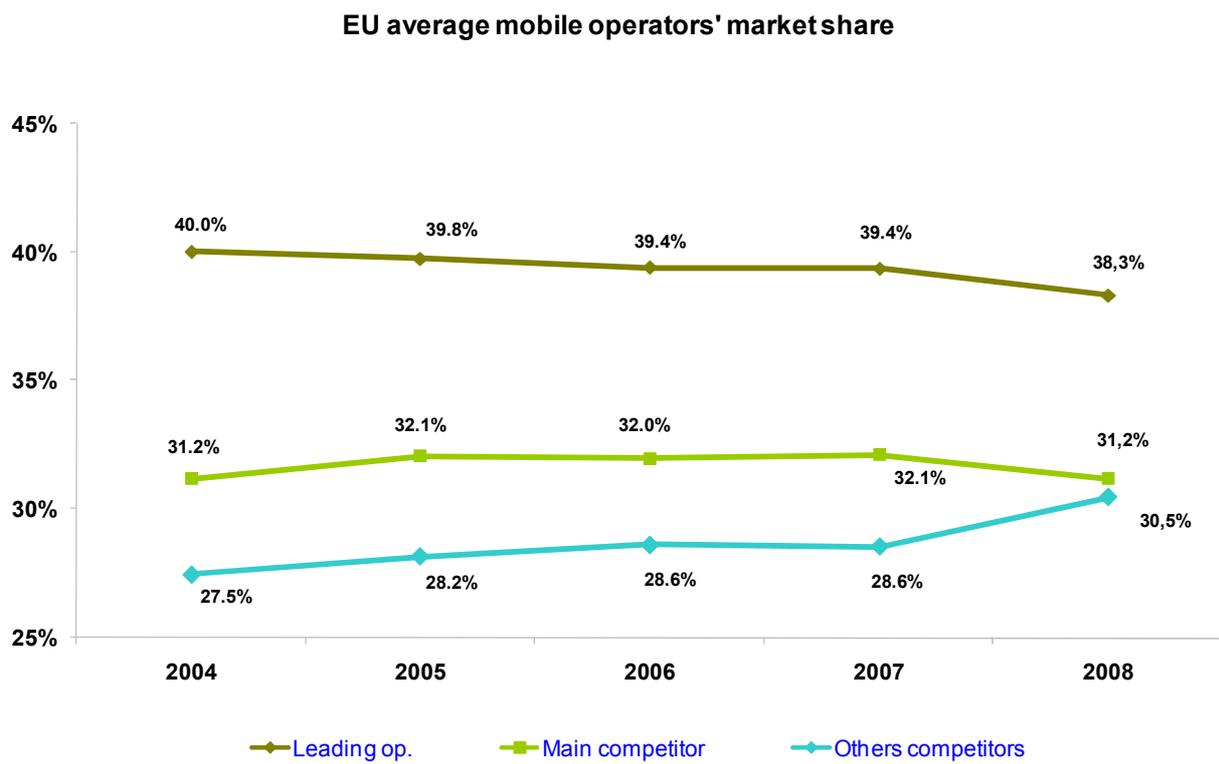


Figure 13: Market share of the leading operator in the market, October 2008

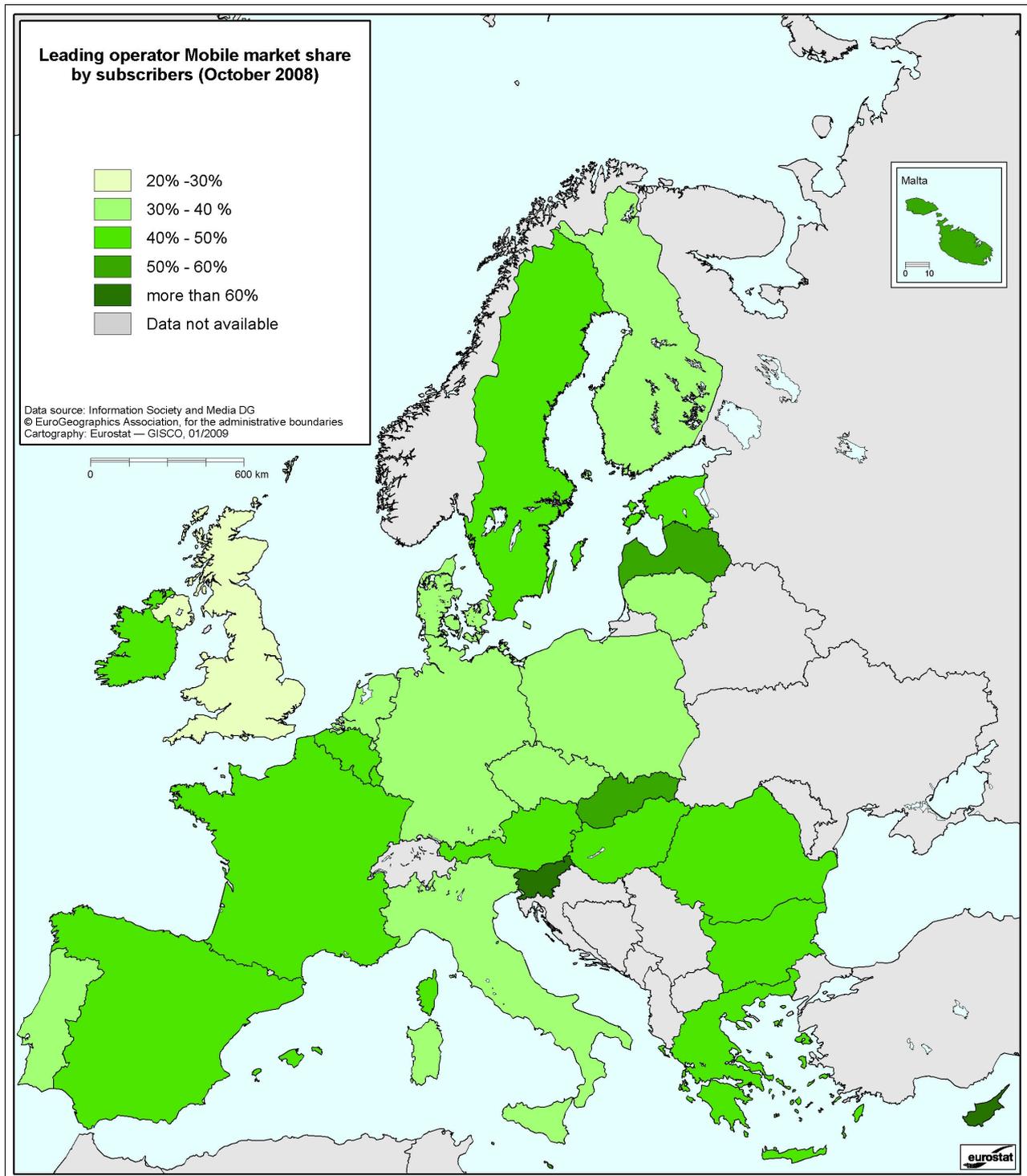
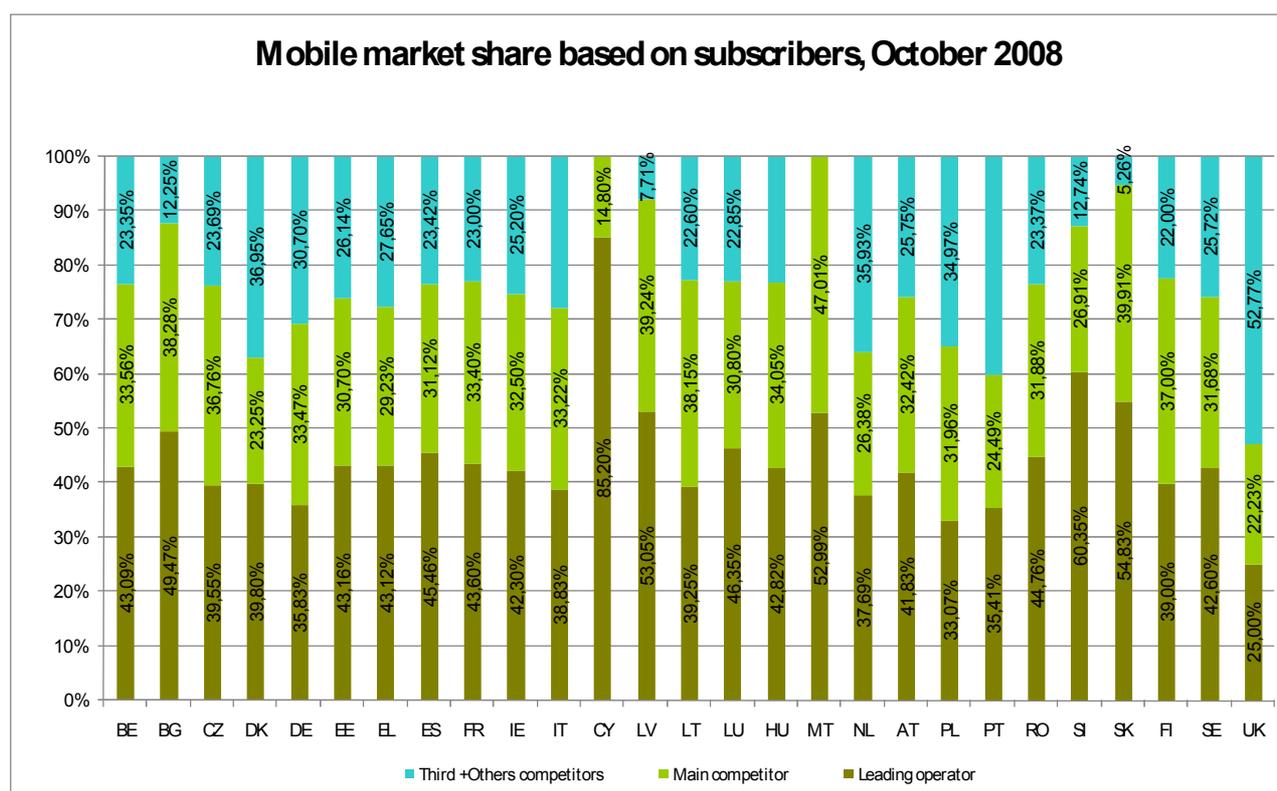


Figure 14: Mobile market share based on subscribers, October 2008



1.4. MOBILE NUMBER PORTABILITY

Mobile number portability enables mobile subscribers to retain their number when they move from one operator to another.

Figures refer to the number of transactions calculated up to 1st October each year, unless stated otherwise under each table.

According to the data at our disposal for 25 countries, the mobile ported numbers have increased during the past period (+14.1million) and as of October 2008 almost 60.7 million subscribers have ported their number since the introduction of this possibility

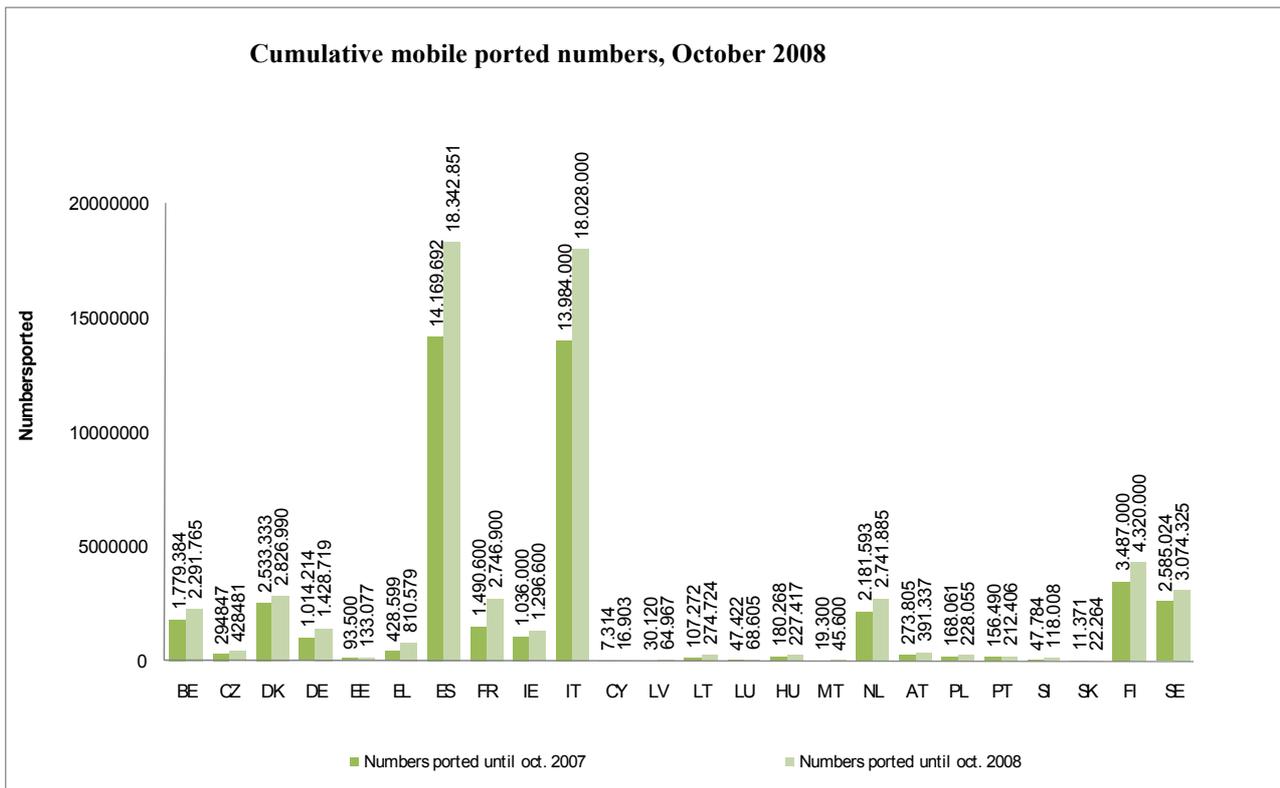
The percentage of ported numbers in the EU over the total mobile subscribers since the introduction of mobile number portability is now 9.3%.

Spain and Italy continues to lead in terms of the number of subscribers that have ported their numbers (around million).

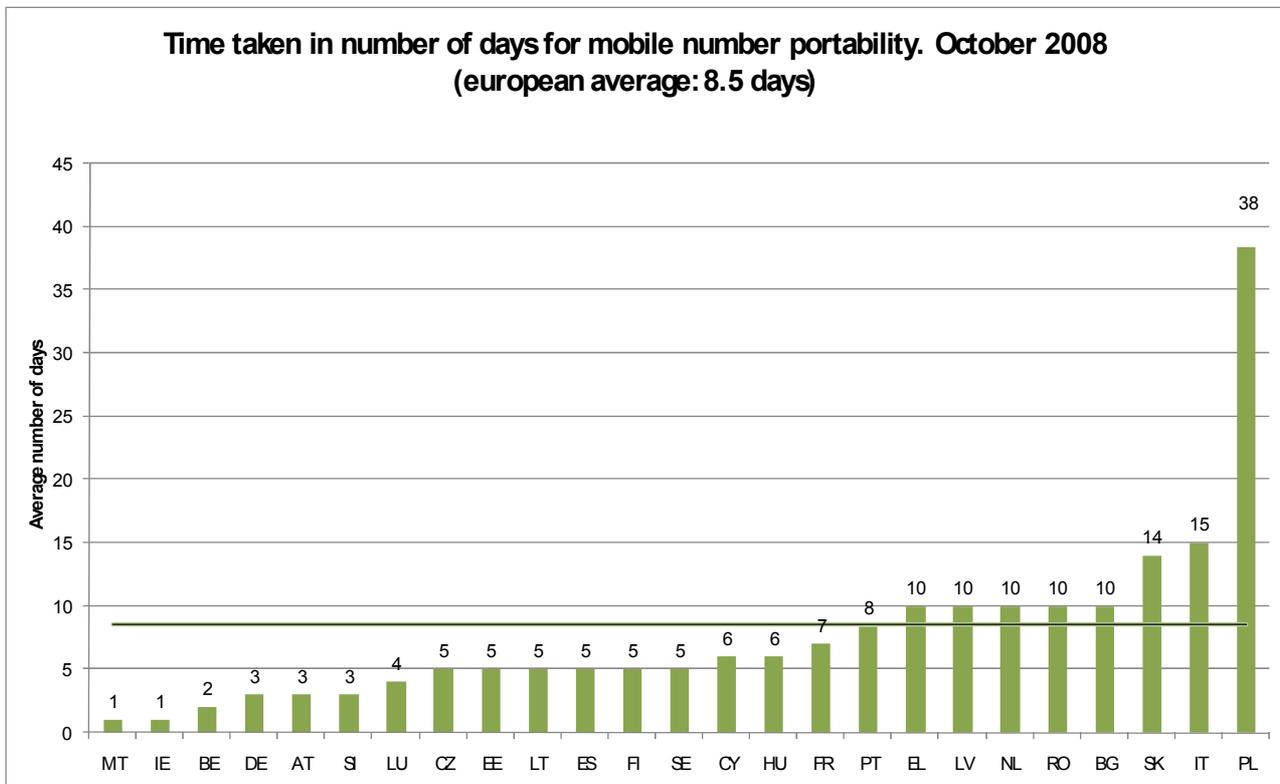
Finland has the highest percentage of ported numbers over the total of mobile subscribers (68%) followed by Denmark (42.06%) and then Spain (28.87%).

In Estonia, Spain, Lithuania and Malta there is no inter-operator charge for the porting of mobile numbers.

Figure 15: Mobile ported numbers. Time taken for mobile portability, October 2008

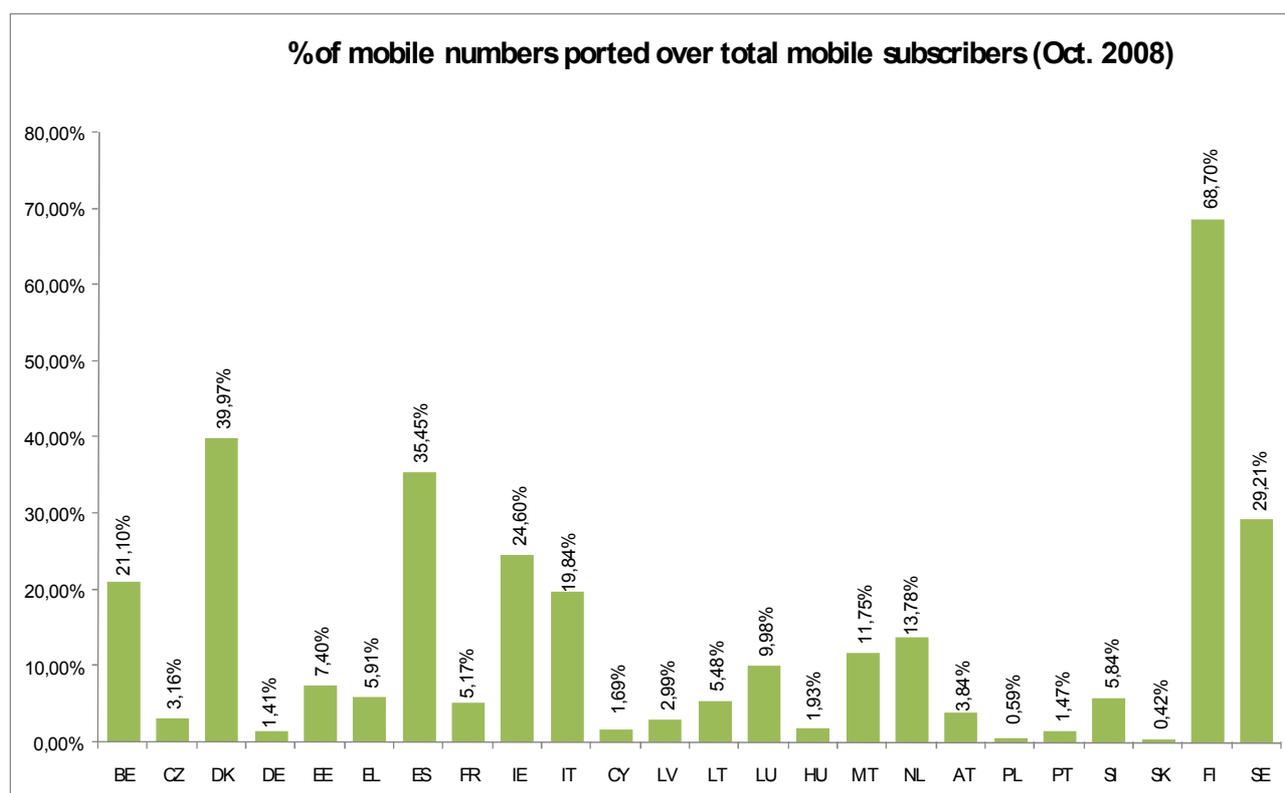


Romania: Mobile ported numbers not available yet; fixed & mobile number portability is operational starting with 21st October 2008; the maximum regulated tariff is 11Euro/mobile number ported



Romania: fixed & mobile number portability available starting with 21st October 2008; the maximum regulated number of days for fixed portability is 10

Figure 16: Percentage of Mobile ported numbers over total mobile subscribers, October 2008



1.5. MOBILE TARIFFS

1. The analysis of national (as opposed to roaming) mobile services is based on the OECD baskets for digital mobile services. OECD baskets have undergone a revision that resulted in a new set of baskets at the beginning of 2006, as opposed to old 2002 OECD baskets. Mobile baskets have been updated with current traffic weights and volumes. The changes are significant enough to prohibit the use of the new baskets with old data.

The baskets contain an SMS element, they include calls to several mobile networks, and they do not cover international calls. In addition, MMS element is included in the basket, while both MMS and SMS are separated for peak and off-peak times, and on-net and off-net destinations. Also, voicemail is included in the baskets, whereas off-net calls can be directed to several networks. There are 3 different baskets, based on low, medium and high usage levels. Packages analysed in this section are both Post-Paid and Pre-Paid packages. Some of the main properties of the "2006 OECD" baskets are:

Low usage basket with:

30 outgoing calls per month + 33 SMS messages

22% of calls are to fixed line phones, 70% to mobile phones, 8% to voicemail,

Medium usage basket with:

65 outgoing calls per month + 50 SMS messages

21% of calls are to fixed line phones, 72% to mobile phones, 7% to voicemail,

High usage basket with:
140 outgoing calls per month + 55 SMS messages
20% of calls are to fixed line phones, 73% to mobile phones, 7% to voicemail.

Each basket also has a unique definition of time of day distribution and call duration, and includes the monthly rental, and any registration charges distributed over 3 years.

The two most prominent operators in each country are covered, based on available subscriber numbers. All relevant packages from each operator are considered, but the final results presented here only show the cheapest package for each basket.

The asterisk (*) behind the package name means that the package name and/or its structure have changed between 2007 and 2008. The package chosen at any time is the cheapest package from that provider for the usage profile in question. This may give rise to significant price changes over time.

The balance of fixed and usage in the mobile baskets varies considerably between countries, as the preferred packages in some countries contain a lot of calling time included in the fixed charge.

A full description of the methodology can be found at the end of this report.

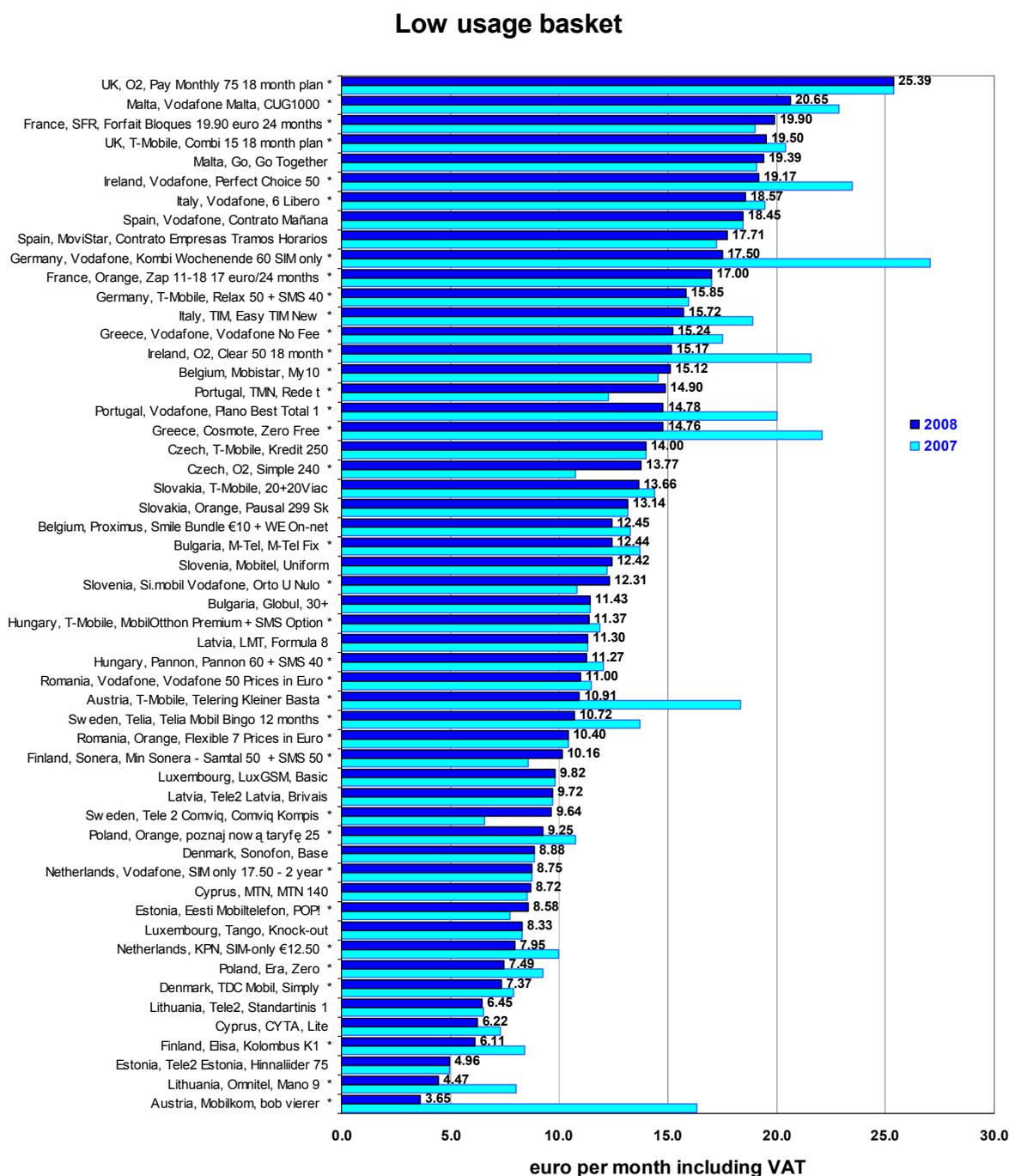
The names of the tariff packages used in the basket analysis are found in the table below.

2. In order to show a price trend, the "2006 OECD" baskets have been used. Mobile services from 2006 till 2008 are used. The graphs will show the average price developments for the EU countries, using a simple average across all member countries per year. The averages cover the cheapest package from the same mobile operators.

From 2007, Bulgaria and Romania are also included.

1.5.1. 2006 OECD baskets

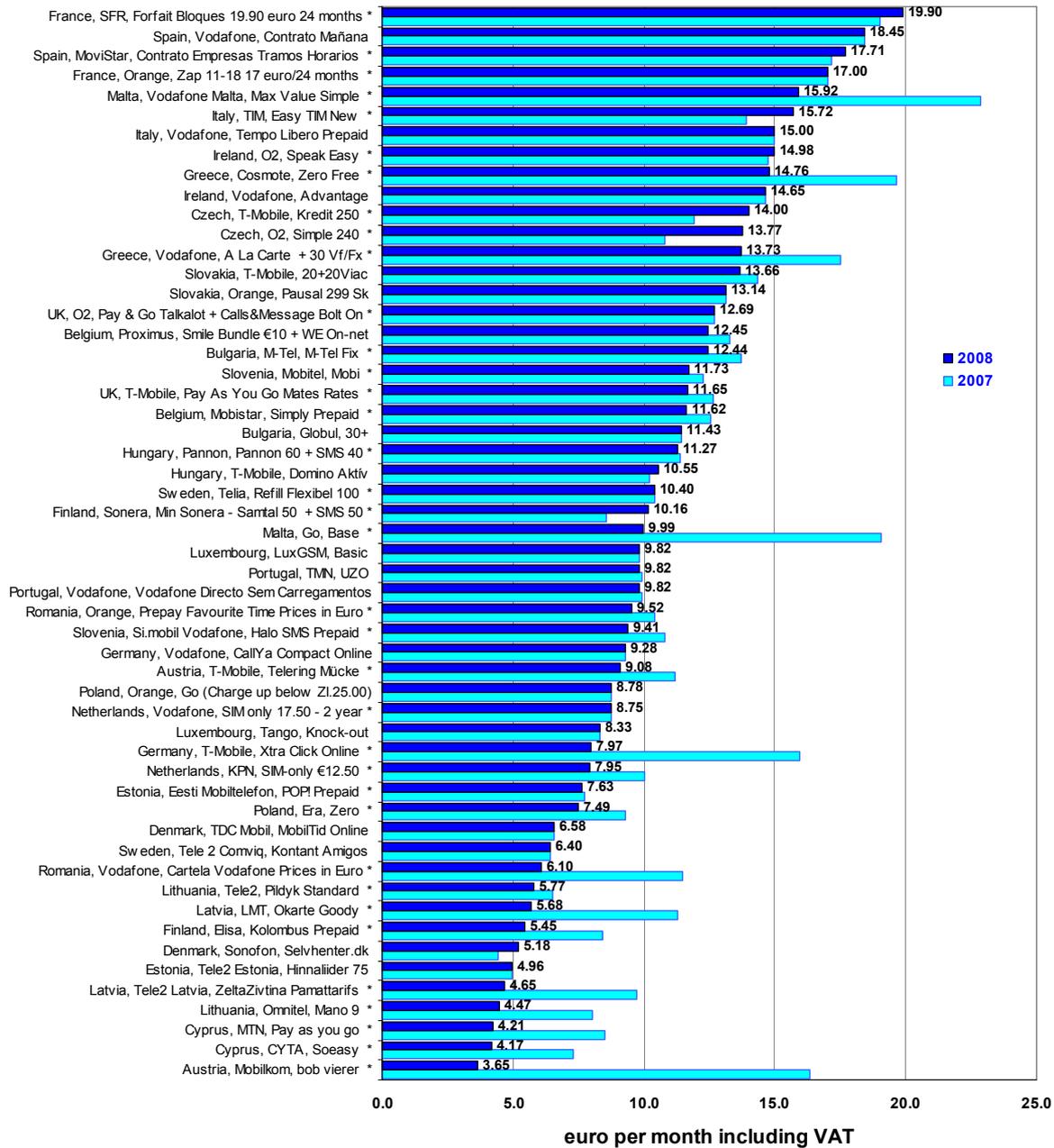
Figure 17: Low usage basket post-paid



Entries with an asterisk (*) after the name have changed the package name and structure since last year.

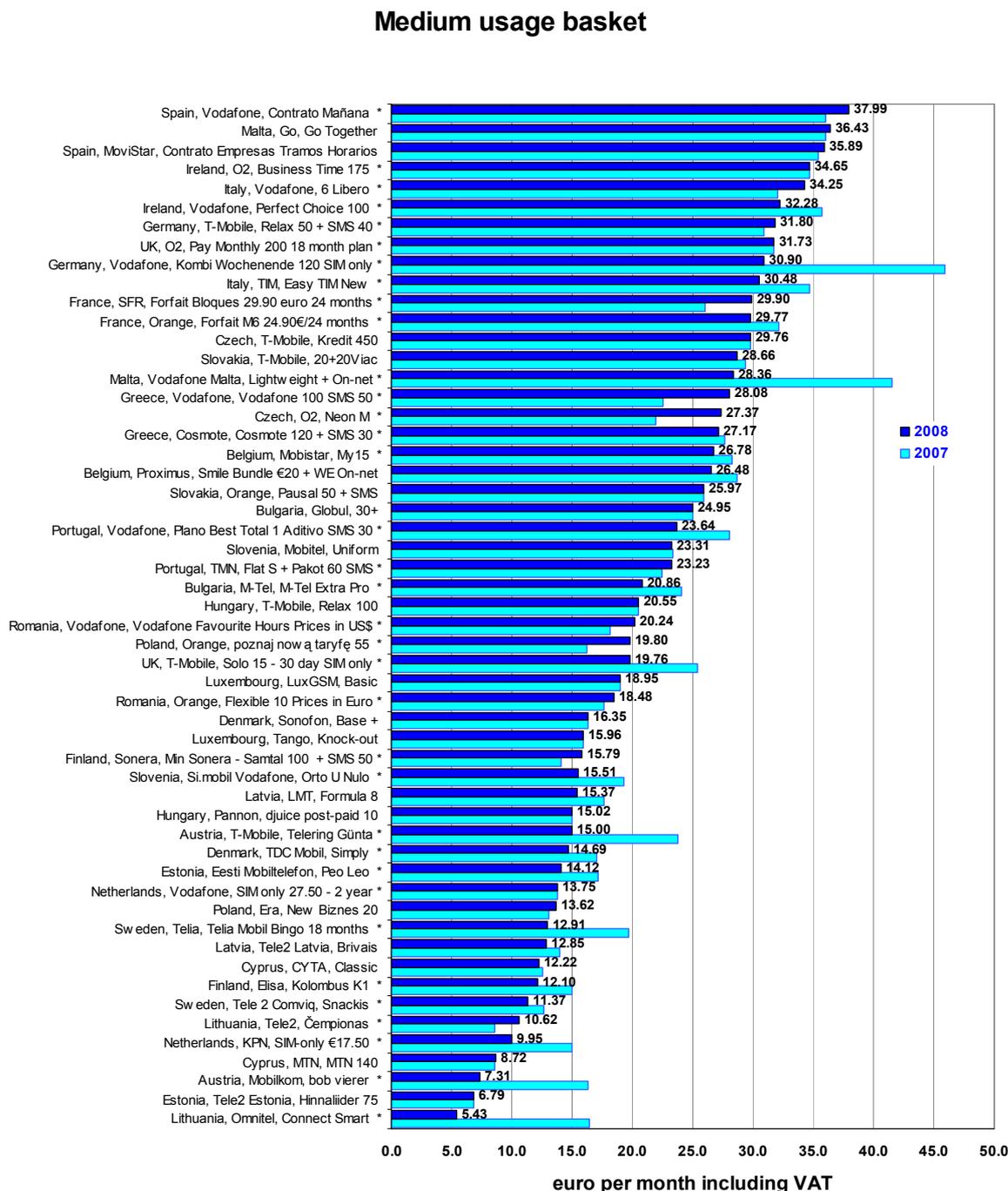
Figure 18: Low usage basket pre & post-paid

Low usage basket Pre & Post-paid



Entries with an asterisk (*) after the name have changed the package name and structure since last year.

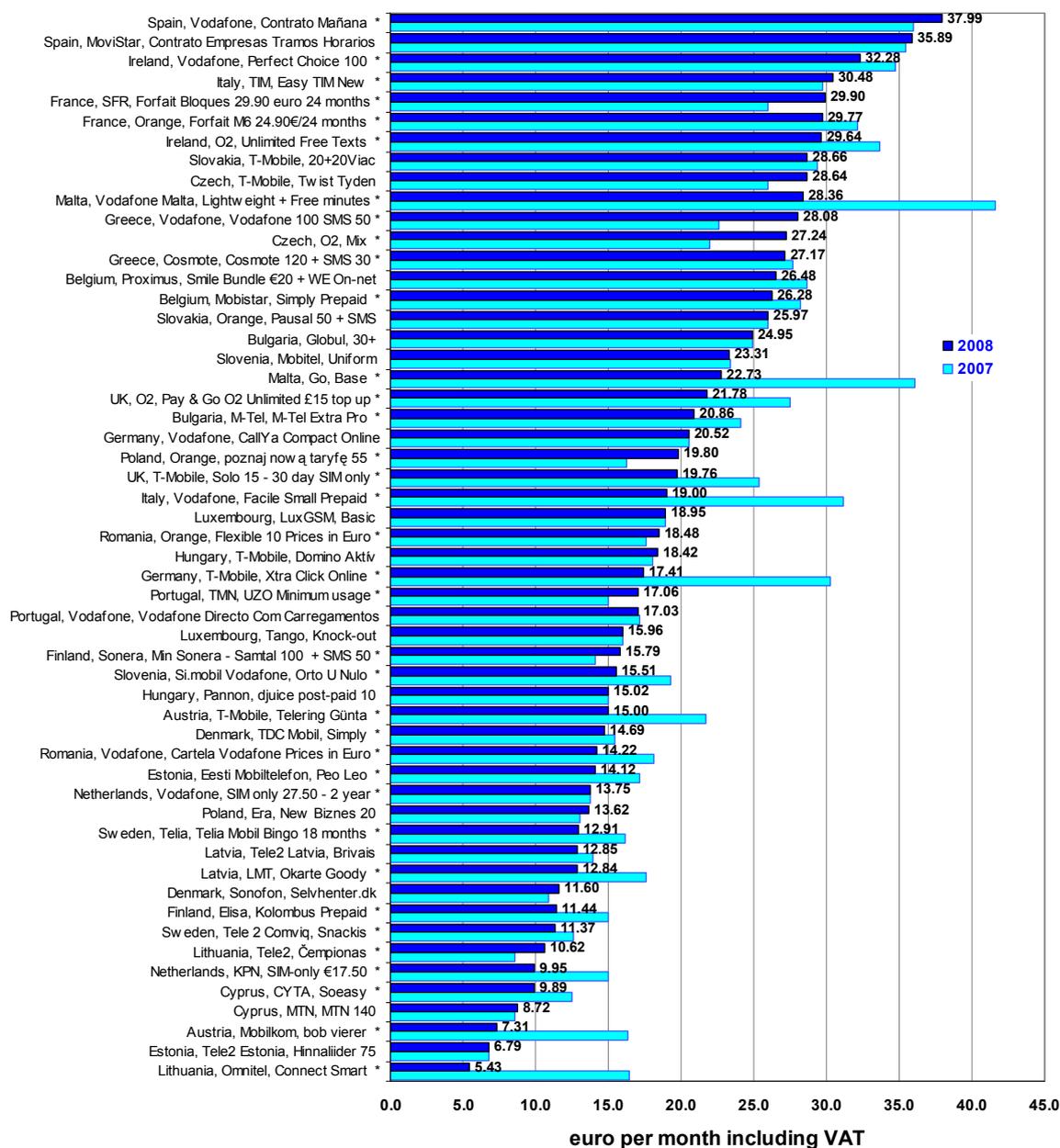
Figure 19: Medium usage basket post-paid



Entries with an asterisk (*) after the name have changed the package name and structure since last year.

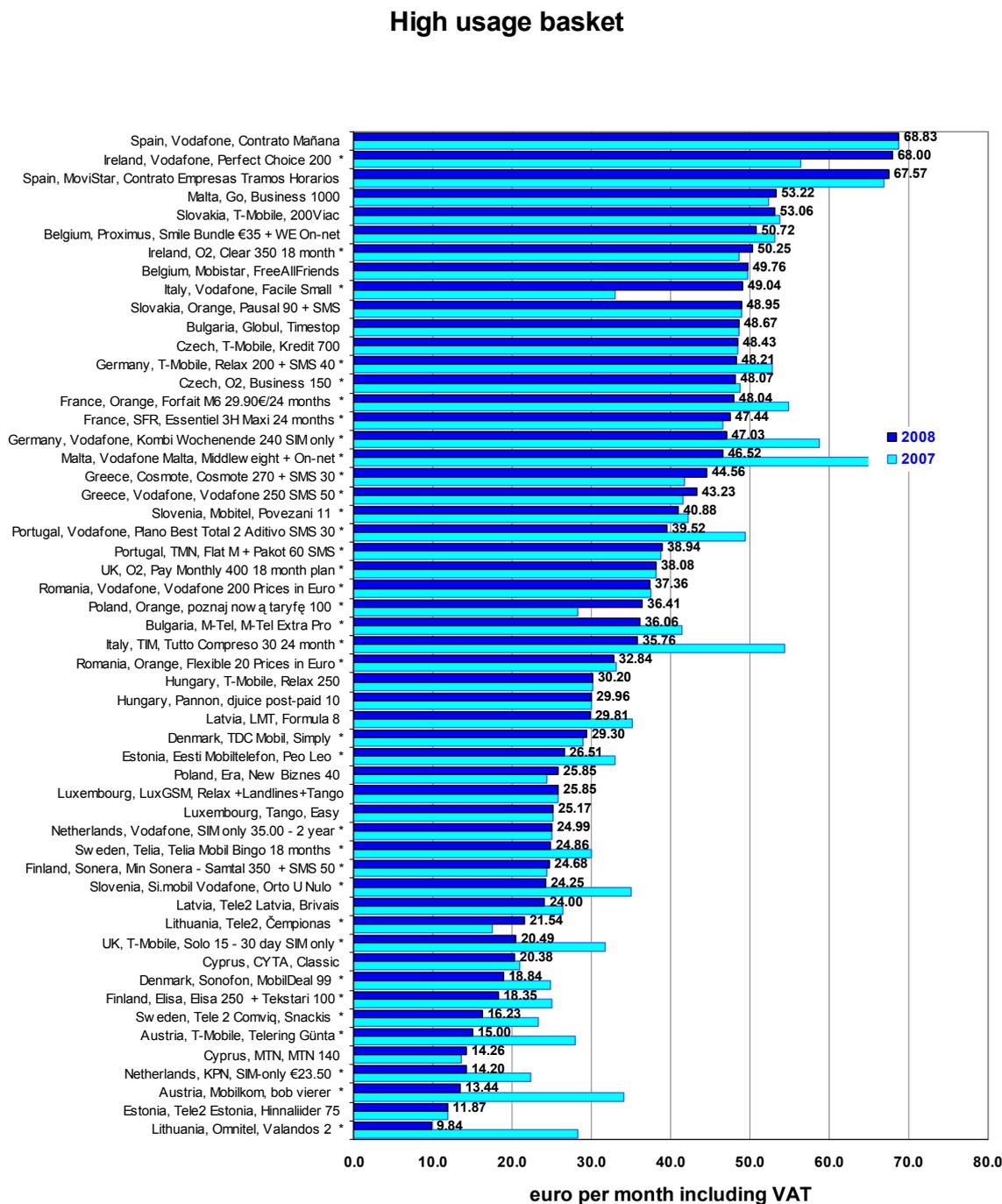
Figure 20: Medium usage basket pre & post-paid

Medium usage basket Pre & Post-paid



Entries with an asterisk (*) after the name have changed the package name and structure since last year.

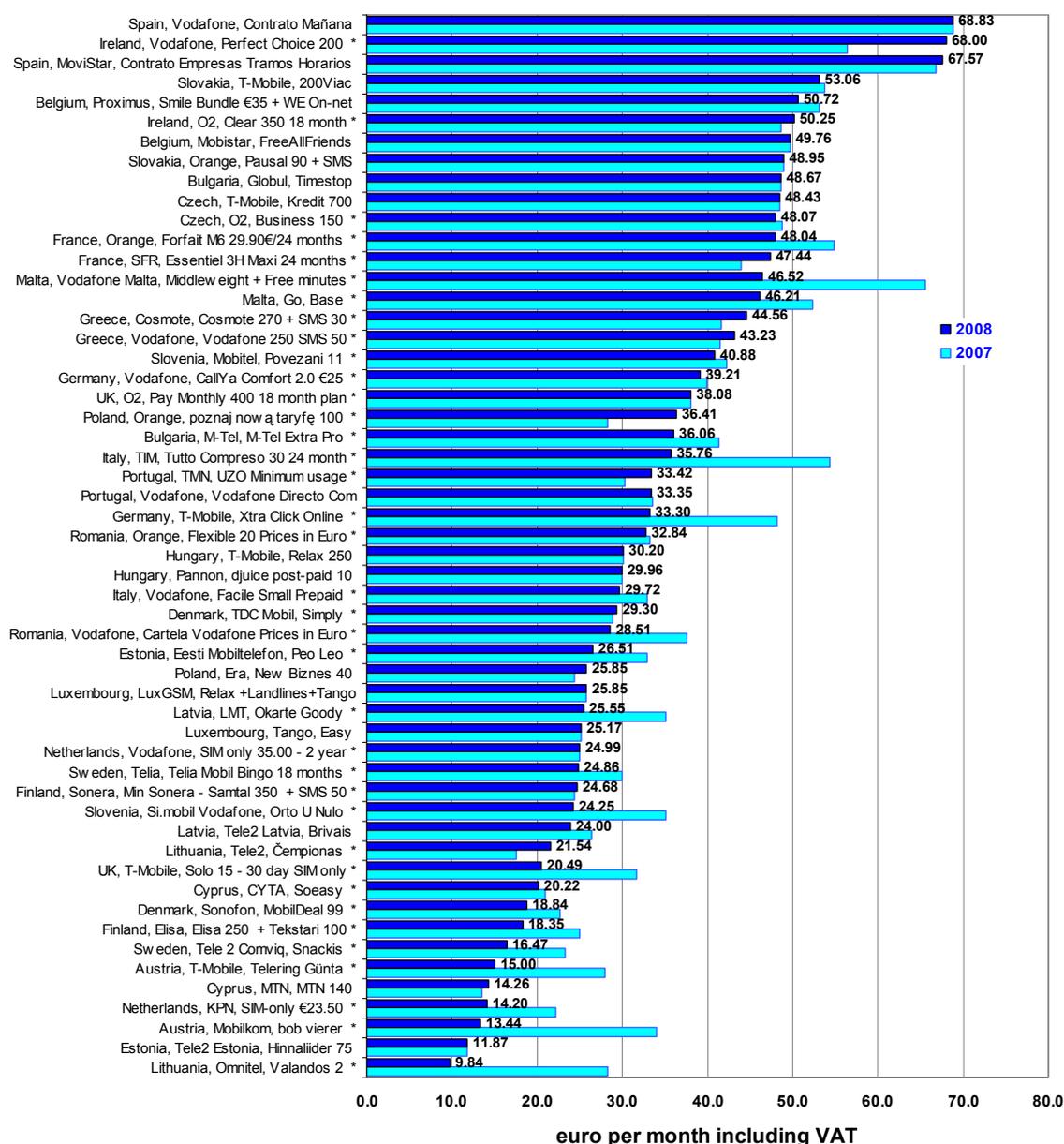
Figure 21: High usage basket post-paid



Entries with an asterisk (*) after the name have changed the package name and structure since last year.

Figure 22: High usage basket pre & post-paid

High usage basket Pre & Post-paid



Entries with an asterisk (*) after the name have changed the package name and structure since last year.

1.5.2. Simple average across all mobile operators

Figure 23: Average 2006-2008 Low usage basket post-paid

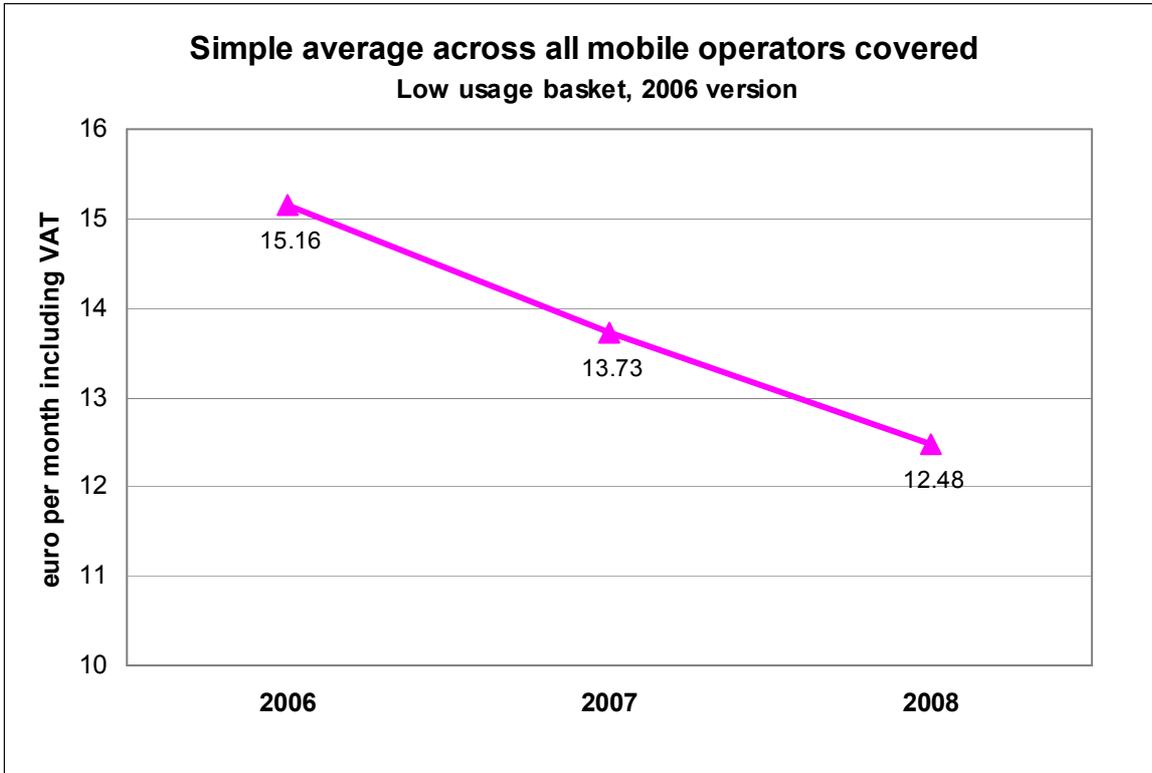


Figure 24: Average 2006-2008 Low usage basket pre & post-paid

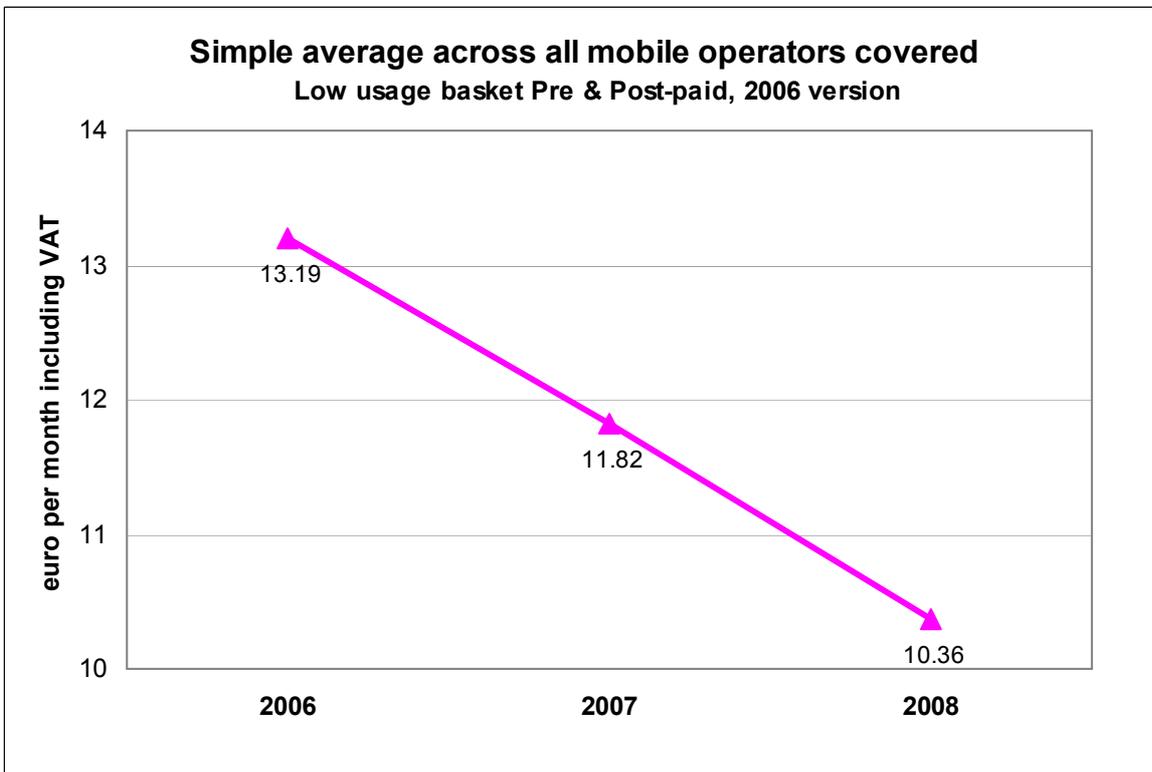


Figure 25: Average 2006-2008 Medium usage basket post-paid

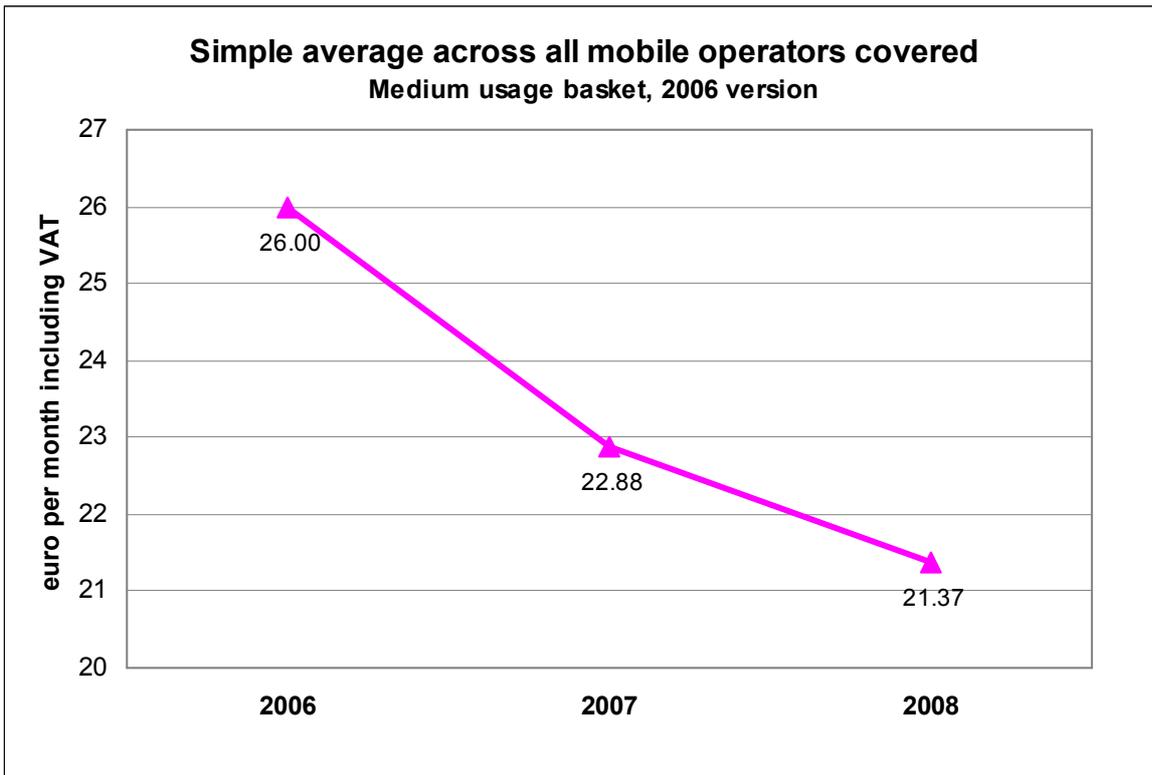


Figure 26: Average 2006-2008 Medium usage basket pre & post-paid

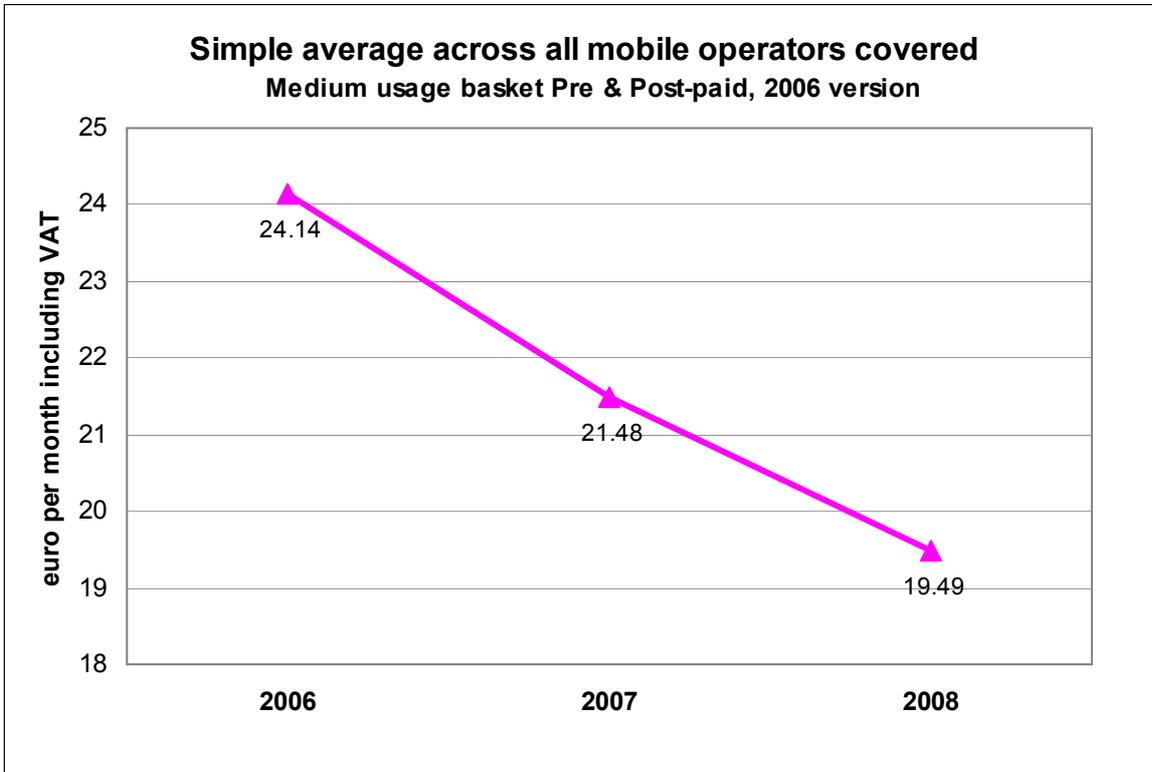


Figure 27: Average 2006-2008 High usage basket post-paid

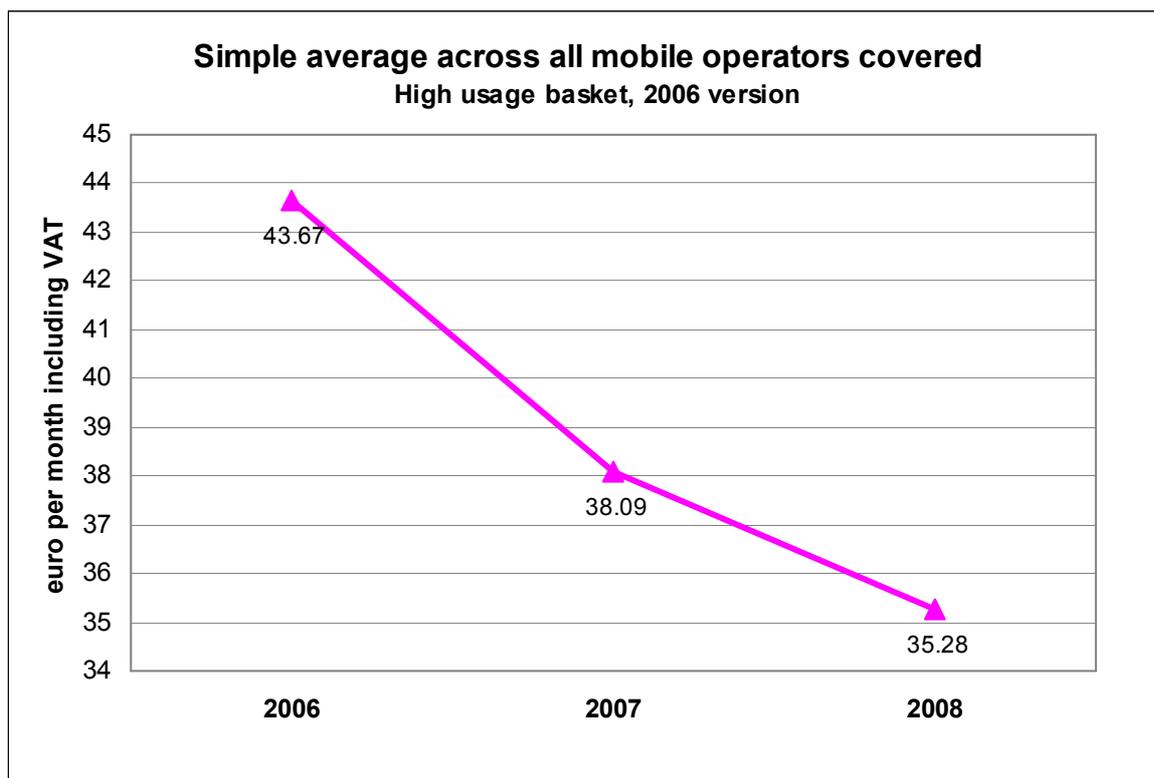
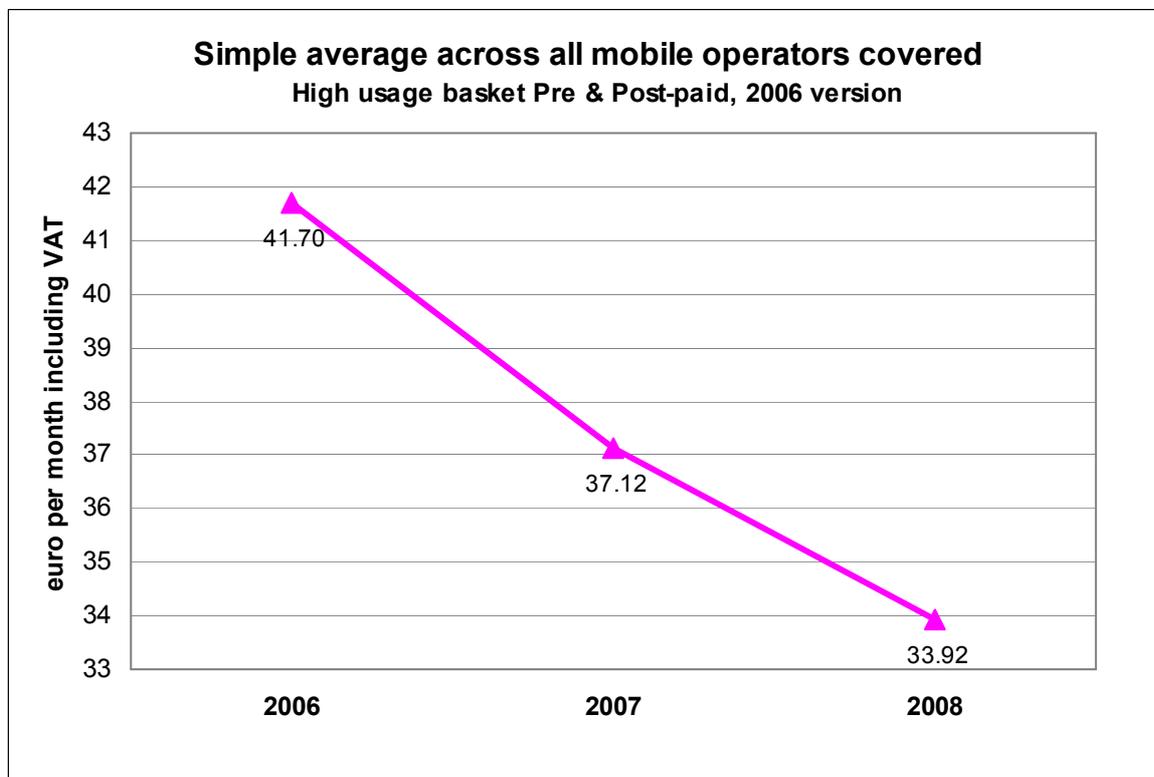


Figure 28: Average 2006-2008 High usage basket pre & post-paid



1.6. CALL TERMINATION ON MOBILE NETWORKS

This section presents the per-minute interconnection charges for fixed call termination on the networks of mobile operators based on the first three minutes of a call at peak rate. Where available charges for call termination on the networks of 3G operators and service providers (MVNO and resellers) have been included. Charges are for calls originated in the same countries

In the following charts information is shown for mobile operators in the EU (representing almost 100% of the EU mobile market). Where available, information on mobile-to-mobile termination rate has been indicated in the notes.

Data have been collected by the NRAs, and refer to 1 October 2008.

1.6.1. EU and national average

The following chart shows the trend at EU level in the (weighted) average fixed-to-mobile termination charges for all mobile operators in the EU since October 2005. The EU trend should be considered as indicative, since Bulgaria and Romania have been included only in 2007.

The national averages for all mobile operators in each Member States are weighted average charges based on the number of subscribers and the termination rate of each operator at 1 October 2008.

Where available, national averages based on interconnection traffic data have been shown. This gives a better indication of EU national average.

Where available, data for 3G operators and service providers have been taken into account. The 2008 exchange rates have been applied to the non euro-zone countries for previous years.

Despite the continuing decline, termination charges remain on average more than times higher than the fixed interconnection charges (double transit).

The trend shows that termination charges have continued to decrease and at October 2008 the EU average termination charge was % lower than one year before (% respect October 2005). The most significant reductions¹ have occurred in Slovenia (%), Belgium (%) and Austria (%). Reductions around % have taken place in France and Germany. However, mobile termination rate remain very high in Bulgaria and Estonia (more than % above the EU average) and in Ireland (almost % above the EU average).

¹ National average calculated on the basis of subscribers.

Figure 29: EU average interconnection charges for call termination on mobile networks

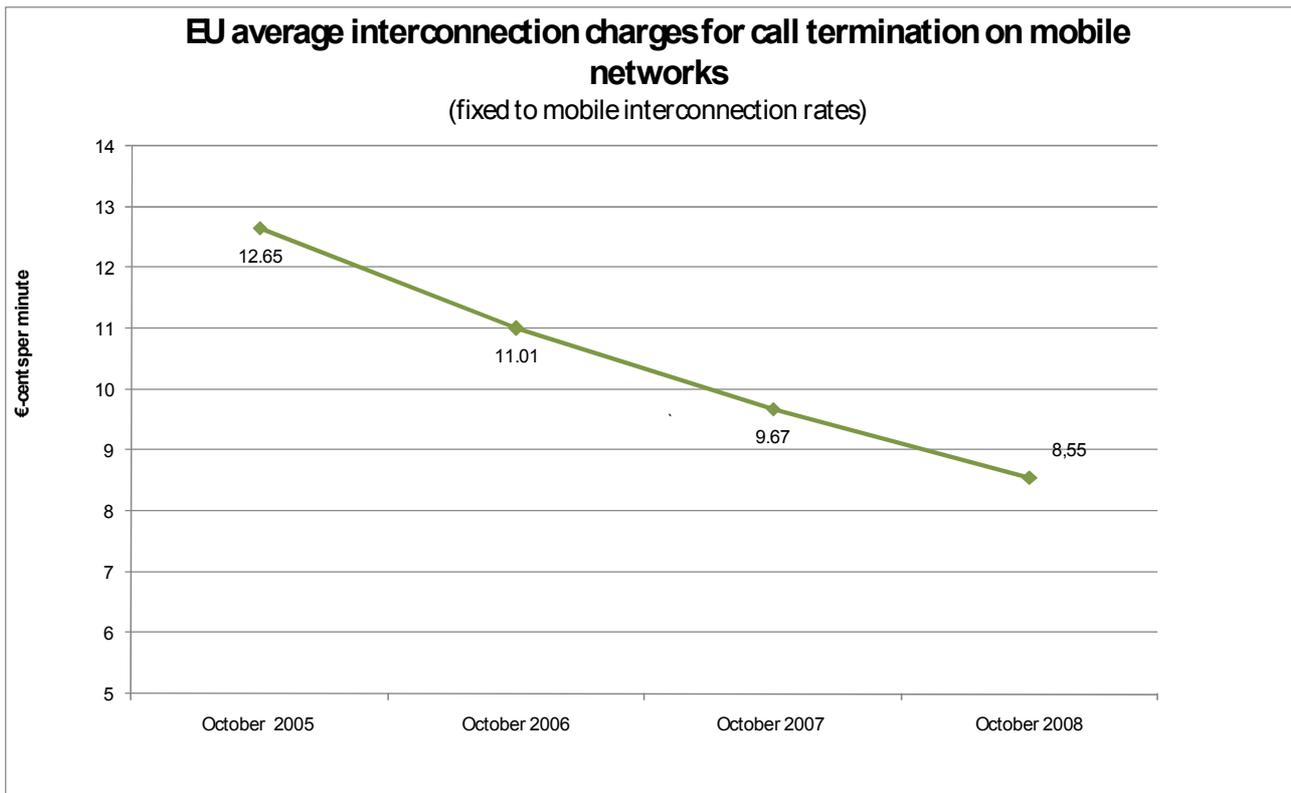
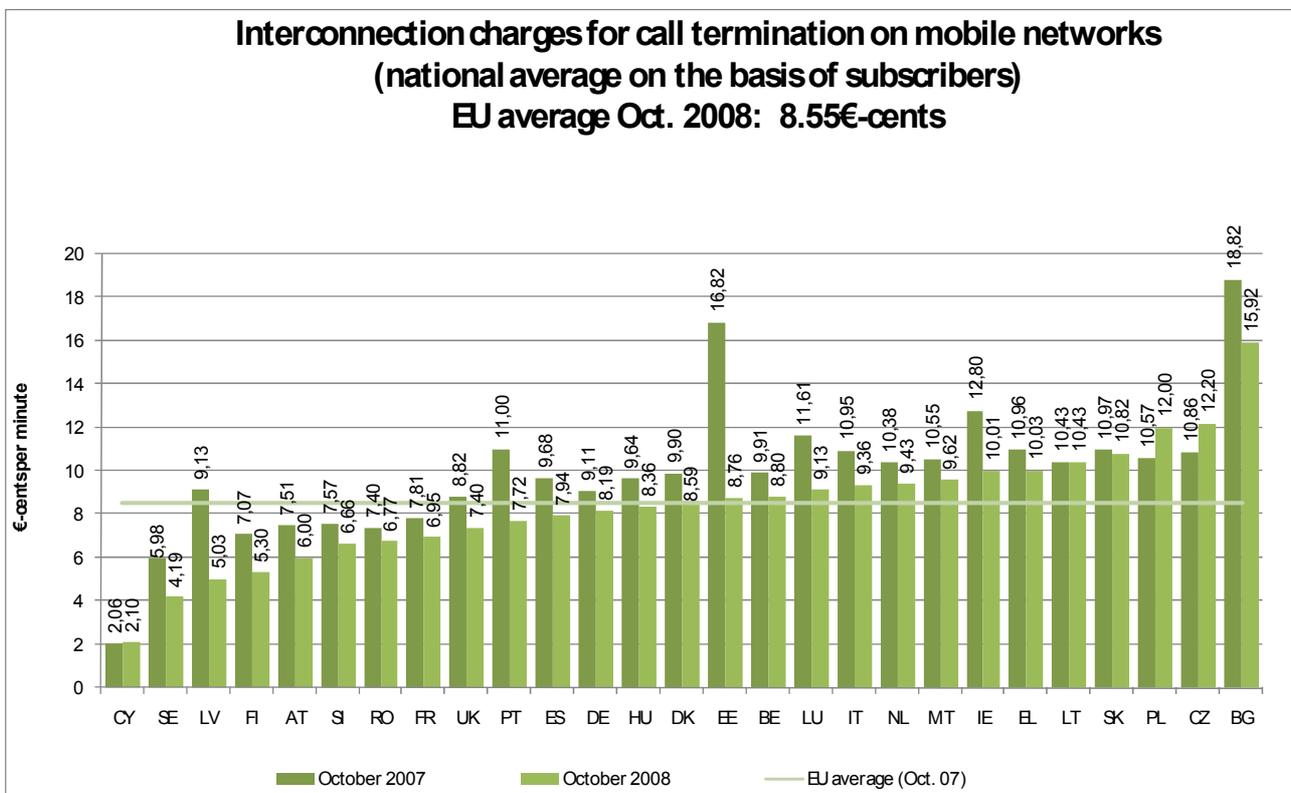


Figure 30: Interconnection charges for call termination on mobile networks

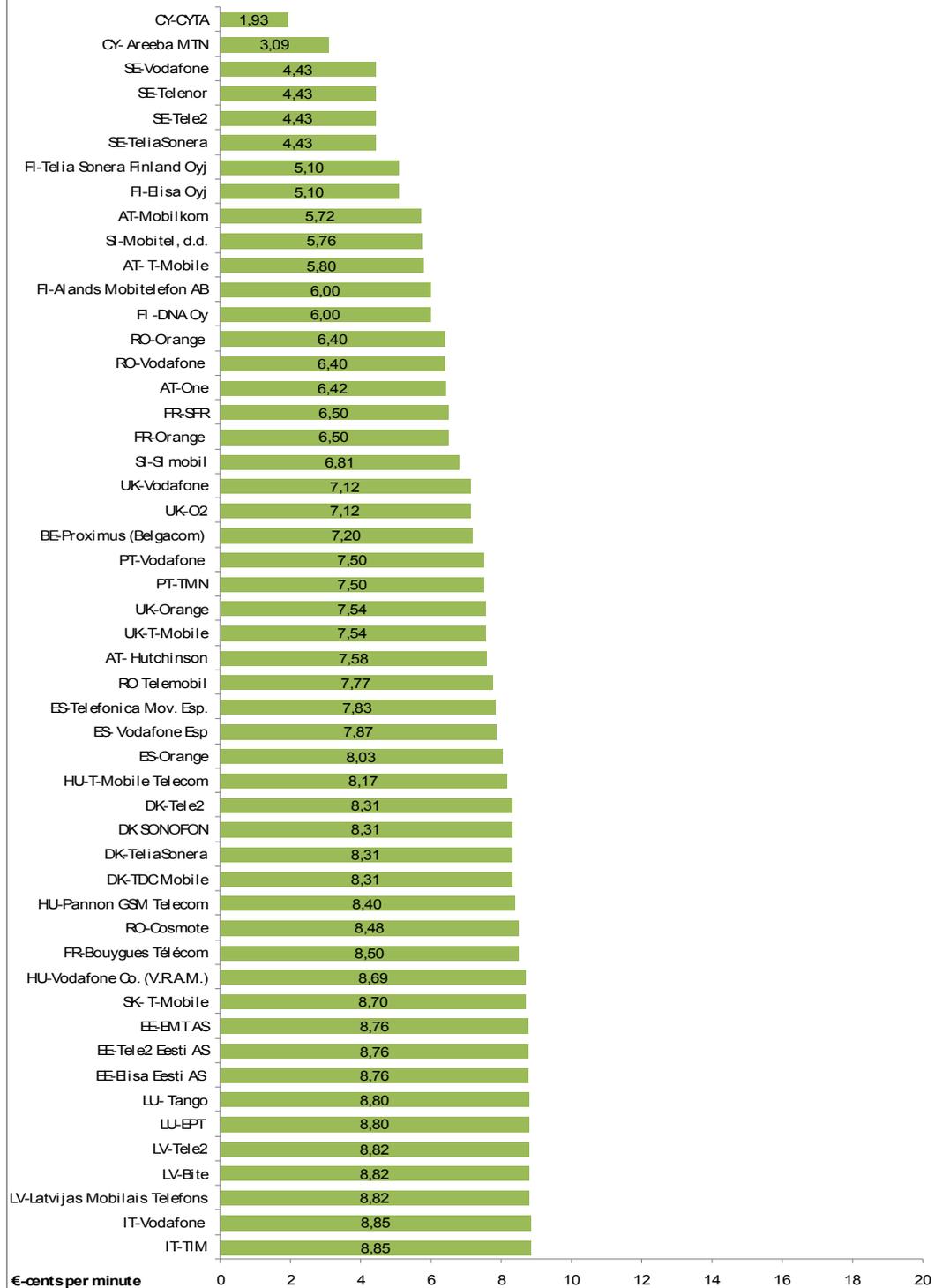


Romania: Cosmote and Telemobil are charging in USD dollars the mobile termination services provided to the fixed incumbent and to the main mobile competitor ; the exchange EUR/USD rates used for Cosmote and Zapp tariffs were 1.42 as of 1st October 2007 and 1.41 as of 1st October 2008

The following charts show the individual fixed-to-mobile interconnection charges for mobile operators in the EU. Cyprus shows the lowest charge (€ cents) whereas the highest charge is found in € cents.

Figure 31: Interconnection charges for call termination on mobile networks (peak)

**I.C. charges for call termination on mobile networks (peak)
in €-cents, October 2008**



I.C. charges for call termination on mobile networks (peak) in €-cents, October 2008

