

Report on
Telecoms Tariff Analysis
Using basket methodologies
for the period
January 1998 – December 2002
Volume 3: Mobile

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The opinions expressed in this Study are those of the authors and do not necessarily reflect the views of the European Commission.
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Table of contents

1. INTRODUCTION.....	1
2. MOBILE BASKET DEFINITIONS.....	3
2.1. MOBILE USER TYPE DEFINITIONS	3
2.2. FIXED CHARGES.....	3
2.3. CALL DISTRIBUTION	4
2.4. TIME AND DAY WEIGHT.....	4
2.5. CALL DURATION	5
3. INDIVIDUAL COUNTRY RESULTS.....	6
3.1. BELGIUM, PROXIMUS	7
3.2. BELGIUM, MOBISTAR.....	8
3.3. DENMARK, TELE DANMARK MOBIL	9
3.4. DENMARK, SONOFON	10
3.5. GERMANY, T-MOBILE.....	11
3.6. GERMANY, VODAFONE.....	12
3.7. GREECE, COSMOTE	13
3.8. GREECE, VODAFONE	14
3.9. SPAIN, MOVISTAR.....	15
3.10. SPAIN, VODAFONE	16
3.11. FRANCE, ORANGE	17
3.12. FRANCE, SFR.....	18
3.13. IRELAND, VODAFONE	19
3.14. IRELAND, O2	20
3.15. ITALY, TELECOM ITALIA MOBILE	21
3.16. ITALY, OMNITEL.....	22
3.17. LUXEMBOURG, LUXGSM.....	23
3.18. LUXEMBOURG, TANGO.....	24
3.19. NETHERLANDS, KPN	25
3.20. NETHERLANDS, VODAFONE.....	26
3.21. AUSTRIA, MOBILKOM	27
3.22. AUSTRIA, T-MOBILE.....	28
3.23. PORTUGAL, TNM.....	29
3.24. PORTUGAL, VODAFONE.....	30
3.25. FINLAND, SONERA.....	31
3.26. FINLAND, RADIOLINJA.....	32
3.27. SWEDEN, MOBITEL	33
3.28. SWEDEN, COMVIQ	34
3.29. UNITED KINGDOM, O2	35
3.30. UNITED KINGDOM, VODAFONE.....	36
4. BASKET COMPARISONS	37

4.1.	COMPARISONS USING MARKET EXCHANGE RATES	37
4.2.	ALTERNATIVE COMPARISONS USING PPP EXCHANGE RATES	42

1. EXCHANGE RATES 48

2. VAT PERCENTAGES..... 49

List of Tables in this report:

TABLE 2.1	MOBILE BASKET DESCRIPTIONS.....	3
TABLE 2.2	DISTRIBUTION OF CALLS AND MINUTES OVER CALL TYPE, IN % OF TOTAL NUMBER OF CALLS AND MINUTES PER YEAR.....	4
TABLE 2.3	NATIONAL CALL DISTRIBUTION WITH TIME AND DAY, IN % OF TOTAL NUMBER OF NATIONAL CALLS.....	4
TABLE 2.4	INTERNATIONAL CALL DISTRIBUTION WITH TIME, IN % OF TOTAL NUMBER OF INTERNATIONAL CALLS.....	5
TABLE 2.5	CALL DURATIONS FOR LOW INTENSITY BASKET, IN MINUTES PER CALL	5
TABLE 2.6	CALL DURATIONS FOR HIGH INTENSITY BASKET, IN MINUTES PER CALL	5
TABLE 2.7	CALL DURATIONS FOR INTERNATIONAL CALLS, IN MINUTES PER CALL	5
TABLE 3.1.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, BELGIUM, PROXIMUS.....	7
TABLE 3.1.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, BELGIUM, PROXIMUS	7
TABLE 3.2.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, BELGIUM, MOBISTAR	8
TABLE 3.2.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, BELGIUM, MOBISTAR.....	8
TABLE 3.3.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, DENMARK, TDM	9
TABLE 3.3.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, DENMARK, TDM.....	9
TABLE 3.4.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, DENMARK, SONOFON	10
TABLE 3.4.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, DENMARK, SONOFON.....	10
TABLE 3.5.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GERMANY, T-MOBILE	11
TABLE 3.5.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GERMANY, T-MOBILE	11
TABLE 3.6.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GERMANY, VODAFONE.....	12
TABLE 3.6.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GERMANY, VODAFONE	12
TABLE 3.7.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GREECE, COSMOTE	13
TABLE 3.7.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GREECE, COSMOTE.....	13
TABLE 3.8.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GREECE, VODAFONE	14
TABLE 3.8.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GREECE, VODAFONE.....	14
TABLE 3.9.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SPAIN, MOVISTAR	15
TABLE 3.9.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SPAIN, MOVISTAR	15
TABLE 3.10.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SPAIN, VODAFONE.....	16
TABLE 3.10.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SPAIN, VODAFONE.....	16
TABLE 3.11.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FRANCE, ORANGE	17
TABLE 3.11.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FRANCE, ORANGE.....	17
TABLE 3.12.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FRANCE, SFR.....	18
TABLE 3.12.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FRANCE, SFR	18
TABLE 3.13.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, IRELAND, VODAFONE	19
TABLE 3.13.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, IRELAND, VODAFONE	19
TABLE 3.14.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, IRELAND, O2.....	20
TABLE 3.14.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, IRELAND, O2.....	20
TABLE 3.15.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, ITALY, TIM	21
TABLE 3.15.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, ITALY, TIM.....	21
TABLE 3.16.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, ITALY, OMNITEL	22
TABLE 3.16.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, ITALY, OMNITEL	22
TABLE 3.17.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, LUXEMBOURG, LUXGSM.....	23
TABLE 3.17.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, LUXEMBOURG, LUXGSM.....	23

TABLE 3.18.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, LUXEMBOURG, TANGO	24
TABLE 3.18.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, LUXEMBOURG, TANGO	24
TABLE 3.19.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, NETHERLANDS, KPN.....	25
TABLE 3.19.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, NETHERLANDS, KPN.....	25
TABLE 3.20.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, NETHERLANDS, VODAFONE	26
TABLE 3.20.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, NETHERLANDS, VODAFONE	26
TABLE 3.21.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, AUSTRIA, MOBILKOM.....	27
TABLE 3.21.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, AUSTRIA, MOBILKOM.....	27
TABLE 3.22.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, AUSTRIA, T-MOBILE	28
TABLE 3.22.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, AUSTRIA, T-MOBILE.....	28
TABLE 3.23.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, PORTUGAL, TNM.....	29
TABLE 3.23.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, PORTUGAL, TNM.....	29
TABLE 3.24.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, PORTUGAL, VODAFONE	30
TABLE 3.24.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, PORTUGAL, VODAFONE.....	30
TABLE 3.25.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FINLAND, SONERA.....	31
TABLE 3.25.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FINLAND, SONERA	31
TABLE 3.26.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FINLAND, RADIOLINJA.....	32
TABLE 3.26.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FINLAND, RADIOLINJA	32
TABLE 3.27.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SWEDEN, TELIAMOBILE	33
TABLE 3.27.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SWEDEN, TELIAMOBILE.....	33
TABLE 3.28.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SWEDEN, COMVIQ.....	34
TABLE 3.28.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SWEDEN, COMVIQ	34
TABLE 3.29.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, O2	35
TABLE 3.29.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, O2.....	35
TABLE 3.30.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, VODAFONE	36
TABLE 3.30.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, VODAFONE	36
TABLE 4. 1.1	ANNUAL LOW INTENSITY BASKET COMPARISONS 1998 – 2002.12	39
TABLE 4. 1.2	ANNUAL HIGH INTENSITY BASKET COMPARISONS 1998 – 2002.12	41
TABLE 4.2.1	ANNUAL LOW INTENSITY BASKET COMPARISONS 1998 – 2002.12, USING PPP	44
TABLE 4.2.2	ANNUAL HIGH INTENSITY BASKET COMPARISONS 1998 – 2002.12, USING PPP	46
TABLE A.1	EXCHANGE RATES	48
TABLE A.2	VAT PERCENTAGES (1998-2002).....	49

List of Figures in this report:

FIGURE 3.1.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, BELGIUM, PROXIMUS.....	7
FIGURE 3.1.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, BELGIUM, PROXIMUS	7
FIGURE 3.2.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, BELGIUM, MOBISTAR	8
FIGURE 3.2.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, BELGIUM, MOBISTAR.....	8
FIGURE 3.3.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, DENMARK, TDM	9
FIGURE 3.3.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, DENMARK, TDM.....	9
FIGURE 3.4.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, DENMARK, SONOFON	10
FIGURE 3.4.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, DENMARK, SONOFON	10
FIGURE 3.5.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GERMANY, T-MOBILE.....	11
FIGURE 3.5.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GERMANY, T-MOBILE	11
FIGURE 3.6.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GERMANY, VODAFONE.....	12
FIGURE 3.6.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GERMANY, VODAFONE.....	12
FIGURE 3.7.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GREECE, COSMOTE	13
FIGURE 3.7.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GREECE, COSMOTE.....	13
FIGURE 3.8.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, GREECE, VODAFONE	14
FIGURE 3.8.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, GREECE, VODAFONE	14
FIGURE 3.9.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SPAIN, MOVISTAR	15
FIGURE 3.9.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SPAIN, MOVISTAR	15
FIGURE 3.10.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SPAIN, VODAFONE	16
FIGURE 3.10.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SPAIN, VODAFONE.....	16
FIGURE 3.11.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FRANCE, ORANGE	17
FIGURE 3.11.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FRANCE, ORANGE.....	17

FIGURE 3.12.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FRANCE, SFR.....	18
FIGURE 3.12.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FRANCE, SFR.....	18
FIGURE 3.13.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, IRELAND, VODAFONE.....	19
FIGURE 3.13.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, IRELAND, VODAFONE.....	19
FIGURE 3.14.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, IRELAND, O2.....	20
FIGURE 3.14.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, IRELAND, O2.....	20
FIGURE 3.15.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, ITALY, TIM.....	21
FIGURE 3.15.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, ITALY, TIM.....	21
FIGURE 3.16.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, ITALY, OMNITEL.....	22
FIGURE 3.16.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, ITALY, OMNITEL.....	22
FIGURE 3.17.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, LUXEMBOURG, LUXGSM.....	23
FIGURE 3.17.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, LUXEMBOURG, LUXGSM.....	23
FIGURE 3.18.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, LUXEMBOURG, TANGO.....	24
FIGURE 3.18.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, LUXEMBOURG, TANGO.....	24
FIGURE 3.19.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, NETHERLANDS, KPN.....	25
FIGURE 3.19.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, NETHERLANDS, KPN.....	25
FIGURE 3.20.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, NETHERLANDS, VODAFONE.....	26
FIGURE 3.20.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, NETHERLANDS, VODAFONE.....	26
FIGURE 3.21.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, AUSTRIA, MOBILKOM.....	27
FIGURE 3.21.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, AUSTRIA, MOBILKOM.....	27
FIGURE 3.22.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, AUSTRIA, T-MOBILE.....	28
FIGURE 3.22.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, AUSTRIA, T-MOBILE.....	28
FIGURE 3.23.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, PORTUGAL, TNM.....	29
FIGURE 3.23.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, PORTUGAL, TNM.....	29
FIGURE 3.24.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, PORTUGAL, VODAFONE.....	30
FIGURE 3.24.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, PORTUGAL, VODAFONE.....	30
FIGURE 3.25.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FINLAND, SONERA.....	31
FIGURE 3.25.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FINLAND, SONERA.....	31
FIGURE 3.26.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, FINLAND, RADIOLINJA.....	32
FIGURE 3.26.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, FINLAND, RADIOLINJA.....	32
FIGURE 3.27.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SWEDEN, TELIAMOBILE.....	33
FIGURE 3.27.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SWEDEN, TELIAMOBILE.....	33
FIGURE 3.28.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, SWEDEN, COMVIQ.....	34
FIGURE 3.28.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, SWEDEN, COMVIQ.....	34
FIGURE 3.29.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, O2.....	35
FIGURE 3.29.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, O2.....	35
FIGURE 3.30.1	ANNUAL LOW INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, VODAFONE.....	36
FIGURE 3.30.2	ANNUAL HIGH INTENSITY BASKET EXPENDITURE, UNITED KINGDOM, VODAFONE.....	36
FIGURE 4. 1.1	ANNUAL LOW INTENSITY BASKET COMPARISONS 1998 – 2002.12.....	38
FIGURE 4. 1.2	ANNUAL HIGH INTENSITY BASKET COMPARISONS 1998 – 2002.12.....	40
FIGURE 4.2.1	ANNUAL LOW INTENSITY BASKET COMPARISONS 1998 – 2002.12, USING PPP.....	43
FIGURE 4.2.2	ANNUAL HIGH INTENSITY BASKET COMPARISONS 1998 – 2002.12, USING PPP.....	45

Disclaimer: This report has been commissioned as an independent study to examine tariff developments in the European Community. The Commission does not accept any responsibility for the accuracy or completeness of the information contained herein.

1. Introduction

This report is produced for the Information Society DG of the European Commission by Teligen HI Europe. It forms part of a larger study looking at price developments for telecommunications services within the European Union. Reports monitoring the tariffs in the EU Member States have been produced by Teligen for the years 1998, 1999, January and December 2000, December 2001 and December 2002.

This report will analyse prices of mobile telephony services, using basket methodologies, in order to compare real price relationships between the countries, and over time. A similar report was produced for December 2000 and 2001, and this is an update to the previous reports.

The opinions expressed in this Study are those of the authors and do not necessarily reflect the views of the European Commission.

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This report is based on prices for mobile services (GSM) as of 1 January 1998, 1999 and 2000, and 1 December 2000, 2001 and 2002.

Teligen has collected tariff data from primary sources, i.e. directly from the mobile operators. As a specialist in tariff information, Teligen maintains direct contacts with all the operators covered on a regular basis, using a unique network of personal contacts within the operators' organisations (so called liaison officers).

Constructing representative baskets for mobile telephone services is complex for a number of reasons.

Firstly, there is little publicly available information on average calling patterns and usage profiles for mobile subscribers.

Secondly, subscription rates to mobile services, user types and consequently, usage patterns, are evolving rapidly. For example, the number of mobile phones is growing, and mobile phones are no longer being used simply to make or receive voice calls. The latter is also occurring with fixed telephones but there at least usage patterns are changing more gradually and in a more predictable way.

Thirdly, tariff packages and pricing arrangements for mobile phones are complex. For instance tariffs may vary considerably according to whether the call is to a party on the same mobile network, another mobile network or to a fixed subscriber, and not simply whether the call is national or international. Additionally, charges for calls made or received whilst a user is roaming on another network are highly variable, even if such calls form a very small part of overall average use.

Fourthly, any given operator normally provides a range of tariff packages and forms of subscriptions, including (a) subscription and usage billing, (b) subscription including pre-determined usage with additional usage billed and (c) entirely pre-paid arrangement. The range and nature of these tariff packages also change often, making time series comparisons rather difficult.

Fifthly, in most member states there is a choice of both operators and service providers for all users.

These factors combined make it very difficult both to construct simple baskets representing typical usage or user behaviour and then to evaluate and compare the amount of the basket over time, between operators or between countries. The results presented here should therefore be seen as a complement to the tariff information provided in the annual tariff reports, referred to above. They should also be seen as indicative of patterns and trends rather than a genuine reflection of the tariff situation faced by any given group of users.

The 1998 tariffs used as a basis for this report are taken from the “incumbent” mobile operator in each EU Member State, and for 1999 onwards from the “incumbent” operator and the other most significant mobile (GSM) operator in each EU Member State. Tariffs are selected as representative for the low and high usage baskets. There will in many cases be a range of possible tariff packages, and this study does not take the full range into account.

2. Mobile basket definitions

The Tariff study for the period January 1998 – December 2002 requires a series of basket analyses in order to compare the price levels in the 15 EU countries. Two baskets have been produced to represent residential and business users. Unless specified, baskets are based on standard tariffs and include VAT. The basket results show the expenditure for 1 year.

2.1. Mobile user type definitions

As there is very little evidence on mobile usage patterns, the two baskets in this section have been constructed based on the PSTN basket structure with modifications made to reflect the different nature of the mobile service, (see section 1, Introduction). **A relevant selection of mobile packages has been used in the baskets, for low and high intensity users.** The results include VAT.

Two mobile baskets are defined, one for a low intensity user and another for a high intensity user. The usage can be described as follows:

Table 2.1 Mobile basket descriptions

Low intensity	A residential user with occasional usage, mainly in the local area. Very few international calls
High intensity	A business user with national and international traffic, using the mobile phone actively every working day.

2.2. Fixed charges

Any nonrecurring, fixed charges are depreciated over 3 years, even though the burden of those charges will come in the first year.

Subscription (rental) charges for 1 year are included.

2.3. Call distribution

Mobile services will normally have a single price for calls to the entire country. Some new tariffs include a lower charge for calls to the local area, either the area where the mobile actually is at the moment, or where the subscriber chooses to have a local area. To accommodate such tariffs, the following distribution of national mobile calls is set out:

Table 2.2 Distribution of calls and minutes over call type, in % of total number of calls and minutes per year

		Mobile to fixed							Mobile to Mobile	
		Total	Local		Long-distance		International		Mobile	
		#	#	%	#	%	#	%	#	%
Low intensity	Calls	200	120	60 %	58	29 %	2	1 %	20	10 %
	Minutes	590	314	53.3 %	210	35.6 %	6	1.0 %	60	10.2 %
High intensity	Calls	1000	450	45 %	350	35 %	100	10 %	100	10 %
	Minutes	3012	963	32.0 %	1449	48.1 %	300	10.0 %	300	10.0 %

Note: Mobile to mobile means calls within the same network.

International calls include calls to other EU countries. The call distribution is weighted according to the method developed by Teligen for international weighting, using the actual call volume data as reported by the ITU. This means that routes with a lot of traffic, and then presumably the lowest prices, will carry the most weight in the comparison.

2.4. Time and day weight

This is consistent with the fixed line (PSTN) baskets, as the likelihood of making calls at any particular time will not vary with service type. Weights are in % of the total number of calls.

Table 2.3 National call distribution with time and day, in % of total number of national calls

	We 11:00	We 15:00	We 22:00	We 03:00	Sa 11:00	Su 15:00
Low intensity	13 %	25 %	31 %	5 %	15 %	11 %
High intensity	45.4 %	40.6 %	7.0 %	0.8 %	5.7 %	0.5 %

Note: The same distribution is used for local calls, long distance calls and calls to mobiles

International calls are only distinguishing between Peak and Off-peak. Peak will always mean the most expensive charge, and Off-peak the cheapest. The distribution is:

Table 2.4 International call distribution with time, in % of total number of international calls

International calls	Peak calls	Off-peak calls
Low intensity	25%	75%
High intensity	75%	25%

2.5. Call duration

Call durations are slightly different for the low and high intensity baskets, as they reflect residential and business users, respectively.

Table 2.5 Call durations for low intensity basket, in minutes per call

Low intensity	Local	Long distance	To Mobile
We11:00	2	3	3
We15:00	2	3	3
We22:00	3	4	3
We03:00	3	4	3
Sa11:00	3	4	3
Su15:00	3	4	3

Table 2.6 Call durations for high intensity basket, in minutes per call

High intensity	Local	Long distance	To Mobile
We11:00	2	4	3
We15:00	2	4	3
We22:00	3	5	3
We03:00	3	5	3
Sa11:00	3	5	3
Su15:00	3	5	3

International calls are divided into Peak and Off-peak calls. Peak will always mean the most expensive charge, and Off-peak the cheapest.

Table 2.7 Call durations for international calls, in minutes per call

International calls	Peak calls	Off-peak calls
All baskets	3 minutes	3 minutes

3. Individual country results

The tables and graphs in this section show the results for each country and each basket for the years 1998, 1999 and January and December 2000, December 2001 and December 2002. The annual expenditure is presented in euro, including VAT, due to the change of national currency at the beginning of 2002.

The graphs show 3 lines:

The bottom line is the fixed cost (per year), i.e. the monthly rental added up to one year.

The middle line is the national usage cost. Where there is a call allowance included in the monthly rental, the usage cost will be reduced accordingly. If the actual usage cost is less than the allowance, the displayed usage cost will go to zero. This is what happens when the middle line meets the lower line.

The top line is the total cost including the international usage. With the low user basket the cost of international usage is very low, and this line will mostly be hidden behind the national usage.

The availability of suitable tariff packages will vary. When for example the range of allowances included in the packages change, the new optimum package may incur a different fixed cost than before. This may impact on the total results especially for the low user basket.

(Tables and graphs start on next page)

3.1. Belgium, Proximus

Nominal price developments

Table 3.1.1 Annual low intensity basket expenditure, Belgium, Proximus

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Belgium, Proximus, ProxiFun	198	184	4	387
1999	Belgium, Proximus, ProxiFun	169	166	4	338
2000.01	Belgium, Proximus, ProxiFun	169	159	4	331
2000.12	Belgium, Proximus, ProxiFun	169	135	4	307
2001.12	Belgium, Proximus, ProxiFun	168	134	4	306
2002.12	Belgium, Proximus, ProxiFun	168	141	4	313

Table 3.1.2 Annual high intensity basket expenditure, Belgium, Proximus

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Belgium, Proximus, ProxiPlus	542	738	216	1,496
1999	Belgium, Proximus, ProxiPro	329	885	234	1,449
2000.01	Belgium, Proximus, ProxiPro	478	622	200	1,300
2000.12	Belgium, Proximus, ProxiPro	478	622	200	1,300
2001.12	Belgium, Proximus, ProxiPro	299	621	173	1,092
2002.12	Belgium, Proximus, ProxiPro	298	622	173	1,093

Note (nominal prices): Using euro, including VAT.

Figure 3.1.1 Annual low intensity basket expenditure, Belgium, Proximus

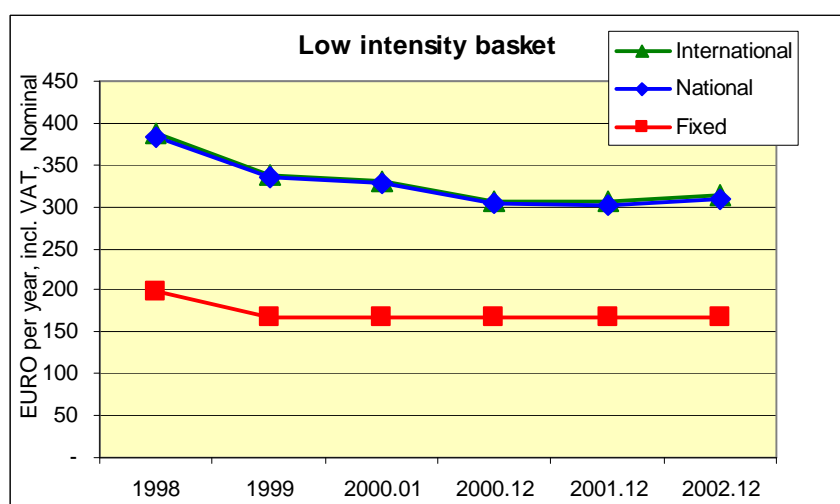
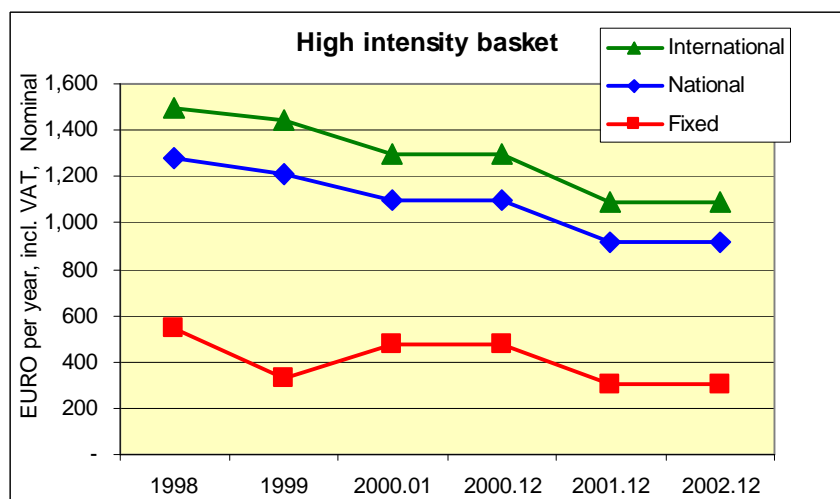


Figure 3.1.2 Annual high intensity basket expenditure, Belgium, Proximus



3.2. Belgium, Mobistar

Nominal price developments

Table 3.2.1 Annual low intensity basket expenditure, Belgium, Mobistar

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Belgium, Mobistar, Optimum 1	157	158	4	319
2000.01	Belgium, Mobistar, Optimum 1	157	111	4	272
2000.12	Belgium, Mobistar, Optimum 1	157	150	4	311
2001.12	Belgium, Mobistar, Optimum 1	157	121	4	281
2002.12	Belgium, Mobistar, Optimum for me	294	-	4	298

Table 3.2.2 Annual high intensity basket expenditure, Belgium, Mobistar

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Belgium, Mobistar, Optimum 2	306	864	234	1,404
2000.01	Belgium, Mobistar, Optimum 2	306	827	228	1,361
2000.12	Belgium, Mobistar, Optimum 2	306	827	228	1,361
2001.12	Belgium, Mobistar, Optimum 2	512	163	262	937
2002.12	Belgium, Mobistar, Flexo 2	300	649	260	1,210

Note (nominal prices): Using euro, including VAT.

Figure 3.2.1 Annual low intensity basket expenditure, Belgium, Mobistar

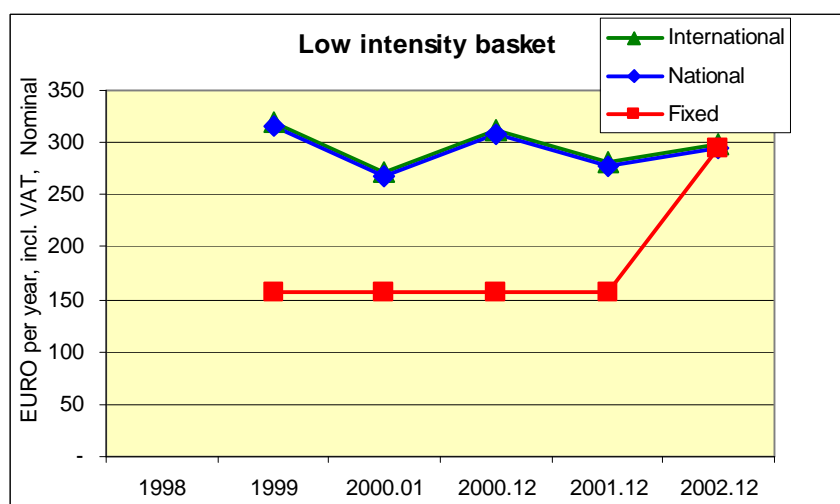
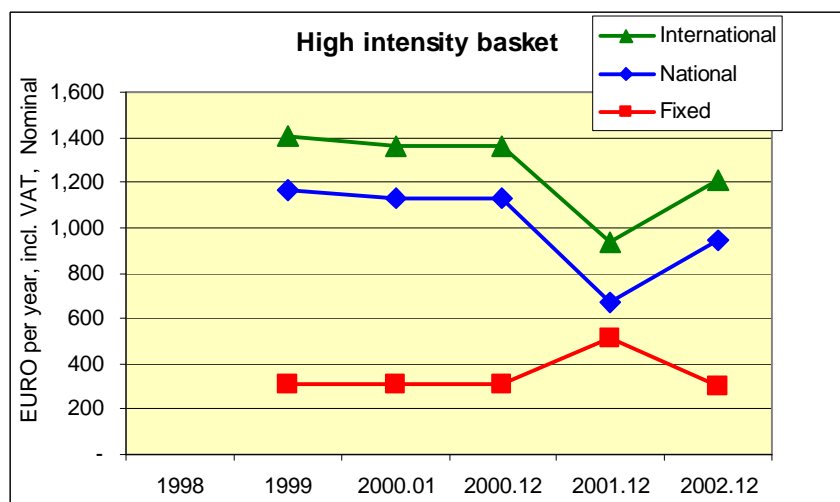


Figure 3.2.2 Annual high intensity basket expenditure, Belgium, Mobistar



3.3. Denmark, Tele Danmark Mobil

Nominal price developments

Table 3.3.1 Annual low intensity basket expenditure, Denmark, TDM

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Denmark, TDM, Fritid Plus	132	158	4	294
1999	Denmark, TDM, Fritid Plus	166	158	4	328
2000.01	Denmark, TDM, Fritid Plus	166	142	3	311
2000.12	Denmark, TDM, Privat Plus	166	106	3	274
2001.12	Denmark, TDM, Vic 45	160	8	3	171
2002.12	Denmark, TDM, Mobil 45	164	57	4	225

Table 3.3.2 Annual high intensity basket expenditure, Denmark, TDM

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Denmark, TDM, Erhverv Plus	238	662	199	1,098
1999	Denmark, TDM, Erhverv Plus	305	662	221	1,188
2000.01	Denmark, TDM, Erhverv Plus	305	596	176	1,077
2000.12	Denmark, TDM, Erhverv Plus	305	596	140	1,041
2001.12	Denmark, TDM, Vic Flex	139	578	140	856
2002.12	Denmark, TDM, Mobil Talk	126	468	139	733

Note (nominal prices): Using euro, including VAT.

Figure 3.3.1 Annual low intensity basket expenditure, Denmark, TDM

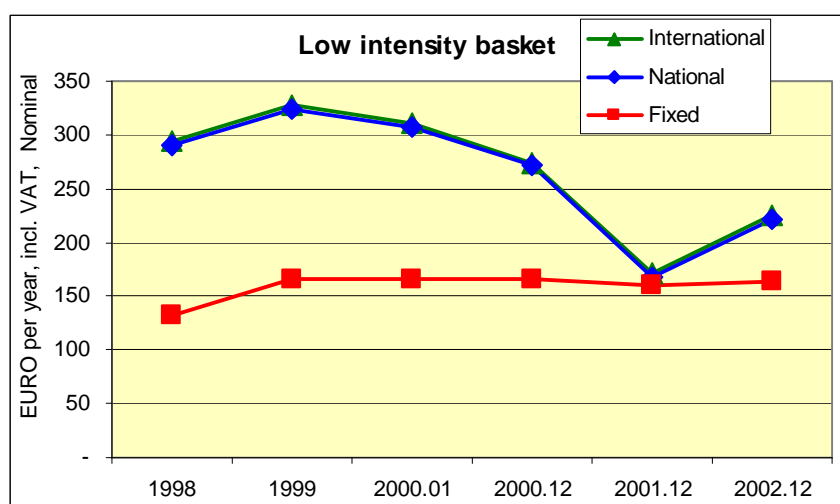
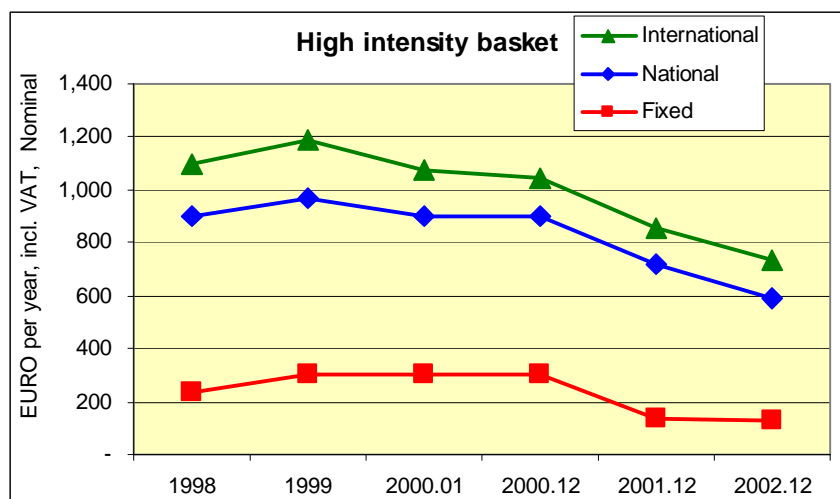


Figure 3.3.2 Annual high intensity basket expenditure, Denmark, TDM



3.4. Denmark, Sonofon

Nominal price developments

Table 3.4.1 Annual low intensity basket expenditure, Denmark, Sonofon

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Denmark, Sonofon, Fritid	161	151	3	315
2000.01	Denmark, Sonofon, Fritids	161	142	3	306
2000.12	Denmark, Sonofon, Fritids	161	142	3	306
2001.12	Denmark, Sonofon, Variant 1	72	164	3	238
2002.12	Denmark, Sonofon, Variant 1	72	164	4	240

Table 3.4.2 Annual high intensity basket expenditure, Denmark, Sonofon

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Denmark, Sonofon, Erhverv Xtra	225	721	180	1,126
2000.01	Denmark, Sonofon, Standard	161	678	183	1,022
2000.12	Denmark, Sonofon, Standard	161	678	183	1,022
2001.12	Denmark, Sonofon, Variant 3	153	487	105	744
2002.12	Denmark, Sonofon, Variant 3	128	468	189	786

Note (nominal prices): Using euro, including VAT.

Figure 3.4.1 Annual low intensity basket expenditure, Denmark, Sonofon

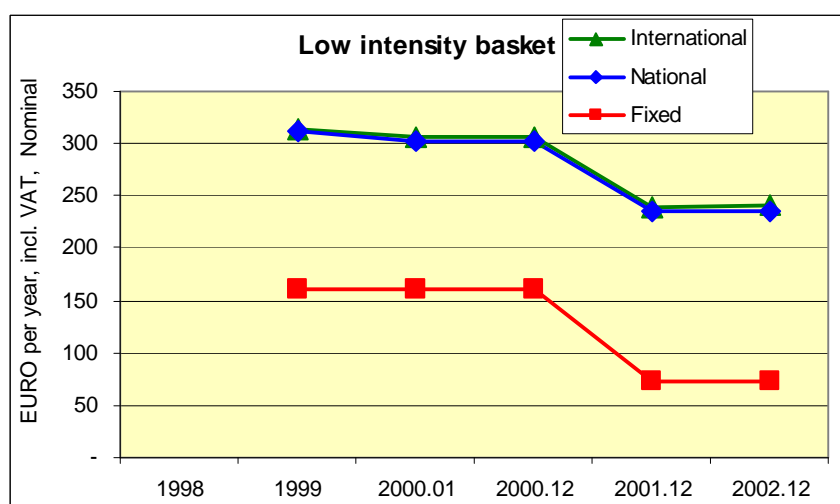
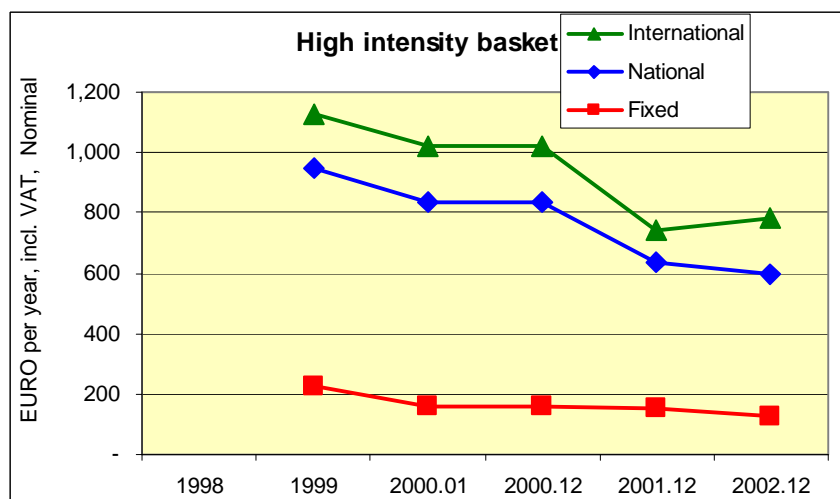


Figure 3.4.2 Annual high intensity basket expenditure, Denmark, Sonofon



3.5. Germany, T-Mobile

Nominal price developments

Table 3.5.1 Annual low intensity basket expenditure, Germany, T-Mobile

	Low intensity basket	Fixed	National	International	Total
1998	Germany, T-Mobile, Telly D-1	309	256	4	569
1999	Germany, T-Mobile, Telly D-1	315	257	5	577
2000.01	Germany, T-Mobile, Telly D-1	162	177	5	343
2000.12	Germany, T-Mobile, Telly D-1	162	149	5	315
2001.12	Germany, T-Mobile, Telly D-1	162	150	5	316
2002.12	Germany, T-Mobile, Telly D1	162	151	5	317

Table 3.5.2 Annual high intensity basket expenditure, Germany, T-Mobile

	High intensity basket	Fixed	National	International	Total
1998	Germany, T-Mobile, ProTel D-1	432	1,727	255	2,414
1999	Germany, T-Mobile, ProTel Plus	436	977	254	1,667
2000.01	Germany, T-Mobile, ProTel D-1 Standard	438	526	254	1,218
2000.12	Germany, T-Mobile, ProTel D-1 Standard	438	373	253	1,064
2001.12	Germany, T-Mobile, ProTel D-1 Standard	407	373	253	1,033
2002.12	Germany, T-Mobile, ProTel D1	407	376	292	1,076

Note (nominal prices): Using euro, including VAT.

Figure 3.5.1 Annual low intensity basket expenditure, Germany, T-Mobile

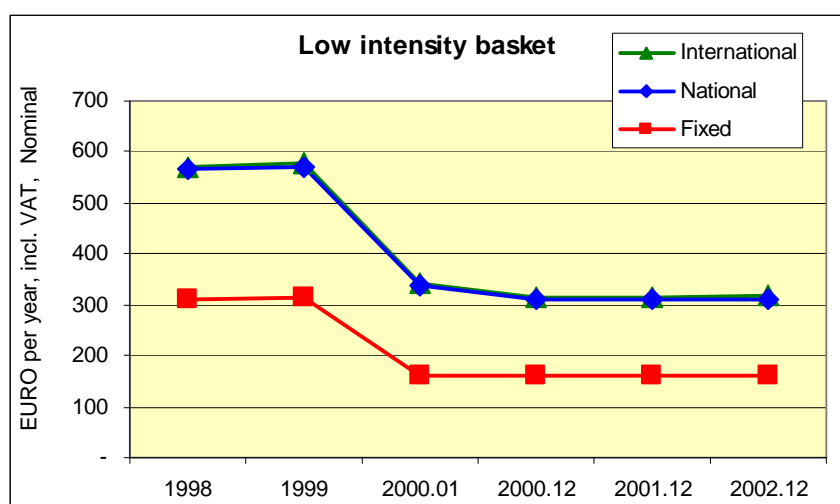
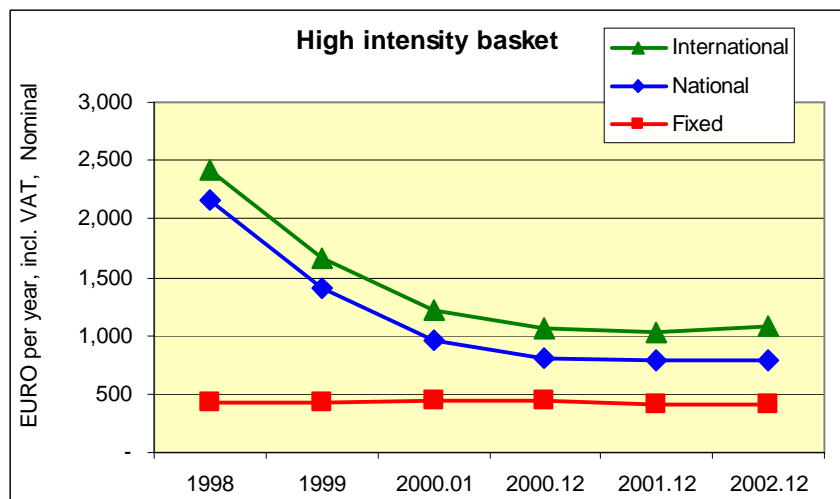


Figure 3.5.2 Annual high intensity basket expenditure, Germany, T-Mobile



3.6. Germany, Vodafone

Nominal price developments

Table 3.6.1 Annual low intensity basket expenditure, Germany, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Germany, D-2, Fun	162	209	5	375
2000.01	Germany, D-2, Fun	162	177	5	343
2000.12	Germany, D-2, Fun	162	149	5	315
2001.12	Germany, D-2, Fun	162	149	5	315
2002.12	Germany, Vodafone, Fun	128	145	5	278

Table 3.6.2 Annual high intensity basket expenditure, Germany, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Germany, D-2, Classic Premium	407	977	270	1,654
2000.01	Germany, D-2, Classic Premium	407	526	270	1,203
2000.12	Germany, D-2, Classic Premium	407	388	270	1,065
2001.12	Germany, D-2, Classic Premium	407	388	267	1,063
2002.12	Germany, Vodafone, Classic	248	694	318	1,260

Note (nominal prices): Using euro, including VAT.

Figure 3.6.1 Annual low intensity basket expenditure, Germany, Vodafone

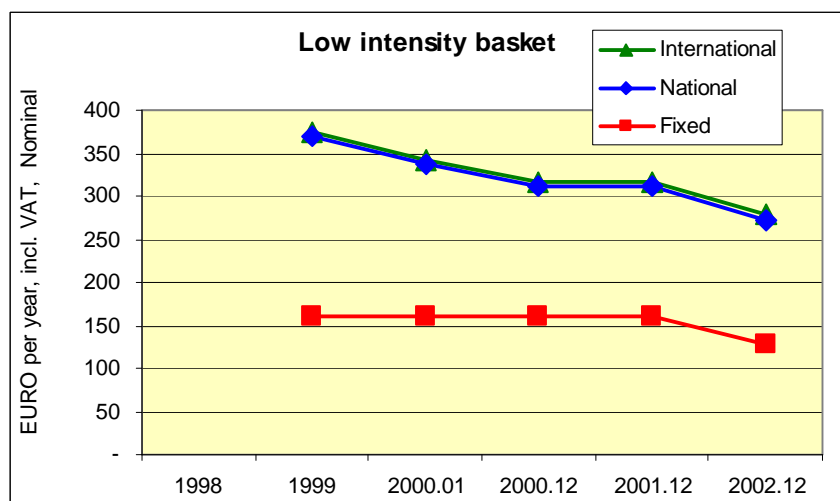
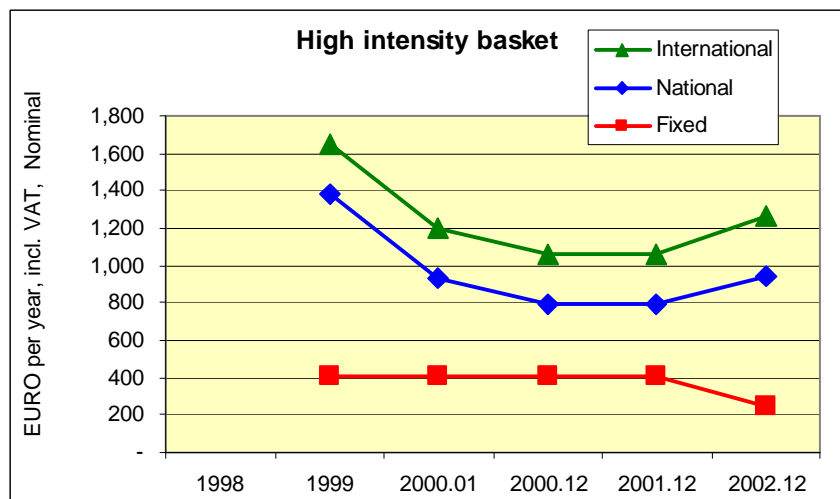


Figure 3.6.2 Annual high intensity basket expenditure, Germany, Vodafone



3.7. Greece, Cosmote

Nominal price developments

Table 3.7.1 Annual low intensity basket expenditure, Greece, Cosmote

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Greece, Cosmote, Basic 2	116	214	3	334
2000.01	Greece, Cosmote, Basic 2	116	194	3	314
2000.12	Greece, Cosmote, Basic 2	104	170	3	277
2001.12	Greece, Cosmote, Basic 2	104	146	2	252
2002.12	Greece, Cosmote, Priviledged 1	104	145	3	252

Table 3.7.2 Annual high intensity basket expenditure, Greece, Cosmote

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Greece, Cosmote, Basic 2	116	1,001	194	1,311
2000.01	Greece, Cosmote, Basic 2	116	902	178	1,196
2000.12	Greece, Cosmote, Basic 2	104	611	178	893
2001.12	Greece, Cosmote, Basic 2	104	611	109	824
2002.12	Greece, Cosmote, Priviledged 1	104	672	163	939

Note (nominal prices): Using euro, including VAT.

Figure 3.7.1 Annual low intensity basket expenditure, Greece, Cosmote

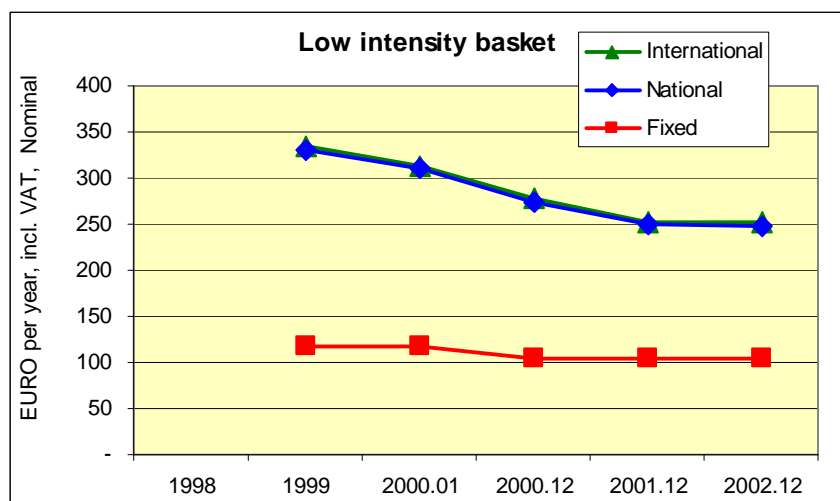
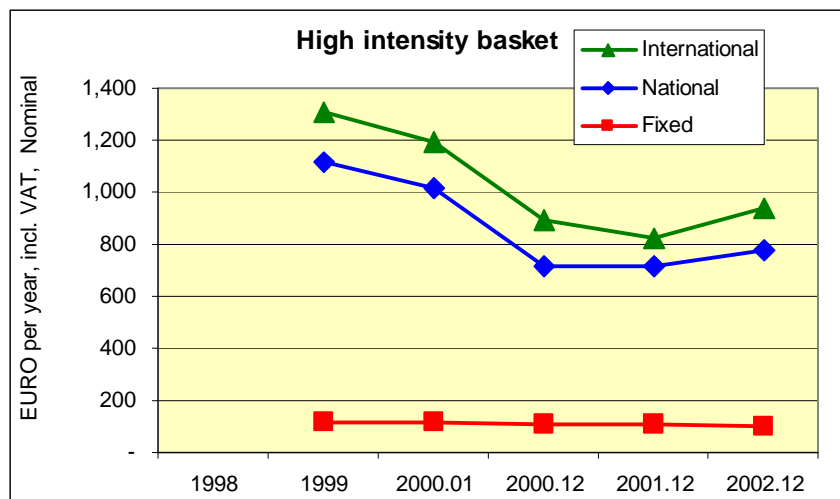


Figure 3.7.2 Annual high intensity basket expenditure, Greece, Cosmote



3.8. Greece, Vodafone

Nominal price developments

Table 3.8.1 Annual low intensity basket expenditure, Greece, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Greece, Panafon, Economy	270	359	4	632
2000.01	Greece, Panafon, Economy	270	325	3	598
2000.12	Greece, Panafon 1	145	170	3	319
2001.12	Greece, Panafon 1	125	145	3	273
2002.12	Greece, Vodafone 1	125	145	4	273

Table 3.8.2 Annual high intensity basket expenditure, Greece, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Greece, Panafon, Executive	499	1,100	182	1,781
2000.01	Greece, Panafon, Executive	499	990	163	1,652
2000.12	Greece, Panafon 180	665	564	163	1,392
2001.12	Greece, Panafon 180	561	321	119	1,001
2002.12	Greece, Vodafone 180	561	98	164	822

Note (nominal prices): Using euro, including VAT.

Figure 3.8.1 Annual low intensity basket expenditure, Greece, Vodafone

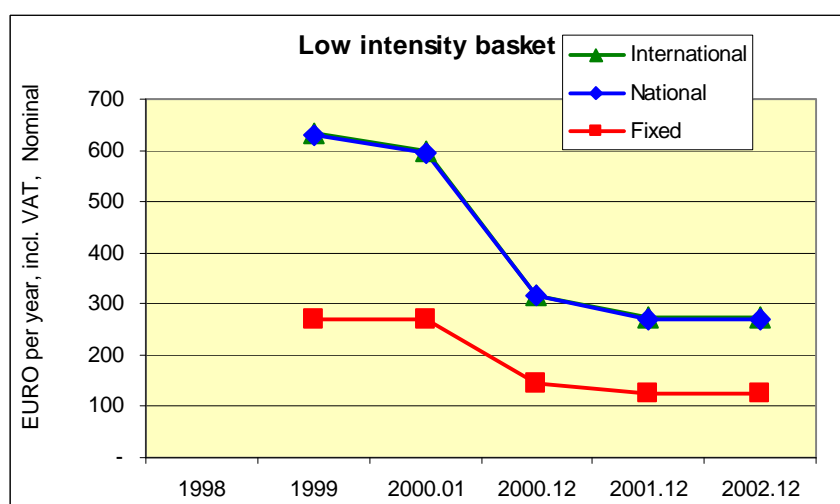
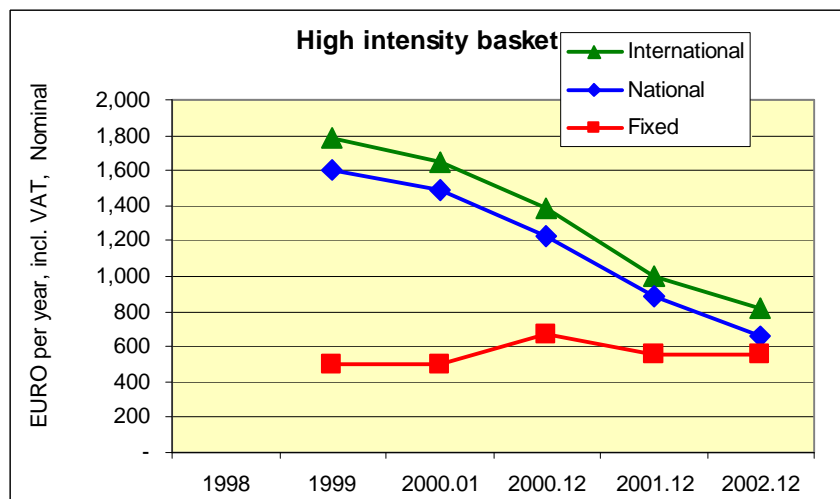


Figure 3.8.2 Annual high intensity basket expenditure, Greece, Vodafone



3.9. Spain, Movistar

Nominal price developments

Table 3.9.1 Annual low intensity basket expenditure, Spain, Movistar

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Spain, TMA, Personal	207	226	#N/A	433
1999	Spain, Movistar, Personal	176	250	4	429
2000.01	Spain, Movistar, Personal	176	126	4	305
2000.12	Spain, Movistar, Eleccion Tarde	92	102	4	197
2001.12	Spain, Movistar, Eleccion Tarde	92	87	3	182
2002.12	Spain, Movistar, Plus Eleccion	8	108	4	121

Table 3.9.2 Annual high intensity basket expenditure, Spain, Movistar

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Spain, TMA, Business	1,279	1,190	#N/A	2,469
1999	Spain, Movistar, Exacto Prof.	343	915	197	1,455
2000.01	Spain, Movistar, General	343	608	197	1,148
2000.12	Spain, Movistar, Professional	92	807	197	1,095
2001.12	Spain, Movistar, Professional	217	743	173	1,134
2002.12	Spain, Movistar, Plus Empresa	8	629	206	843

Note (nominal prices): Using euro, including VAT.

Figure 3.9.1 Annual low intensity basket expenditure, Spain, Movistar

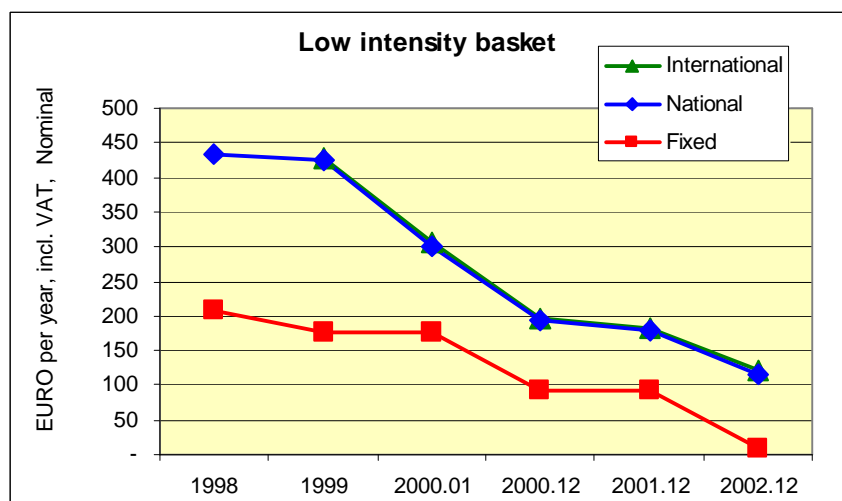
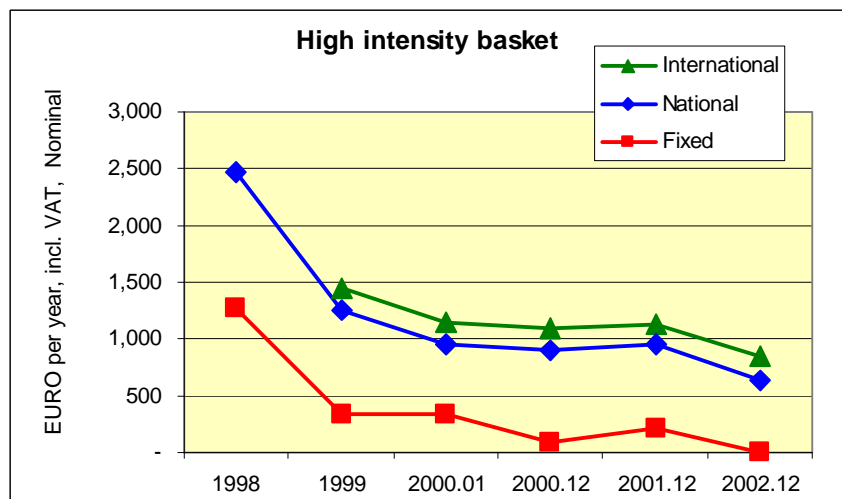


Figure 3.9.2 Annual high intensity basket expenditure, Spain, Movistar



3.10. Spain, Vodafone

Nominal price developments

Table 3.10.1 Annual low intensity basket expenditure, Spain, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Spain, Airtel, Personal	176	192	#N/A	368
2000.01	Spain, Airtel, Provincial	173	101	4	277
2000.12	Spain, Airtel, Tarde	89	150	4	243
2001.12	Spain, Airtel, Tarde	89	156	4	250
2002.12	Spain, Vodafone, Tarde	-	144	4	148

Table 3.10.2 Annual high intensity basket expenditure, Spain, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Spain, Airtel, Profesional	343	915	#N/A	1,258
2000.01	Spain, Airtel, sin Horarios	217	756	197	1,171
2000.12	Spain, Airtel, sin Horarios	50	756	197	1,003
2001.12	Spain, Airtel, sin Horarios	50	756	226	1,032
2002.12	Spain, Vodafone, Universal 20	-	723	197	920

Note (nominal prices): Using euro, including VAT.

Figure 3.10.1 Annual low intensity basket expenditure, Spain, Vodafone

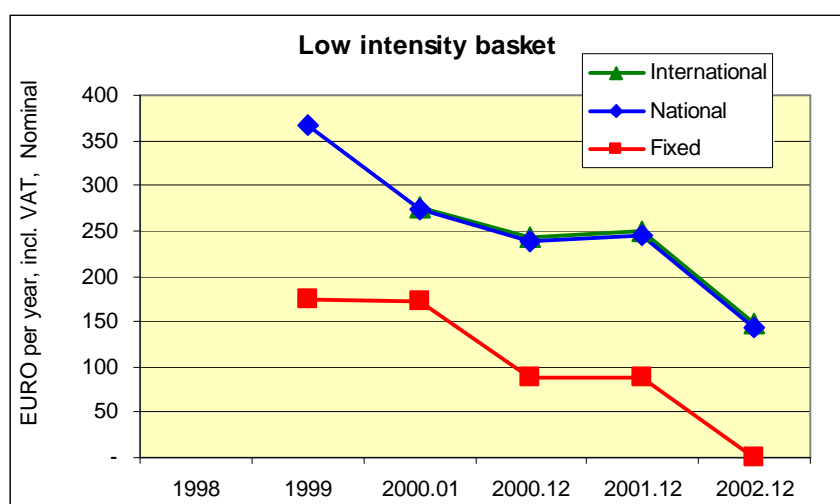
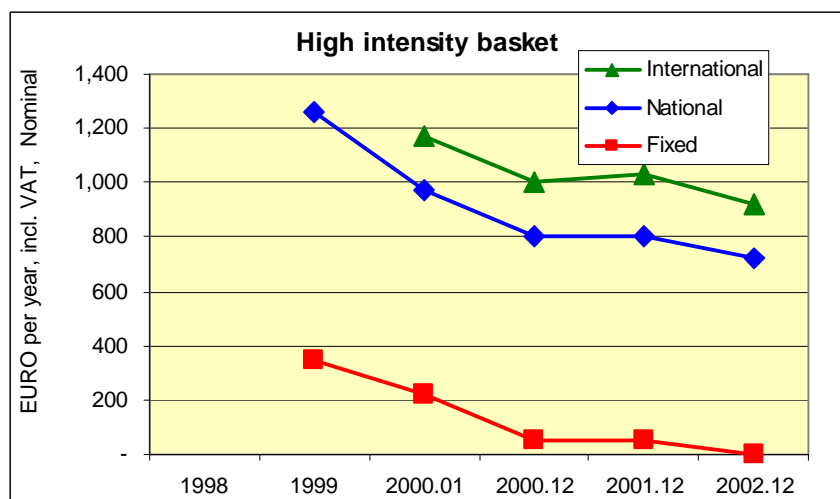


Figure 3.10.2 Annual high intensity basket expenditure, Spain, Vodafone



3.11. France, Orange

Nominal price developments

Table 3.11.1 Annual low intensity basket expenditure, France, Orange

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	France, Itineris, Declic	242	219	6	467
1999	France, Itineris, Declic	203	219	6	427
2000.01	France, Itineris, Declic	203	200	3	406
2000.12	France, Itineris, Ola 2H	375	-	3	378
2001.12	France, Orange, Forfait 1	90	-	3	93
2002.12	France, Orange, Forfait 2h	372	-	3	375

Table 3.11.2 Annual high intensity basket expenditure, France, Orange

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	France, Itineris, Reference	374	1,247	232	1,854
1999	France, Itineris, Reference	367	1,247	232	1,847
2000.01	France, Itineris, Loft 2H	396	805	158	1,359
2000.12	France, Itineris, Loft 4H	577	-	156	734
2001.12	France, Orange, Forfait Adj. 2	318	383	144	845
2002.12	France, Orange, Forfait 5h	642	-	144	785

Note (nominal prices): Using euro, including VAT.

Figure 3.11.1 Annual low intensity basket expenditure, France, Orange

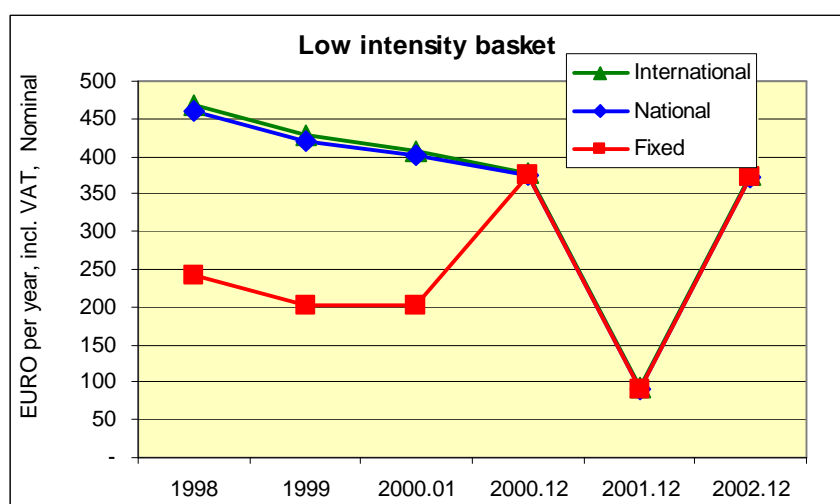
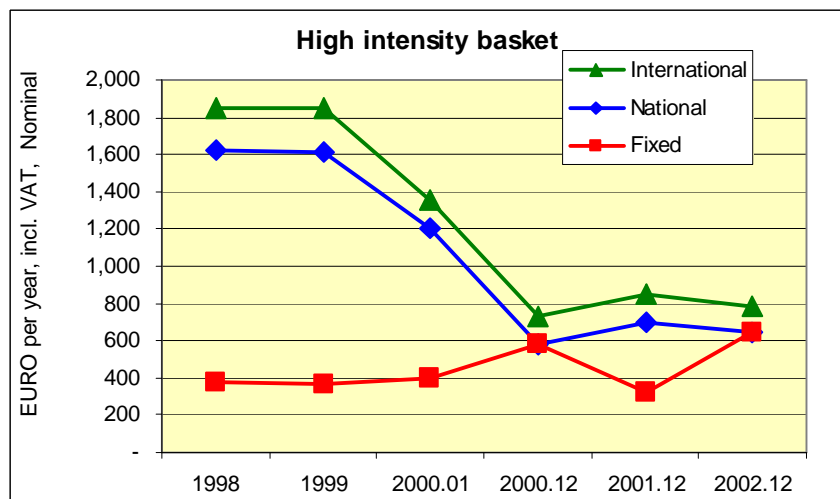


Figure 3.11.2 Annual high intensity basket expenditure, France, Orange



3.12. France, SFR

Nominal price developments

Table 3.12.1 Annual low intensity basket expenditure, France, SFR

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	France, SFR, Forfait 30	268	85	4	356
2000.01	France, SFR 30	268	74	3	345
2000.12	France, SFR Formule ABC	112	177	3	292
2001.12	France, SFR Formule 2+10	311	0	3	314
2002.12	France, SFR Formule 16euro	192	-	3	195

Table 3.12.2 Annual high intensity basket expenditure, France, SFR

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	France, SFR, Pro 100	385	418	163	966
2000.01	France, SFR Pro 100	378	475	149	1,002
2000.12	France, SFR Forfait 4H	669	270	148	1,086
2001.12	France, SFR Pro 100	360	394	153	907
2002.12	France, SFR Pro 100	312	439	153	903

Note (nominal prices): Using euro, including VAT.

Figure 3.12.1 Annual low intensity basket expenditure, France, SFR

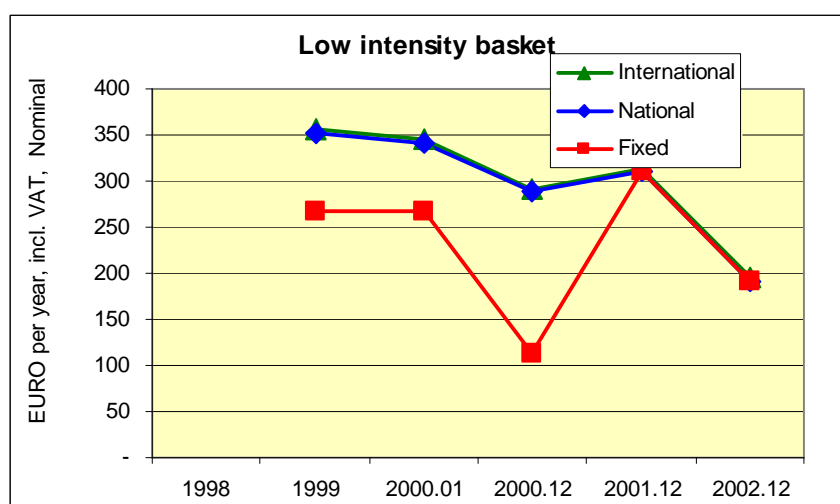
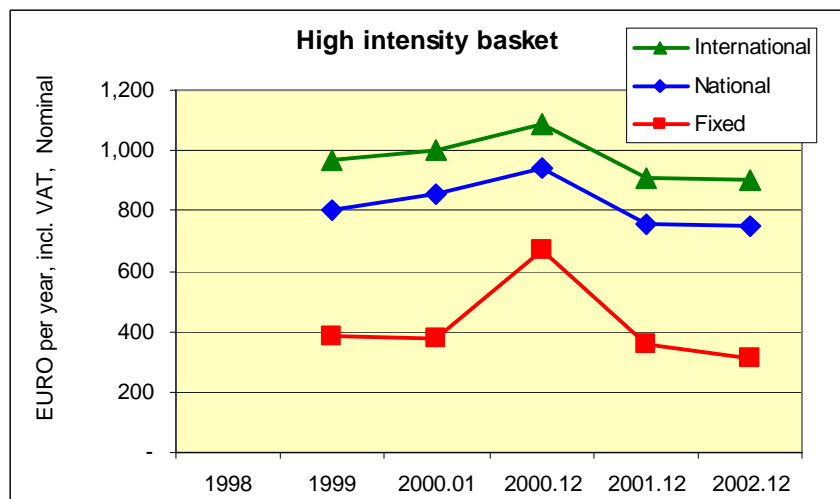


Figure 3.12.2 Annual high intensity basket expenditure, France, SFR



3.13. Ireland, Vodafone

Nominal price developments

Table 3.13.1 Annual low intensity basket expenditure, Ireland, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Ireland, Eircell, Eirtime	202	296	4	503
1999	Ireland, Eircell, Eirtime	202	296	4	503
2000.01	Ireland, Eircell, Eirtime 10	201	143	4	348
2000.12	Ireland, Eircell, Eirtime 10	201	143	4	348
2001.12	Ireland, Eircell, Light	302	121	4	427
2002.12	Ireland, Vodafone, Light	230	-	4	234

Table 3.13.2 Annual high intensity basket expenditure, Ireland, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Ireland, Eircell, Eirtime 180	1,124	182	239	1,545
1999	Ireland, Eircell, Eirtime 180	1,124	182	239	1,545
2000.01	Ireland, Eircell, Eirtime 250	1,124	-	239	1,363
2000.12	Ireland, Eircell, Eirtime 250	1,124	-	239	1,363
2001.12	Ireland, Eircell, Performer	1,097	34	201	1,332
2002.12	Ireland, Vodafone, Performer	602	39	202	843

Note (nominal prices): Using euro, including VAT.

Figure 3.13.1 Annual low intensity basket expenditure, Ireland, Vodafone

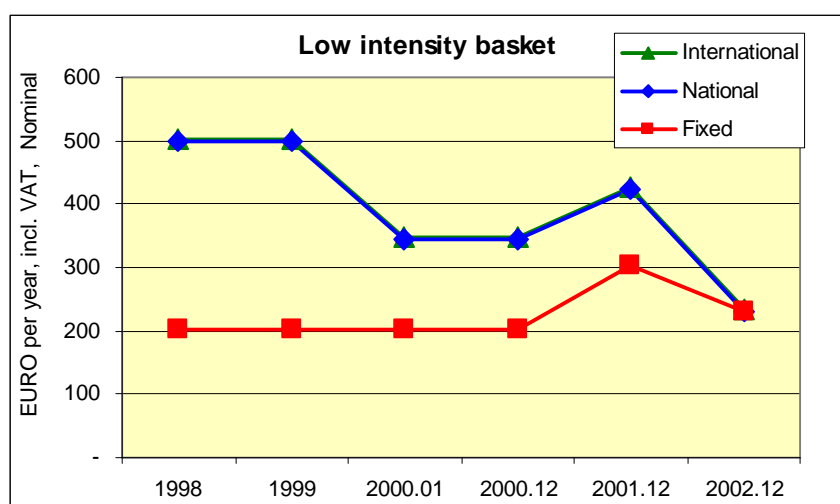
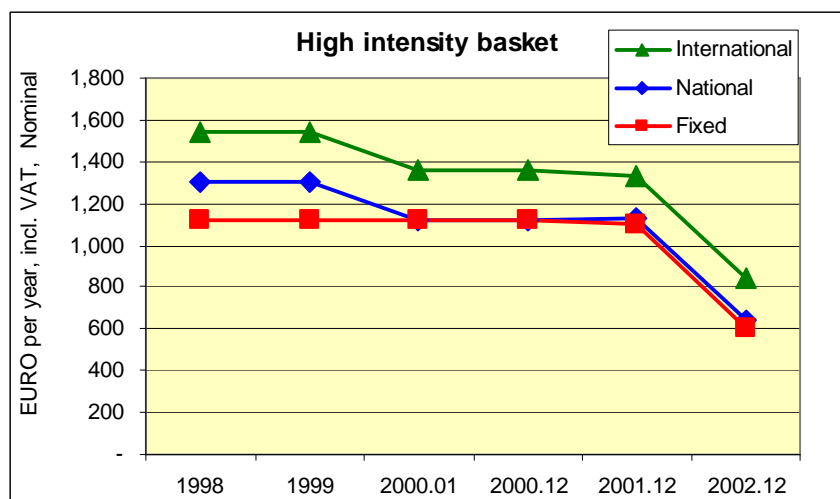


Figure 3.13.2 Annual high intensity basket expenditure, Ireland, Vodafone



3.14. Ireland, O2

Nominal price developments

Table 3.14.1 Annual low intensity basket expenditure, Ireland, O2

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Ireland, Esat, Digilite	247	119	4	369
2000.01	Ireland, Esat, Select 1	202	113	4	319
2000.12	Ireland, Esat, Select 1	184	93	4	281
2001.12	Ireland, Esat, Select 1	184	58	4	246
2002.12	Ireland, O2, Select 1	175	57	4	236

Table 3.14.2 Annual high intensity basket expenditure, Ireland, O2

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Ireland, Esat, Digimax	387	861	202	1,449
2000.01	Ireland, Esat, Select 2	387	616	202	1,204
2000.12	Ireland, Esat, Select 2	369	582	202	1,153
2001.12	Ireland, Esat, Select 2	369	555	201	1,125
2002.12	Ireland, O2, Select 2	369	501	201	1,071

Note (nominal prices): Using euro, including VAT.

Figure 3.14.1 Annual low intensity basket expenditure, Ireland, O2

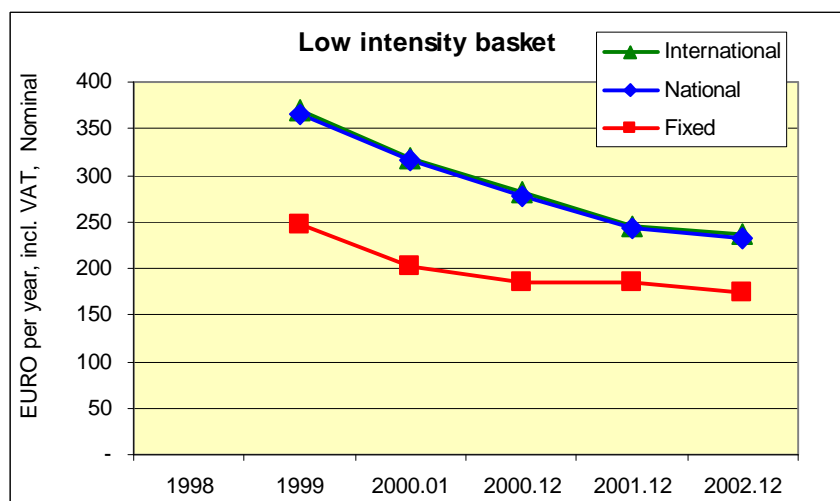
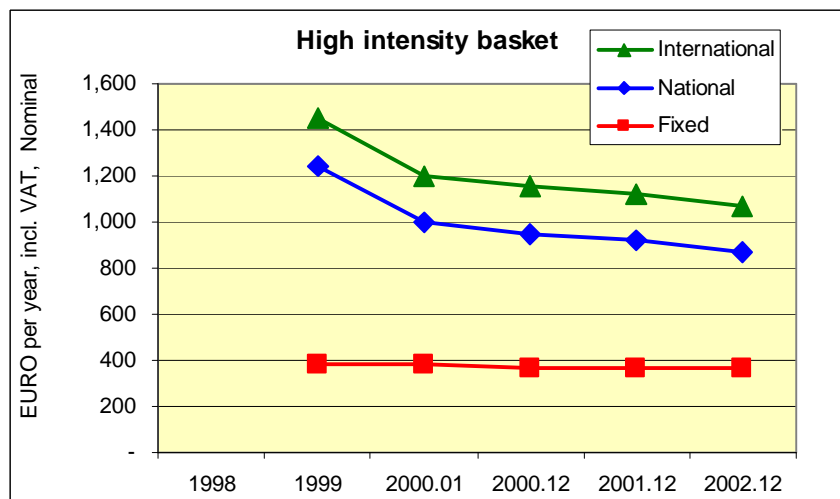


Figure 3.14.2 Annual high intensity basket expenditure, Ireland, O2



3.15. Italy, Telecom Italia Mobile

Nominal price developments

Table 3.15.1 Annual low intensity basket expenditure, Italy, TIM

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Italy, TIM, Euro Time	175	162	#N/A	337
1999	Italy, TIM, Euro Time	112	163	-	274
2000.01	Italy, TIM, Euro Time	112	171	4	286
2000.12	Italy, TIM, Euro Time	112	171	4	286
2001.12	Italy, TIM, Flash	-	169	3	172
2002.12	Italy, TIM, Menu Family	62	251	5	319

Table 3.15.2 Annual high intensity basket expenditure, Italy, TIM

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Italy, TIM, Euro Prof	418	934	#N/A	1,352
1999	Italy, TIM, Euro Prof	260	881	103	1,245
2000.01	Italy, TIM, Euro Prof	260	904	103	1,268
2000.12	Italy, TIM, Euro Prof	260	904	103	1,268
2001.12	Italy, TIM, Menu Bus.	74	742	103	920
2002.12	Italy, TIM, Menu Bus.	160	867	140	1,168

Note (nominal prices): Using euro, including VAT.

Figure 3.15.1 Annual low intensity basket expenditure, Italy, TIM

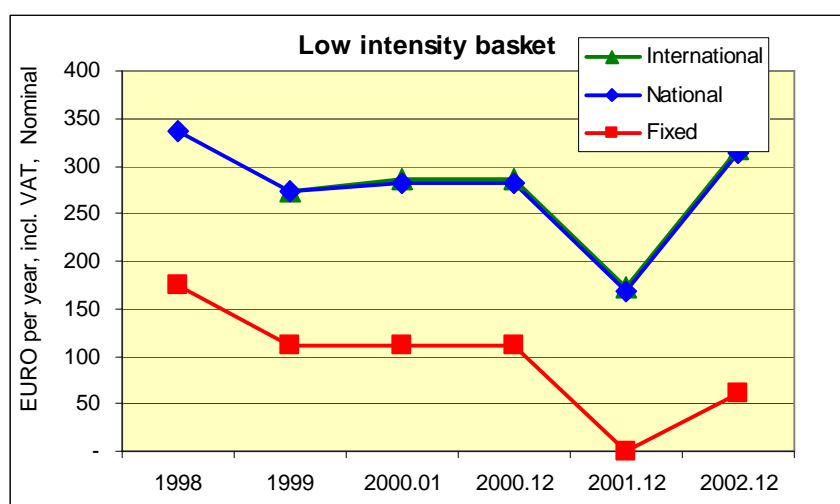
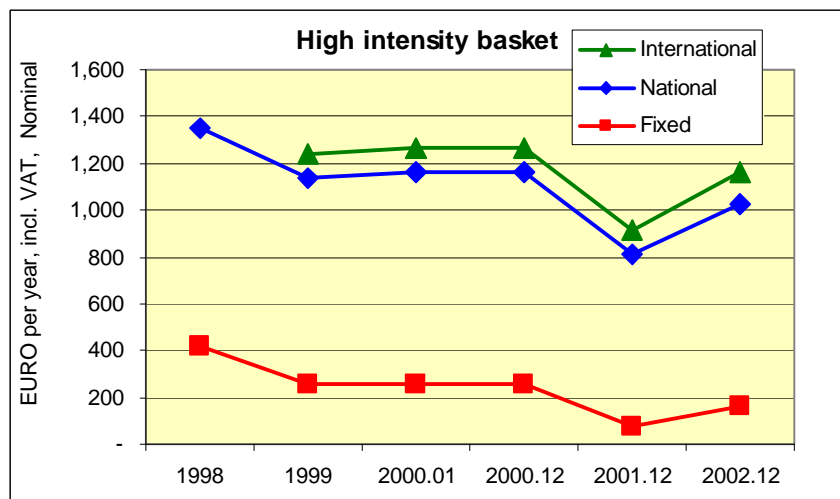


Figure 3.15.2 Annual high intensity basket expenditure, Italy, TIM



3.16. Italy, Omnitel

Nominal price developments

Table 3.16.1 Annual low intensity basket expenditure, Italy, Omnitel

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Italy, Omnitel, Personal 195	-	220	3	223
2000.01	Italy, Omnitel, Nuovo Personal 195	-	140	2	142
2000.12	Italy, Omnitel, Nuovo Personal 195	-	140	2	142
2001.12	Italy, Omnitel, Dippiu 50 a.s.	-	155	2	157
2002.12	Italy, Omnitel, Euro Italy	62	88	4	154

Table 3.16.2 Annual high intensity basket expenditure, Italy, Omnitel

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Italy, Omnitel, Dippiu 30	-	861	86	947
2000.01	Italy, Omnitel, Dippiu 30	-	775	86	861
2000.12	Italy, Omnitel, Dippiu 30	-	607	86	693
2001.12	Italy, Omnitel, Company 50	-	607	84	691
2002.12	Italy, Omnitel, Euro Dippiu 50	62	732	180	973

Note (nominal prices): Using euro, including VAT.

Figure 3.16.1 Annual low intensity basket expenditure, Italy, Omnitel

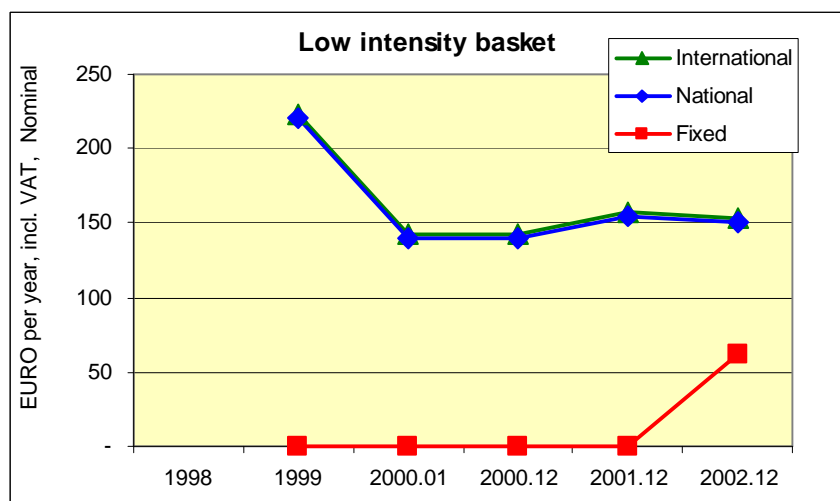
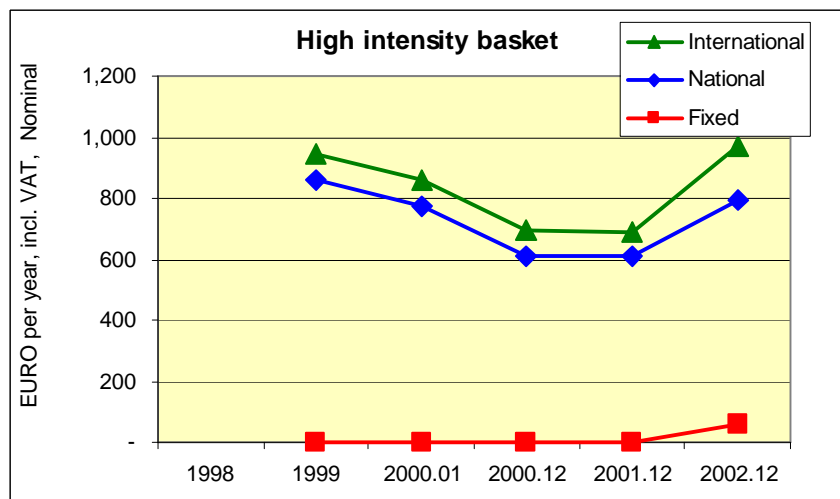


Figure 3.16.2 Annual high intensity basket expenditure, Italy, Omnitel



3.17. Luxembourg, LuxGSM

Nominal price developments

Table 3.17.1 Annual low intensity basket expenditure, Luxembourg, LuxGSM

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Luxembourg, LuxGSM, Liberty	280	152	4	437
1999	Luxembourg, LuxGSM, Liberty	165	123	3	292
2000.01	Luxembourg, LuxGSM, Liberty	165	93	3	261
2000.12	Luxembourg, LuxGSM, Liberty	74	90	3	167
2001.12	Luxembourg, LuxGSM, Liberty	74	90	1	165
2002.12	Luxembourg, LuxGSM, Liberty	74	90	2	166

Table 3.17.2 Annual high intensity basket expenditure, Luxembourg, LuxGSM

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Luxembourg, LuxGSM, Business	537	765	195	1,497
1999	Luxembourg, LuxGSM, Business	530	374	137	1,040
2000.01	Luxembourg, LuxGSM, Business	463	336	104	903
2000.12	Luxembourg, LuxGSM, Business	149	334	104	587
2001.12	Luxembourg, LuxGSM, Business	149	334	37	520
2002.12	Luxembourg, LuxGSM, Business	149	334	79	562

Note (nominal prices): Using euro, including VAT.

Figure 3.17.1 Annual low intensity basket expenditure, Luxembourg, LuxGSM

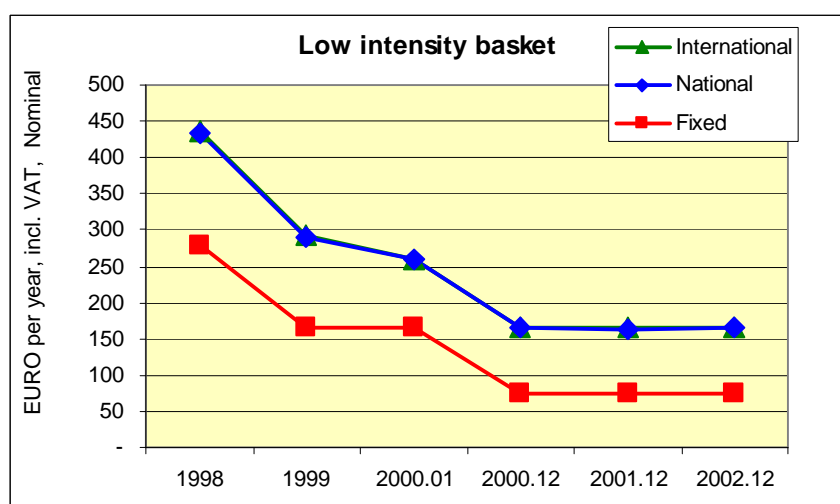
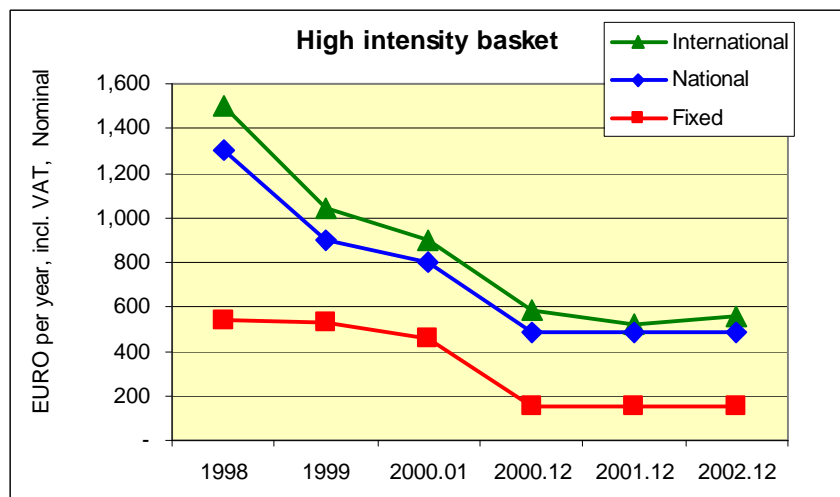


Figure 3.17.2 Annual high intensity basket expenditure, Luxembourg, LuxGSM



3.18. Luxembourg, Tango

Nominal price developments

Table 3.18.1 Annual low intensity basket expenditure, Luxembourg, Tango

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Luxembourg, Mobilux, Surf	165	100	3	267
2000.01	Luxembourg, Tango, Twist	149	88	2	239
2000.12	Luxembourg, Tango, HipHop	-	127	2	129
2001.12	Luxembourg, Tango, HipHop	-	123	1	124
2002.12	Luxembourg, Tango, HipHop	-	133	1	134

Table 3.18.2 Annual high intensity basket expenditure, Luxembourg, Tango

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Luxembourg, Mobilux, Business	537	374	721	1,631
2000.01	Luxembourg, Tango, Swing	446	336	104	887
2000.12	Luxembourg, Tango, Twist	149	321	104	574
2001.12	Luxembourg, Tango, Twist	166	298	41	504
2002.12	Luxembourg, Tango, Twist	144	325	47	516

Note (nominal prices): Using euro, including VAT.

Figure 3.18.1 Annual low intensity basket expenditure, Luxembourg, Tango

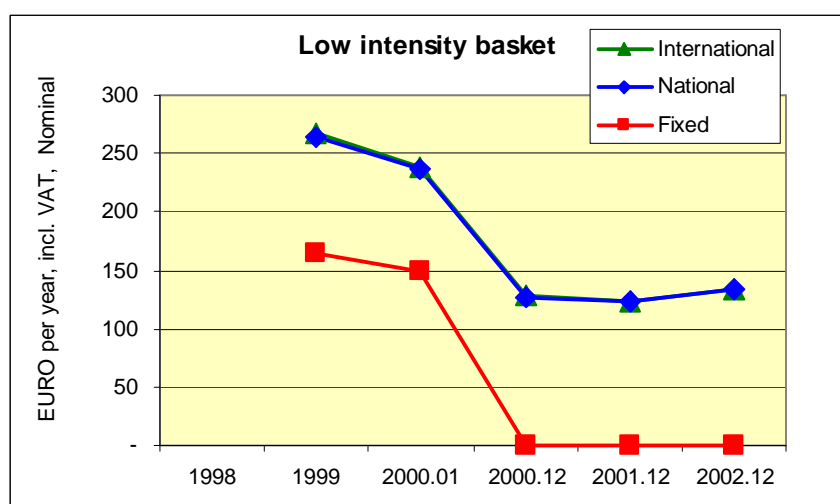
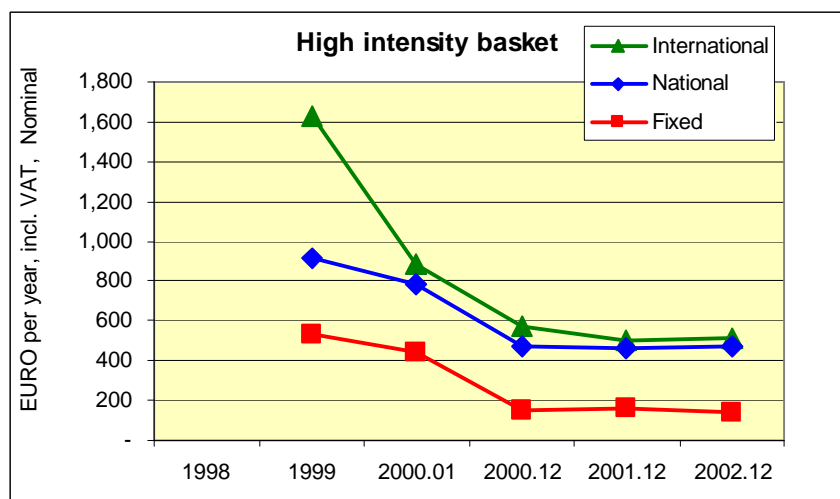


Figure 3.18.2 Annual high intensity basket expenditure, Luxembourg, Tango



3.19. Netherlands, KPN

Nominal price developments

Table 3.19.1 Annual low intensity basket expenditure, Netherlands, KPN

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Netherlands, KPN, FreeSpace	200	249	4	454
1999	Netherlands, KPN, Flexibel Economy	208	190	3	400
2000.01	Netherlands, KPN, Flexibel Hi	207	126	2	335
2000.12	Netherlands, KPN, Flexibel Hi	125	123	2	251
2001.12	Netherlands, KPN, Flexibel Hi	191	122	1	314
2002.12	Netherlands, KPN, Mobile 120	300	-	3	303

Table 3.19.2 Annual high intensity basket expenditure, Netherlands, KPN

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Netherlands, KPN, EuroSpace	432	1,321	207	1,960
1999	Netherlands, KPN, Flexibel Allround	400	881	147	1,428
2000.01	Netherlands, KPN, Flexibel Allround	304	530	98	933
2000.12	Netherlands, KPN, Flexibel Allround	234	608	98	941
2001.12	Netherlands, KPN, Flexibel Allround	245	466	85	796
2002.12	Netherlands, KPN, Mobile 360	600	-	188	787

Note (nominal prices): Using euro, including VAT.

Figure 3.19.1 Annual low intensity basket expenditure, Netherlands, KPN

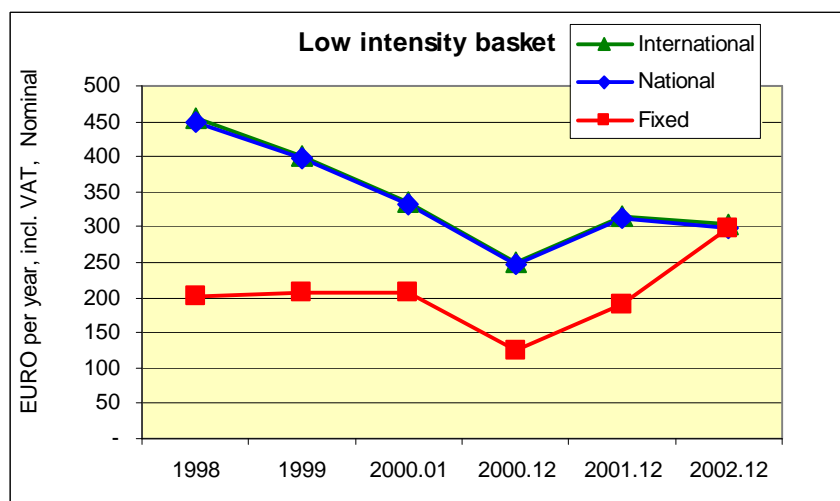
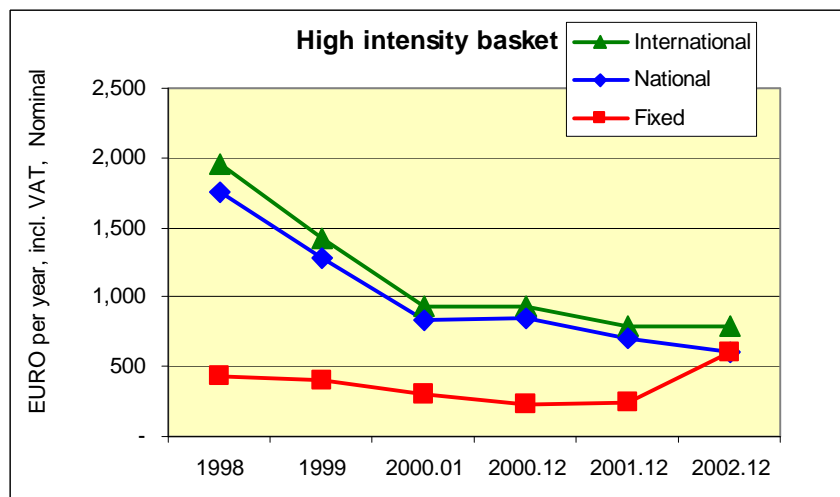


Figure 3.19.2 Annual high intensity basket expenditure, Netherlands, KPN



3.20. Netherlands, Vodafone

Nominal price developments

Table 3.20.1 Annual low intensity basket expenditure, Netherlands, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Netherlands, Libertel, In-Life	206	190	2	398
2000.01	Netherlands, Libertel, Personal	206	87	3	296
2000.12	Netherlands, Libertel 60	204	-	3	207
2001.12	Netherlands, Libertel 60	203	-	2	205
2002.12	Netherlands, Vodafone 60	216	-	3	218

Table 3.20.2 Annual high intensity basket expenditure, Netherlands, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Netherlands, Libertel, In-Business	400	748	135	1,282
2000.01	Netherlands, Libertel, Professional 120	424	112	143	679
2000.12	Netherlands, Libertel 240	419	1	143	563
2001.12	Netherlands, Libertel 240	425	17	88	530
2002.12	Netherlands, Vodafone 240	437	8	152	597

Note (nominal prices): Using euro, including VAT.

Figure 3.20.1 Annual low intensity basket expenditure, Netherlands, Vodafone

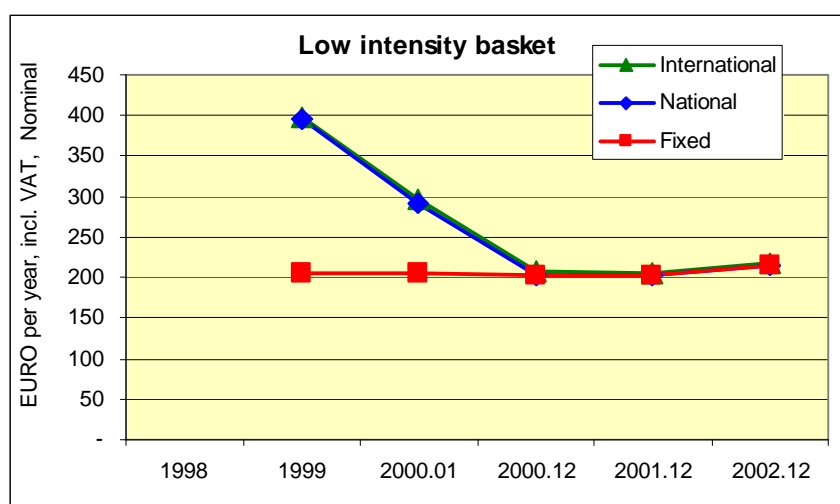
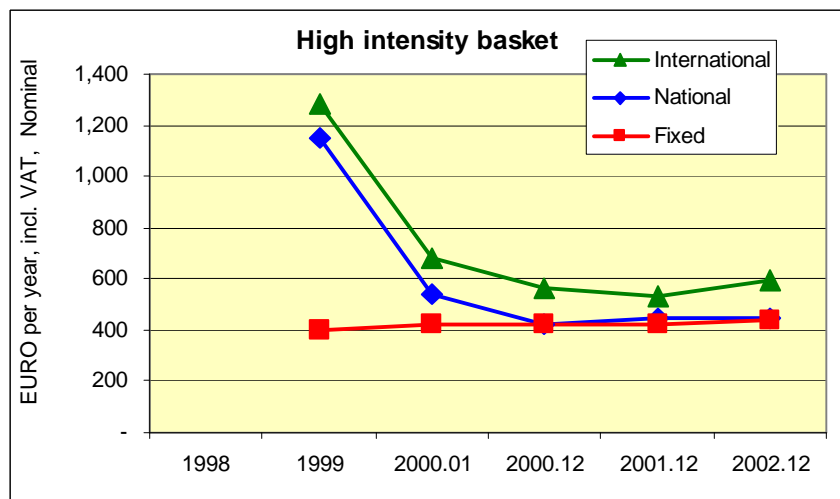


Figure 3.20.2 Annual high intensity basket expenditure, Netherlands, Vodafone



3.21. Austria, Mobilkom

Nominal price developments

Table 3.21.1 Annual low intensity basket expenditure, Austria, Mobilkom

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Austria, Mobilkom, Fun Call	262	166	#N/A	428
1999	Austria, Mobilkom, Fun Call	262	104	3	369
2000.01	Austria, Mobilkom, Fun	262	100	3	365
2000.12	Austria, Mobilkom, Fun	263	100	3	366
2001.12	Austria, Mobilkom, Fun	265	100	3	368
2002.12	Austria, Mobilkom, Fun	265	100	3	368

Table 3.21.2 Annual high intensity basket expenditure, Austria, Mobilkom

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Austria, Mobilkom, Business Call	351	1,040	#N/A	1,391
1999	Austria, Mobilkom, Business Call	351	376	129	856
2000.01	Austria, Mobilkom, Business	351	196	129	676
2000.12	Austria, Mobilkom, Business	351	196	129	676
2001.12	Austria, Mobilkom, Business	353	196	129	678
2002.12	Austria, Mobilkom, Business	353	197	130	680

Note (nominal prices): Using euro, including VAT.

Figure 3.21.1 Annual low intensity basket expenditure, Austria, Mobilkom

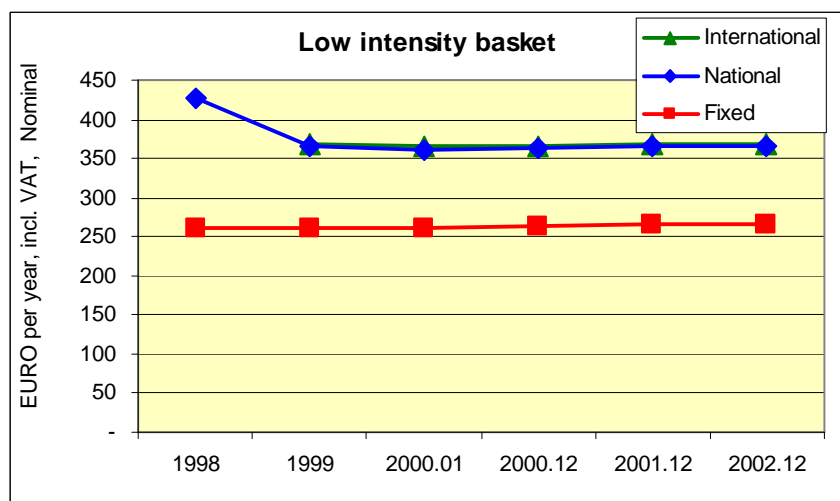
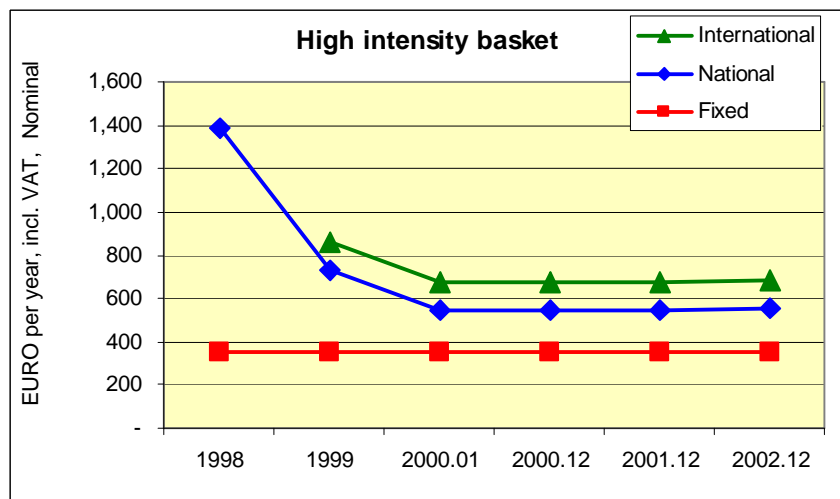


Figure 3.21.2 Annual high intensity basket expenditure, Austria, Mobilkom



3.22. Austria, T-Mobile

Nominal price developments

Table 3.22.1 Annual low intensity basket expenditure, Austria, T-Mobile

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Austria, Maxmobil, Freizeit	272	92	3	367
2000.01	Austria, Maxmobil, Freizeit	272	88	3	363
2000.12	Austria, Maxmobil, Freizeit	272	88	3	363
2001.12	Austria, Maxmobil, Freizeit	272	88	3	364
2002.12	Austria, T-Mobile, EuroFreizeit	193	108	1	303

Table 3.22.2 Annual high intensity basket expenditure, Austria, T-Mobile

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Austria, Maxmobil, Profi	359	376	114	848
2000.01	Austria, Maxmobil, Profi	359	196	114	669
2000.12	Austria, Maxmobil, Profi	359	196	114	669
2001.12	Austria, Maxmobil, Profi	360	196	136	692
2002.12	Austria, T-Mobile, EuroProfi	313	271	50	634

Note (nominal prices): Using euro, including VAT.

Figure 3.22.1 Annual low intensity basket expenditure, Austria, T-Mobile

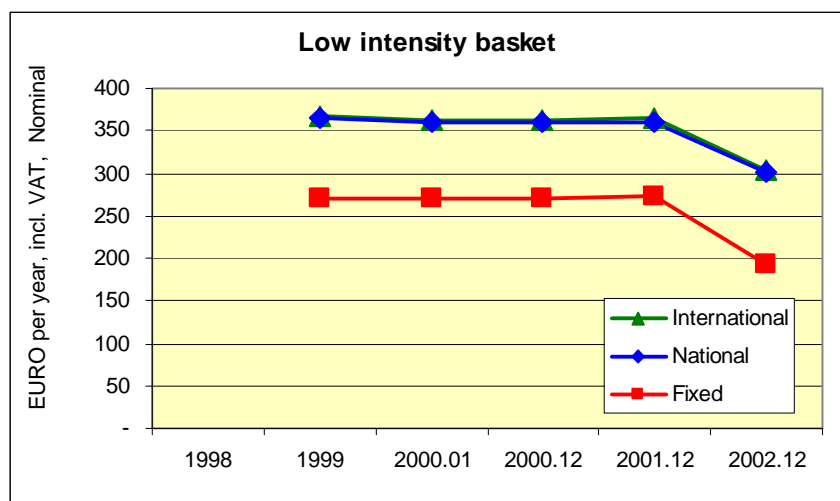
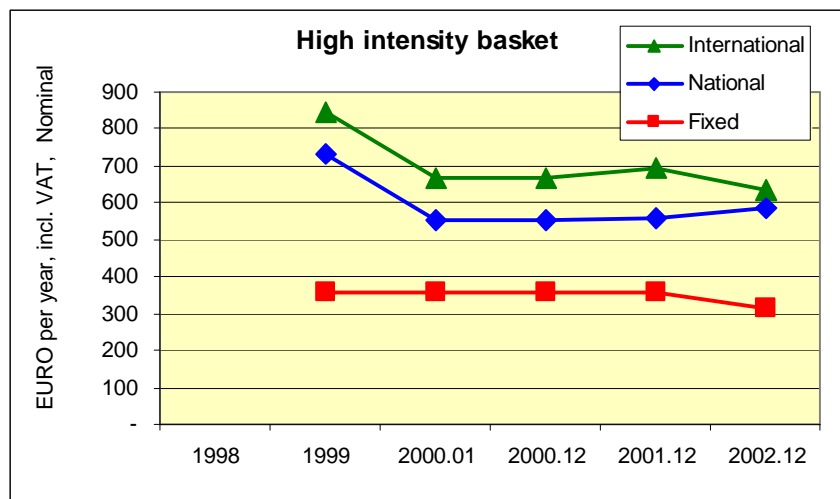


Figure 3.22.2 Annual high intensity basket expenditure, Austria, T-Mobile



3.23. Portugal, TNM

Nominal price developments

Table 3.23.1 Annual low intensity basket expenditure, Portugal, TNM

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Portugal, TNM, Normal	409	206	#N/A	615
1999	Portugal, TNM, Basic	140	219	2	361
2000.01	Portugal, TNM, Basic	140	216	2	359
2000.12	Portugal, TNM, Basic	140	210	2	353
2001.12	Portugal, TNM, Basic	133	137	1	271
2002.12	Portugal, TNM, Basic	136	140	2	277

Table 3.23.2 Annual high intensity basket expenditure, Portugal, TNM

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Portugal, TMN, Normal	409	1,051	#N/A	1,460
1999	Portugal, TMN, Executive	539	500	53	1,091
2000.01	Portugal, TMN, Executive	539	454	53	1,046
2000.12	Portugal, TMN, Executive	539	376	53	968
2001.12	Portugal, TMN, Executive	534	338	53	924
2002.12	Portugal, TMN, Executive	543	350	64	956

Note (nominal prices): Using euro, including VAT.

Figure 3.23.1 Annual low intensity basket expenditure, Portugal, TNM

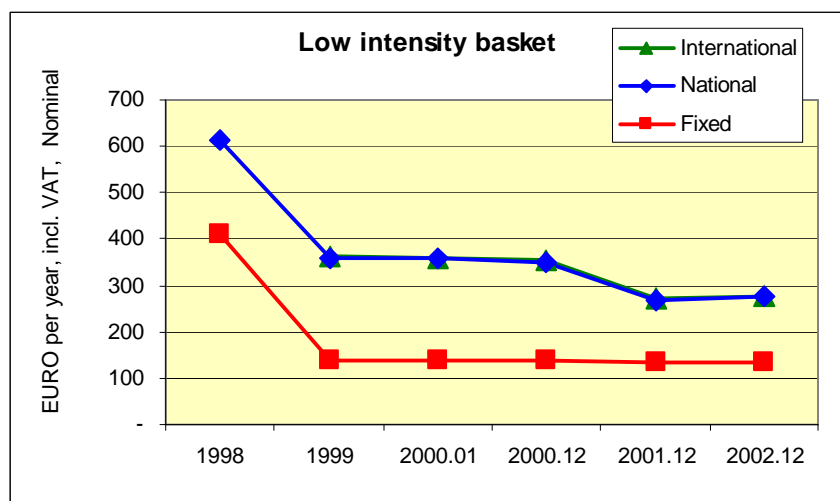
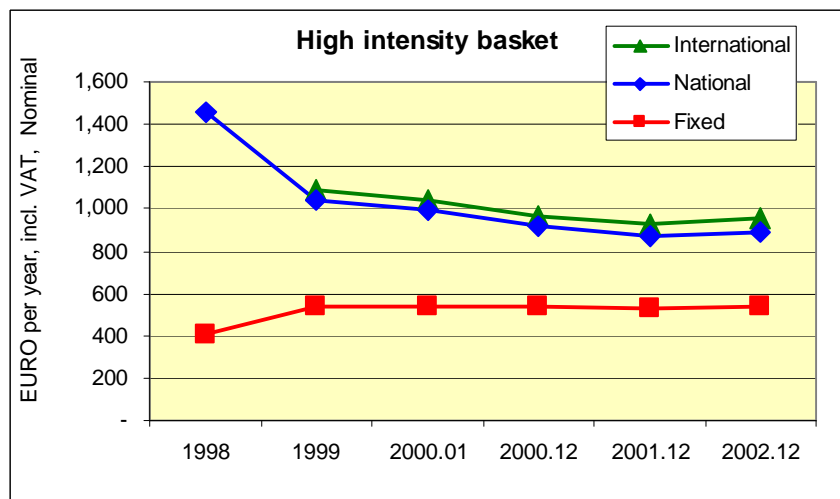


Figure 3.23.2 Annual high intensity basket expenditure, Portugal, TNM



3.24. Portugal, Vodafone

Nominal price developments

Table 3.24.1 Annual low intensity basket expenditure, Portugal, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Portugal, Telecel, IntraRede	151	232	1	384
2000.01	Portugal, Telecel, IntraRede	151	223	1	375
2000.12	Portugal, Telecel, IntraRede	147	217	1	365
2001.12	Portugal, Telecel, IntraRede	147	216	1	365
2002.12	Portugal, Vodafone, Privado 120	203	-	2	205

Table 3.24.2 Annual high intensity basket expenditure, Portugal, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Portugal, Telecel, Mais	543	506	53	1,101
2000.01	Portugal, Telecel, Mais	543	461	53	1,056
2000.12	Portugal, Telecel, Mais	539	461	53	1,053
2001.12	Portugal, Telecel, Mais	539	454	53	1,046
2002.12	Portugal, Vodafone, Privado 480	495	-	132	627

Note (nominal prices): Using euro, including VAT.

Figure 3.24.1 Annual low intensity basket expenditure, Portugal, Vodafone

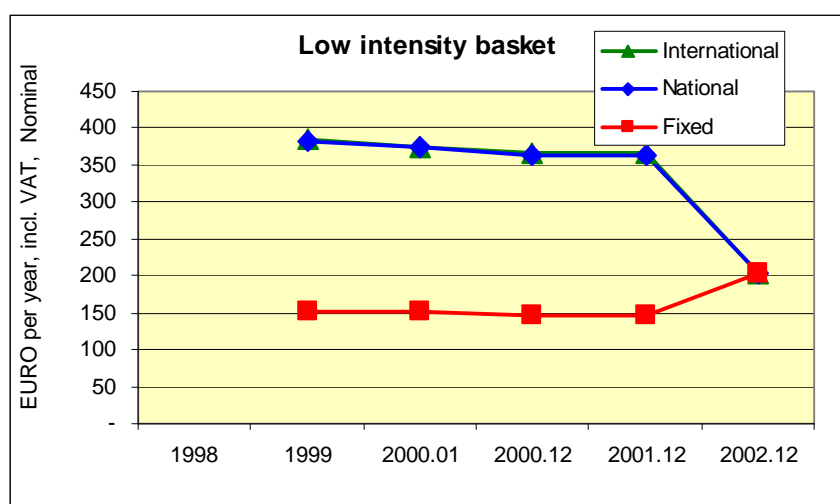
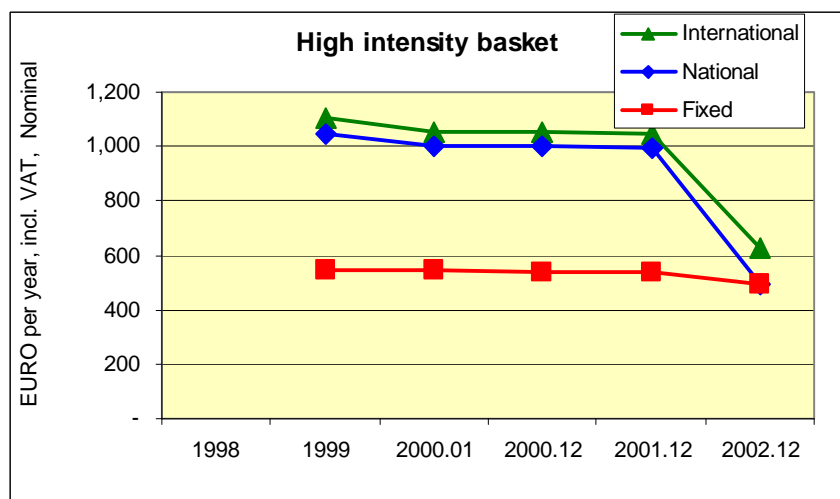


Figure 3.24.2 Annual high intensity basket expenditure, Portugal, Vodafone



3.25. Finland, Sonera

Nominal price developments

Table 3.25.1 Annual low intensity basket expenditure, Finland, Sonera

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Finland, Sonera, Privat	58	146	4	207
1999	Finland, Sonera, Privat	37	141	4	182
2000.01	Finland, Sonera, Privat	36	122	3	161
2000.12	Finland, Sonera, Privat	36	122	3	161
2001.12	Finland, Sonera, Privat	39	122	2	163
2002.12	Finland, Sonera, Privat	39	119	2	161

Table 3.25.2 Annual high intensity basket expenditure, Finland, Sonera

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Finland, Sonera, Business	154	996	162	1,311
1999	Finland, Sonera, Business	126	818	153	1,096
2000.01	Finland, Sonera, Business	126	702	133	961
2000.12	Finland, Sonera, Business	126	702	133	961
2001.12	Finland, Sonera, Business	43	702	151	896
2002.12	Finland, Sonera, Classic	43	758	165	966

Note (nominal prices): Using euro, including VAT.

Figure 3.25.1 Annual low intensity basket expenditure, Finland, Sonera

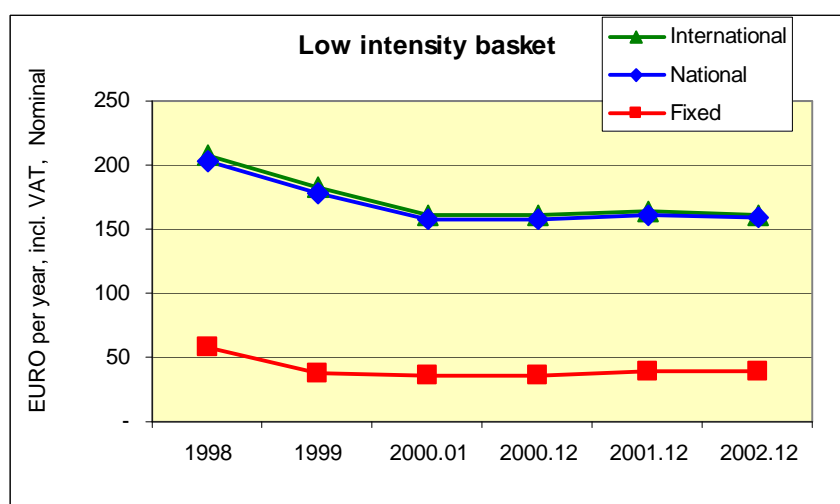
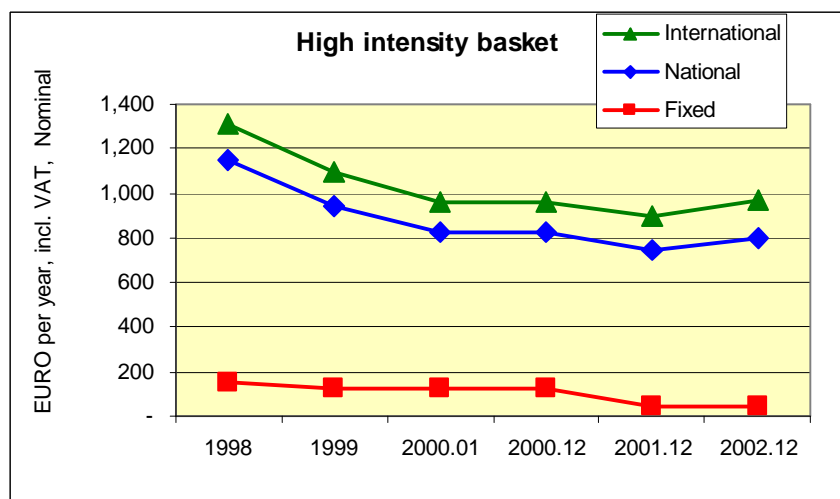


Figure 3.25.2 Annual high intensity basket expenditure, Finland, Sonera



3.26. Finland, Radiolinja

Nominal price developments

Table 3.26.1 Annual low intensity basket expenditure, Finland, Radiolinja

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Finland, Radiolinja, Freetime	38	121	4	163
2000.01	Finland, Radiolinja, Basic	63	119	3	185
2000.12	Finland, Radiolinja, Basic	63	119	3	185
2001.12	Finland, Radiolinja, Basic	61	124	3	188
2002.12	Finland, Radiolinja, Tandem Pro	43	99	2	144

Table 3.26.2 Annual high intensity basket expenditure, Finland, Radiolinja

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Finland, Radiolinja, Kayttoliityrna	121	776	153	1,049
2000.01	Finland, Radiolinja, Usage	124	727	166	1,017
2000.12	Finland, Radiolinja, Usage	124	727	166	1,017
2001.12	Finland, Radiolinja, Usage	121	746	164	1,031
2002.12	Finland, Radiolinja, Tandem Aina	111	507	112	730

Note (nominal prices): Using euro, including VAT.

Figure 3.26.1 Annual low intensity basket expenditure, Finland, Radiolinja

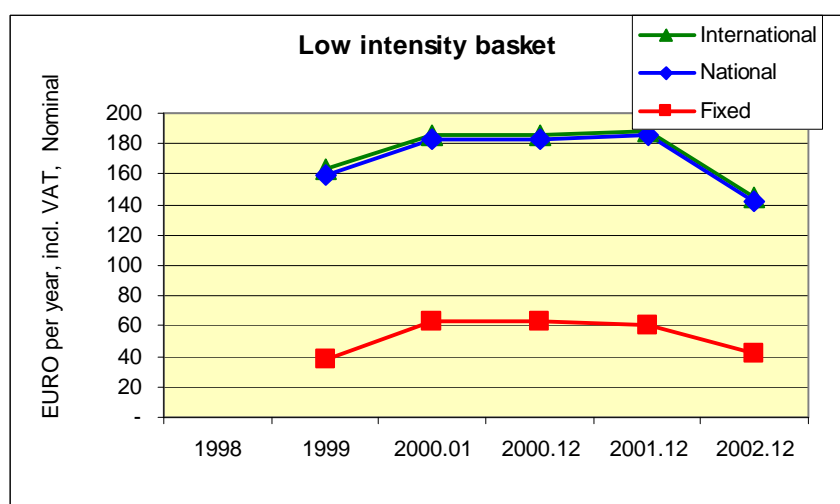
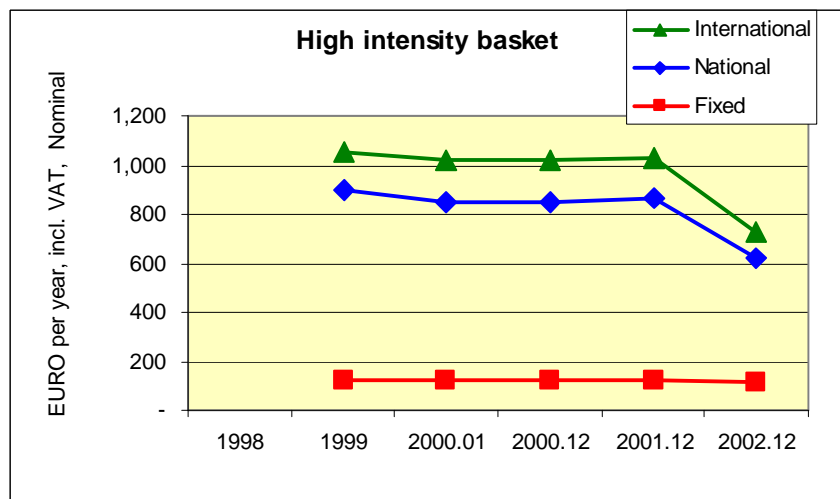


Figure 3.26.2 Annual high intensity basket expenditure, Finland, Radiolinja



3.27. Sweden, Mobitel

Nominal price developments

Table 3.27.1 Annual low intensity basket expenditure, Sweden, TeliaMobile

	<i>Low intensity basket</i>	Fixed	National	International	Total
1998	Sweden, Telia, Pott	207	43	4	254
1999	Sweden, Telia, Pott	207	43	4	254
2000.01	Sweden, Mobitel, Pott	135	91	4	230
2000.12	Sweden, Mobitel, Pott	135	38	4	176
2001.12	Sweden, Mobitel, Pott	135	38	3	176
2002.12	Sweden, TeliaMobile, Plus	108	100	3	212

Table 3.27.2 Annual high intensity basket expenditure, Sweden, TeliaMobile

	<i>High intensity basket</i>	Fixed	National	International	Total
1998	Sweden, Telia, Volym	224	1,182	169	1,575
1999	Sweden, Telia, Volym	224	1,182	169	1,575
2000.01	Sweden, Mobitel, Volym	224	1,063	169	1,456
2000.12	Sweden, Mobitel, Volym	224	974	169	1,367
2001.12	Sweden, Mobitel, Volym	224	882	165	1,270
2002.12	Sweden, TeliaMobile, Företag Bonus	216	759	165	1,139

Note (nominal prices): Using euro, including VAT.

Figure 3.27.1 Annual low intensity basket expenditure, Sweden, TeliaMobile

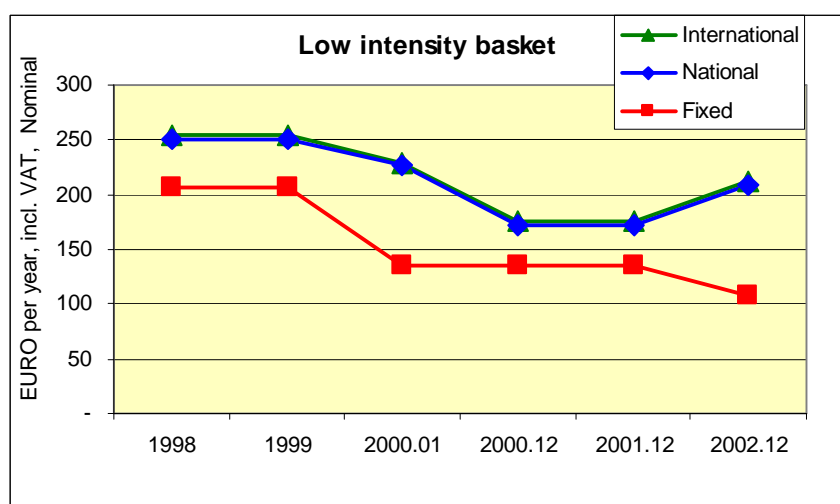
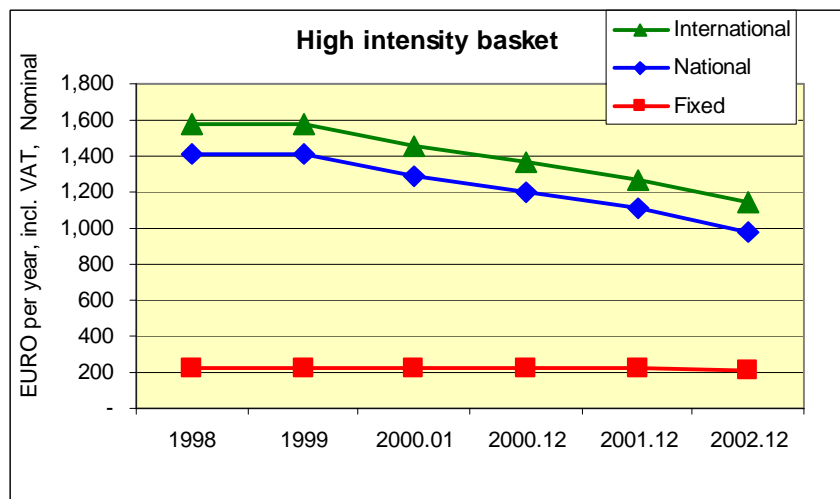


Figure 3.27.2 Annual high intensity basket expenditure, Sweden, TeliaMobile



3.28. Sweden, Comviq

Nominal price developments

Table 3.28.1 Annual low intensity basket expenditure, Sweden, Comviq

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Sweden, Comviq, Privat	173	216	4	392
2000.01	Sweden, Comviq, Joker	113	97	3	213
2000.12	Sweden, Comviq, Joker	113	67	3	184
2001.12	Sweden, Comviq, Grund	40	142	4	187
2002.12	Sweden, Comviq, Kväll	112	106	5	222

Table 3.28.2 Annual high intensity basket expenditure, Sweden, Comviq

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	Sweden, Comviq, Office	249	1,086	163	1,498
2000.01	Sweden, Comviq, Bas	159	941	155	1,255
2000.12	Sweden, Comviq, Dag	113	1,064	155	1,332
2001.12	Sweden, Comviq, Joker	113	1,006	185	1,304
2002.12	Sweden, Comviq, Max	270	335	230	835

Note (nominal prices): Using euro, including VAT.

Figure 3.28.1 Annual low intensity basket expenditure, Sweden, Comviq

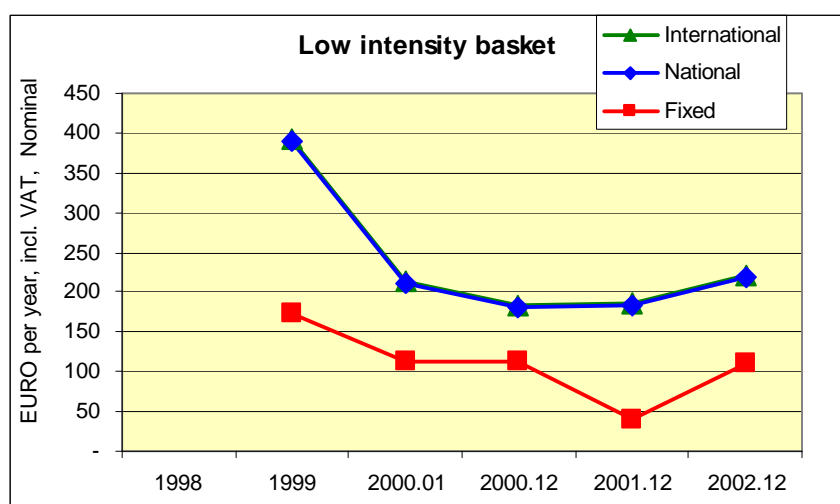
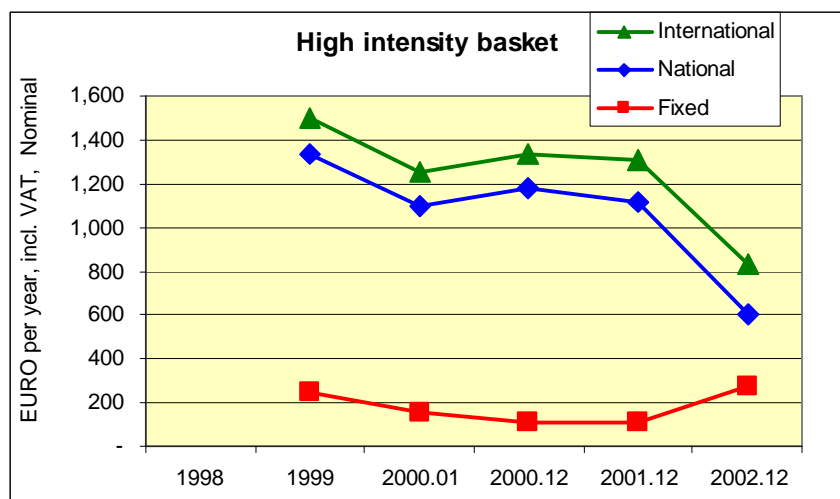


Figure 3.28.2 Annual high intensity basket expenditure, Sweden, Comviq



3.29. United Kingdom, O2

Nominal price developments

Table 3.29.1 Annual low intensity basket expenditure, United Kingdom, O2

	Low intensity basket	Fixed	National	International	Total
1998	UK, Cellnet, Occ. Caller +	348	210	9	567
1999	UK, Cellnet, Occ. Caller +	348	70	9	426
2000.01	UK, Cellnet, Occ. Caller +	348	52	9	409
2000.12	UK, Cellnet, Net 100	357	-	9	366
2001.12	UK, Cellnet, Alltime 75	339	-	9	347
2002.12	UK, O2, O2 Leisure	301	-	9	310

Table 3.29.2 Annual high intensity basket expenditure, United Kingdom, O2

	High intensity basket	Fixed	National	International	Total
1998	UK, Cellnet, Freq. Caller +	772	1,018	443	2,232
1999	UK, Cellnet, Freq. Caller +	772	536	443	1,750
2000.01	UK, Cellnet, Freq. Caller +	772	373	443	1,587
2000.12	UK, Cellnet, Net 200	489	61	443	993
2001.12	UK, Cellnet, Bus. First	264	368	426	1,058
2002.12	UK, O2, O2 200	583	49	426	1,058

Note (nominal prices): Using euro, including VAT.

Figure 3.29.1 Annual low intensity basket expenditure, United Kingdom, O2

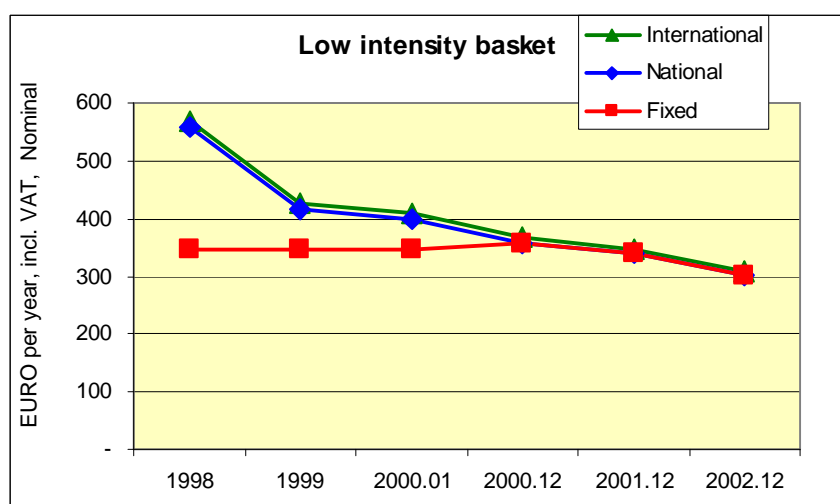
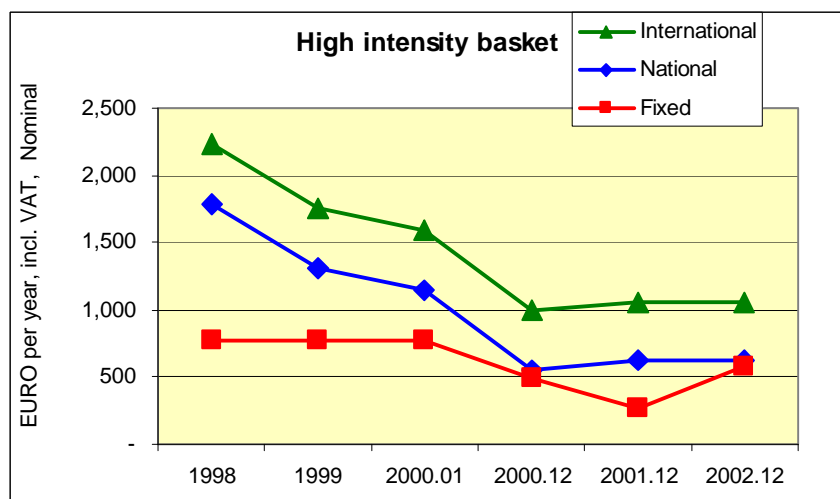


Figure 3.29.2 Annual high intensity basket expenditure, United Kingdom, O2



3.30. United Kingdom, Vodafone

Nominal price developments

Table 3.30.1 Annual low intensity basket expenditure, United Kingdom, Vodafone

	<i>Low intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	UK, Vodafone, Leisure 180	348	-	9	357
2000.01	UK, Vodaphone Leisure 250	301	-	9	309
2000.12	UK, Vodaphone 20	263	39	9	311
2001.12	UK, Vodaphone 20	245	39	5	289
2002.12	UK, Vodaphone 20	245	39	5	289

Table 3.30.2 Annual high intensity basket expenditure, United Kingdom, Vodafone

	<i>High intensity basket</i>	Fixed	National	International	Total
		-	-	-	-
1999	UK, Vodafone, Business	572	869	443	1,884
2000.01	UK, Vodaphone 240	772	-	443	1,214
2000.12	UK, Vodaphone 150	669	125	443	1,237
2001.12	UK, Vodaphone 200	471	38	341	849
2002.12	UK, Vodaphone 200	471	38	324	833

Note (nominal prices): Using euro, including VAT.

Figure 3.30.1 Annual low intensity basket expenditure, United Kingdom, Vodafone

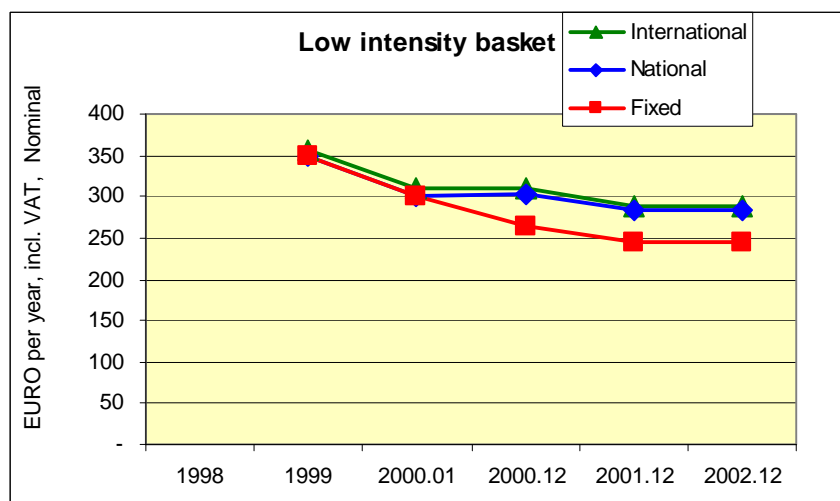
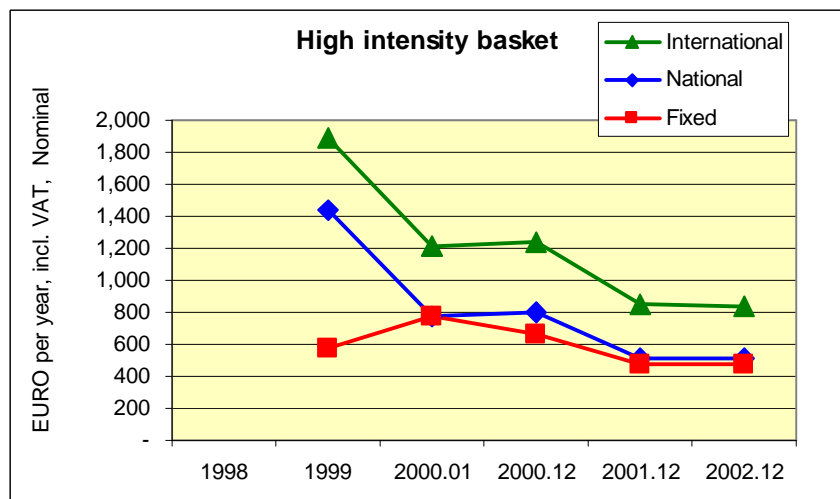


Figure 3.30.2 Annual high intensity basket expenditure, United Kingdom, Vodafone



4. Basket comparisons

Overall price comparisons are shown in Tables and Figures in this section. The total cost of the basket is presented. In section 4.1 basket comparisons between EU Member States are shown using market exchange rates. In section 4.2 basket comparisons are shown using purchasing power parities (PPP).

All prices are in ECU (1998) / Euro (1999-), including VAT.

Tariffs are selected as representative for the low and high usage baskets. There will in many cases be a range of possible tariff packages, and this study does not take the full range into account. For the reasons outlined in section 1, Introduction, it is extremely difficult to construct representative baskets for given user groups and also to evaluate and compare them.

Therefore, the figures for different Member States in the following tables should be used with caution. The same two baskets have been used for all 15 Member States, even though actual usage patterns differ widely between user groups, across regions and between countries. In addition, it is not possible to take into account the full range of choice of subscription package and operator or service provider that is available. The user baskets do not necessarily indicate the best tariffs that may be available to any given user either from the operators that are indicated here, or from other operators or service providers that are not included. The figures include a contribution to any non-recurring charges, and for those countries where such charges exist, the call set-up charges are also included.

4.1. Comparisons using market exchange rates

This section shows the results for each basket and each year using average market exchange rates from December 2002 and the fixed euro rates from 2001. See Appendix A for actual rates.

(Tables and graphs start on next page)

Figure 4.1.1 Annual low intensity basket comparisons 1998 – 2002.12

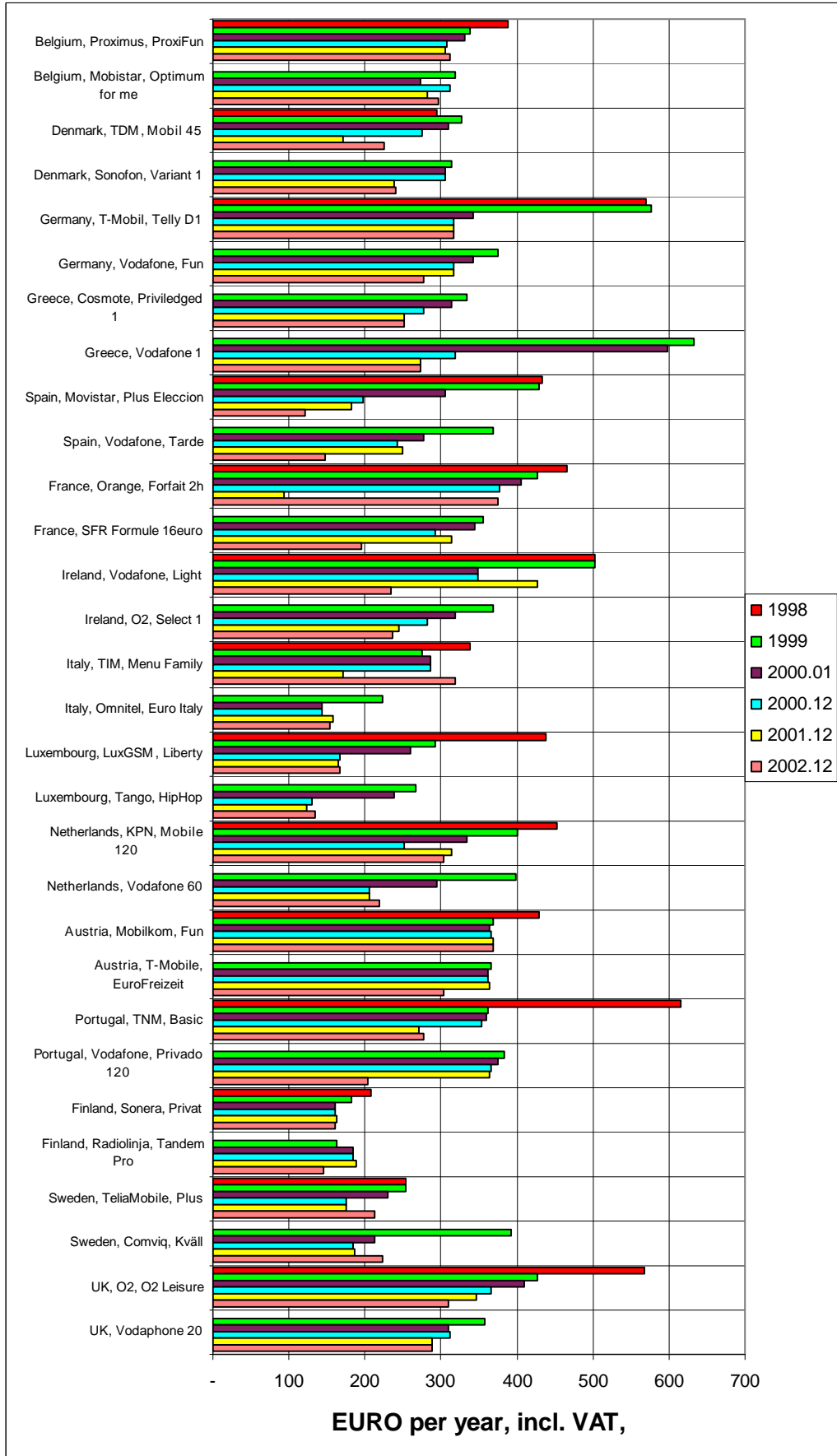


Table 4. 1.1 Annual low intensity basket comparisons 1998 – 2002.12

	1998	1999	2000.01	2000.12	2001.12	2002.12
Belgium, Proximus, ProxiFun	386.89	338.42	330.93	307.30	306.32	312.80
Belgium, Mobistar, Optimum for me	-	319.06	272.10	311.08	281.27	297.60
Denmark, TDM, Mobil 45	294.13	328.21	310.94	274.41	170.90	224.52
Denmark, Sonofon, Variant 1	-	314.58	305.53	305.53	238.45	240.13
Germany, T-Mobil, Telly D1	569.04	576.55	342.75	315.44	315.68	317.44
Germany, Vodafone, Fun	-	374.73	342.81	315.48	315.34	278.19
Greece, Cosmote, Priviledged 1	-	334.04	313.99	277.24	251.79	251.85
Greece, Vodafone 1	-	632.48	598.45	318.65	272.54	273.19
Spain, Movistar, Plus Eleccion	433.43	428.99	305.06	197.22	181.64	120.70
Spain, Vodafone, Tarde	-	367.65	277.35	242.66	250.06	148.15
France, Orange, Forfait 2h	466.77	427.28	405.95	378.17	92.87	374.73
France, SFR Formule 16euro	-	356.45	345.06	291.99	314.06	195.09
Ireland, Vodafone, Light	502.87	502.87	347.95	347.95	427.01	234.02
Ireland, O2, Select 1	-	369.15	318.68	281.08	245.93	235.98
Italy, TIM, Menu Family	337.48	274.27	285.96	285.96	172.27	318.55
Italy, Omnitel, Euro Italy	-	223.12	142.27	142.27	157.40	153.63
Luxembourg, LuxGSM, Liberty	436.84	291.66	260.98	167.11	165.29	166.17
Luxembourg, Tango, HipHop	-	267.38	239.04	129.28	124.02	134.09
Netherlands, KPN, Mobile 120	453.53	400.49	334.67	250.53	314.48	302.68
Netherlands, Vodafone 60	-	398.33	295.63	206.76	205.08	218.48
Austria, Mobilkom, Fun	428.13	369.02	364.68	365.55	367.98	368.08
Austria, T-Mobile, EuroFreizeit	-	367.10	362.90	362.90	363.76	302.58
Portugal, TNM, Basic	615.38	361.15	358.87	352.75	271.18	276.84
Portugal, Vodafone, Privado 120	-	384.03	375.13	365.26	364.93	204.56
Finland, Sonera, Privat	207.18	182.21	160.99	160.99	163.43	161.21
Finland, Radiolinja, Tandem Pro	-	163.25	185.09	185.09	187.58	144.14
Sweden, TeliaMobile, Plus	253.65	253.65	229.51	176.08	176.00	212.18
Sweden, Comviq, Kväll	-	392.44	213.32	183.56	186.58	222.23
UK, O2, O2 Leisure	567.08	426.36	409.24	366.28	347.41	309.50
UK, Vodaphone 20	-	356.99	309.40	311.44	288.64	288.64

Note: Nominal prices in Euro, including VAT.
Exchange rates are average market rates from December 2001 / 2002.
Prices are based on relevant tariff packages.

Figure 4. 1.2 Annual high intensity basket comparisons 1998 – 2002.12

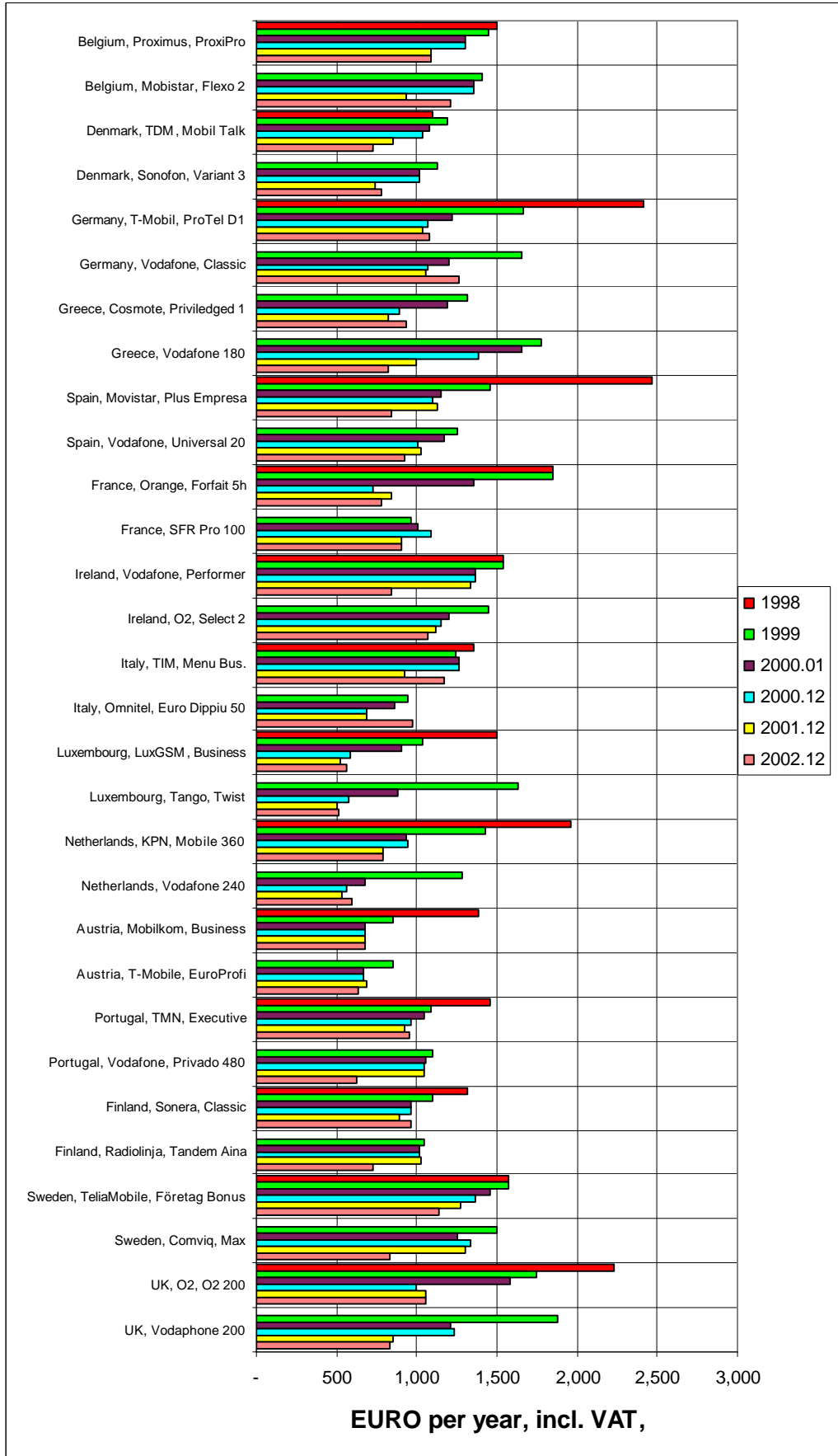


Table 4. 1.2 Annual high intensity basket comparisons 1998 – 2002.12

	1998	1999	2000.01	2000.12	2001.12	2002.12
Belgium, Proximus, ProxiPro	1,495.98	1,448.59	1,299.96	1,299.96	1,092.01	1,093.43
Belgium, Mobistar, Flexo 2	-	1,403.87	1,360.53	1,360.53	937.31	1,209.52
Denmark, TDM, Mobil Talk	1,098.47	1,188.30	1,077.27	1,040.65	856.35	733.28
Denmark, Sonofon, Variant 3	-	1,125.66	1,021.63	1,021.63	744.35	785.58
Germany, T-Mobil, ProTel D1	2,413.56	1,666.73	1,218.06	1,064.17	1,032.68	1,075.63
Germany, Vodafone, Classic	-	1,653.77	1,202.95	1,064.93	1,062.69	1,260.03
Greece, Cosmote, Priviledged 1	-	1,311.45	1,196.13	893.20	823.88	938.67
Greece, Vodafone 180	-	1,780.69	1,651.93	1,391.62	1,000.73	822.27
Spain, Movistar, Plus Empresa	2,468.61	1,455.48	1,147.92	1,095.43	1,133.70	843.24
Spain, Vodafone, Universal 20	-	1,258.44	1,170.59	1,003.19	1,032.00	919.62
France, Orange, Forfait 5h	1,853.91	1,846.63	1,358.73	733.80	844.52	785.48
France, SFR Pro 100	-	966.19	1,002.22	1,086.42	907.38	903.39
Ireland, Vodafone, Performer	1,545.21	1,545.21	1,363.00	1,363.00	1,332.44	842.79
Ireland, O2, Select 2	-	1,449.20	1,204.34	1,152.59	1,124.51	1,070.63
Italy, TIM, Menu Bus.	1,352.06	1,244.76	1,267.94	1,267.94	919.69	1,167.66
Italy, Omnitel, Euro Dippiu 50	-	947.12	861.29	693.21	691.40	973.33
Luxembourg, LuxGSM, Business	1,497.00	1,039.80	902.96	586.87	520.24	561.73
Luxembourg, Tango, Twist	-	1,631.17	886.69	574.25	504.46	516.45
Netherlands, KPN, Mobile 360	1,960.33	1,427.97	932.55	940.60	795.86	787.40
Netherlands, Vodafone 240	-	1,282.35	678.82	562.94	530.22	597.20
Austria, Mobilkom, Business	1,390.88	855.50	676.03	676.03	678.46	680.28
Austria, T-Mobile, EuroProfi	-	848.22	668.75	668.75	692.29	634.49
Portugal, TMN, Executive	1,459.71	1,091.36	1,045.84	968.11	924.49	956.38
Portugal, Vodafone, Privado 480	-	1,101.37	1,056.10	1,052.57	1,045.73	627.03
Finland, Sonera, Classic	1,311.23	1,096.26	960.87	960.87	896.35	965.94
Finland, Radiolinja, Tandem Aina	-	1,049.37	1,016.52	1,016.52	1,031.24	729.91
Sweden, TeliaMobile, Företag Bonus	1,575.20	1,575.20	1,456.23	1,367.11	1,270.36	1,138.97
Sweden, Comviq, Max	-	1,498.25	1,254.81	1,331.68	1,304.46	835.12
UK, O2, O2 200	2,232.03	1,750.47	1,587.11	992.77	1,057.60	1,058.44
UK, Vodafone 200	-	1,883.68	1,214.50	1,236.65	849.48	832.88

Note: Nominal prices in Euro, including VAT.
Exchange rates are average market rates from December 2001 / 2002.
Prices are based on relevant tariff packages.

4.2. Alternative comparisons using PPP exchange rates

This section shows the results for each basket in each year using calculated Purchasing Power Parities (PPP) exchange rates from December 2002 market rates.

(Tables and graphs start on next page)

Figure 4.2.1 Annual low intensity basket comparisons 1998 – 2002.12, using PPP

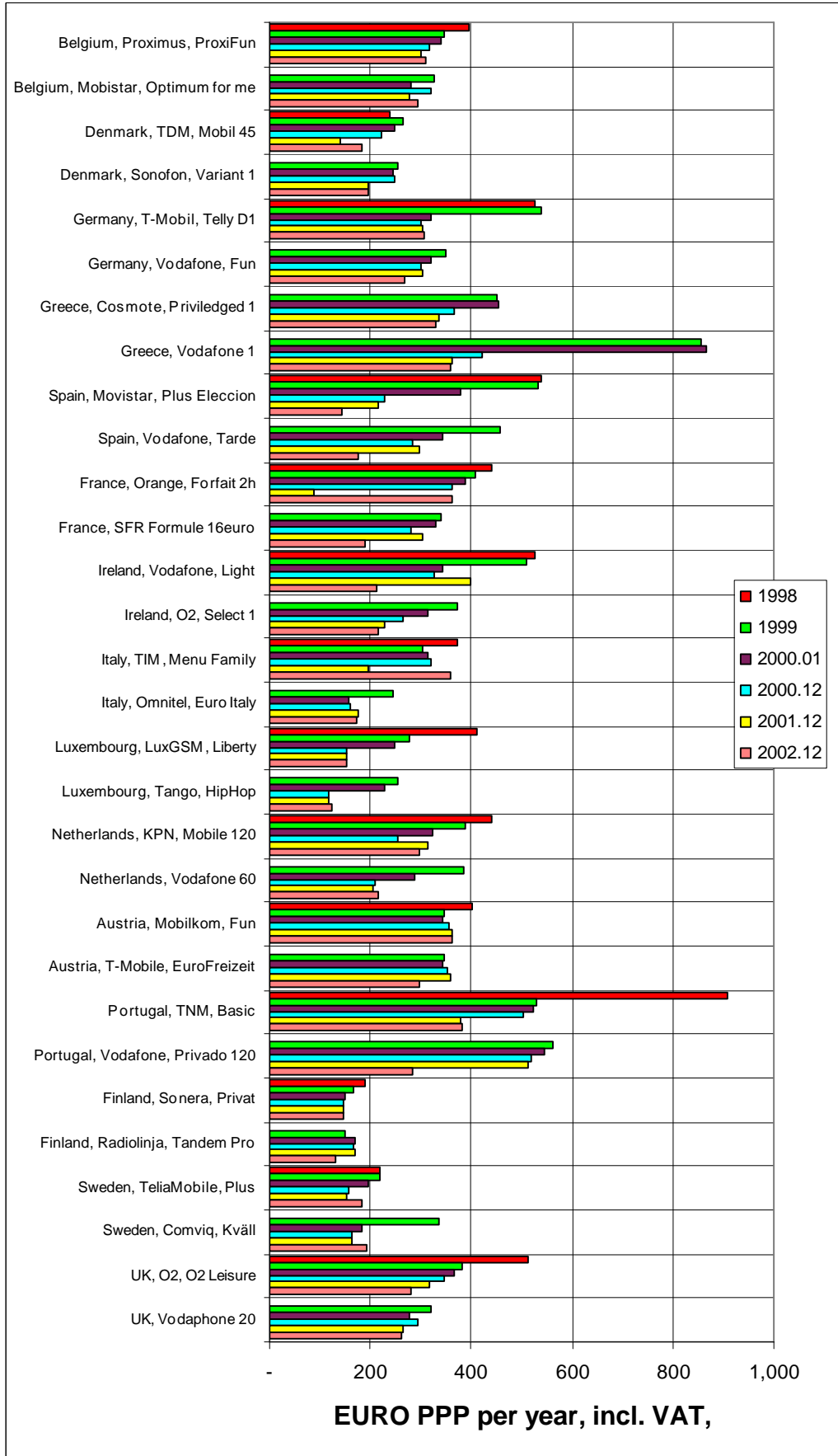


Table 4.2.1 Annual low intensity basket comparisons 1998 – 2002.12, using PPP

	1998	1999	2000.01	2000.12	2001.12	2002.12
Belgium, Proximus, ProxiFun	395.05	347.84	340.98	317.58	302.05	308.83
Belgium, Mobistar, Optimum for me	-	327.93	280.36	321.48	277.36	293.83
Denmark, TDM, Mobil 45	238.24	264.32	248.93	222.87	140.87	184.43
Denmark, Sonofon, Variant 1	-	253.34	244.60	248.15	196.56	197.25
Germany, T-Mobil, Telly D1	526.45	538.50	320.90	301.66	304.38	307.63
Germany, Vodafone, Fun	-	350.00	320.96	301.71	304.05	269.60
Greece, Cosmote, Priviledged 1	-	452.23	454.25	367.61	335.45	330.72
Greece, Vodafone 1	-	856.26	865.79	422.53	363.10	358.74
Spain, Movistar, Plus Eleccion	537.73	532.13	377.61	229.78	217.15	143.08
Spain, Vodafone, Tarde	-	456.05	343.30	282.72	298.95	175.62
France, Orange, Forfait 2h	441.95	408.39	389.31	361.92	89.67	362.76
France, SFR Formule 16euro	-	340.69	330.92	279.45	303.25	188.86
Ireland, Vodafone, Light	525.98	508.42	341.70	328.33	399.46	212.45
Ireland, O2, Select 1	-	373.22	312.96	265.24	230.07	214.23
Italy, TIM, Menu Family	372.70	302.37	313.56	320.65	194.74	360.03
Italy, Omnitel, Euro Italy	-	245.98	156.01	159.54	177.94	173.64
Luxembourg, LuxGSM, Liberty	412.77	277.32	248.16	152.38	154.77	154.17
Luxembourg, Tango, HipHop	-	254.23	227.30	117.88	116.12	124.41
Netherlands, KPN, Mobile 120	441.06	388.62	323.90	254.87	313.81	298.15
Netherlands, Vodafone 60	-	386.52	286.11	210.34	204.65	215.20
Austria, Mobilkom, Fun	402.24	348.02	343.94	355.53	363.27	363.57
Austria, T-Mobile, EuroFreizeit	-	346.20	342.26	352.95	359.11	298.88
Portugal, TNM, Basic	909.25	529.76	521.48	503.23	380.33	383.98
Portugal, Vodafone, Privado 120	-	563.33	545.11	521.08	511.81	283.73
Finland, Sonera, Privat	189.33	167.41	148.85	146.29	148.57	146.44
Finland, Radiolinja, Tandem Pro	-	150.00	171.13	168.19	170.52	130.94
Sweden, TeliaMobile, Plus	218.35	218.39	197.59	155.48	153.13	182.56
Sweden, Comviq, Kväll	-	337.89	183.65	162.08	162.34	191.20
UK, O2, O2 Leisure	512.38	383.61	365.62	345.42	317.76	281.19
UK, Vodaphone 20	-	321.19	276.42	293.70	264.00	262.24

Note: Nominal prices in Euro PPP, including VAT.

Exchange rates are average market rates from December 2001 / 2002 converted to PPP.

Prices are based on relevant tariff packages.

Figure 4.2.2 Annual high intensity basket comparisons 1998 – 2002.12, using PPP

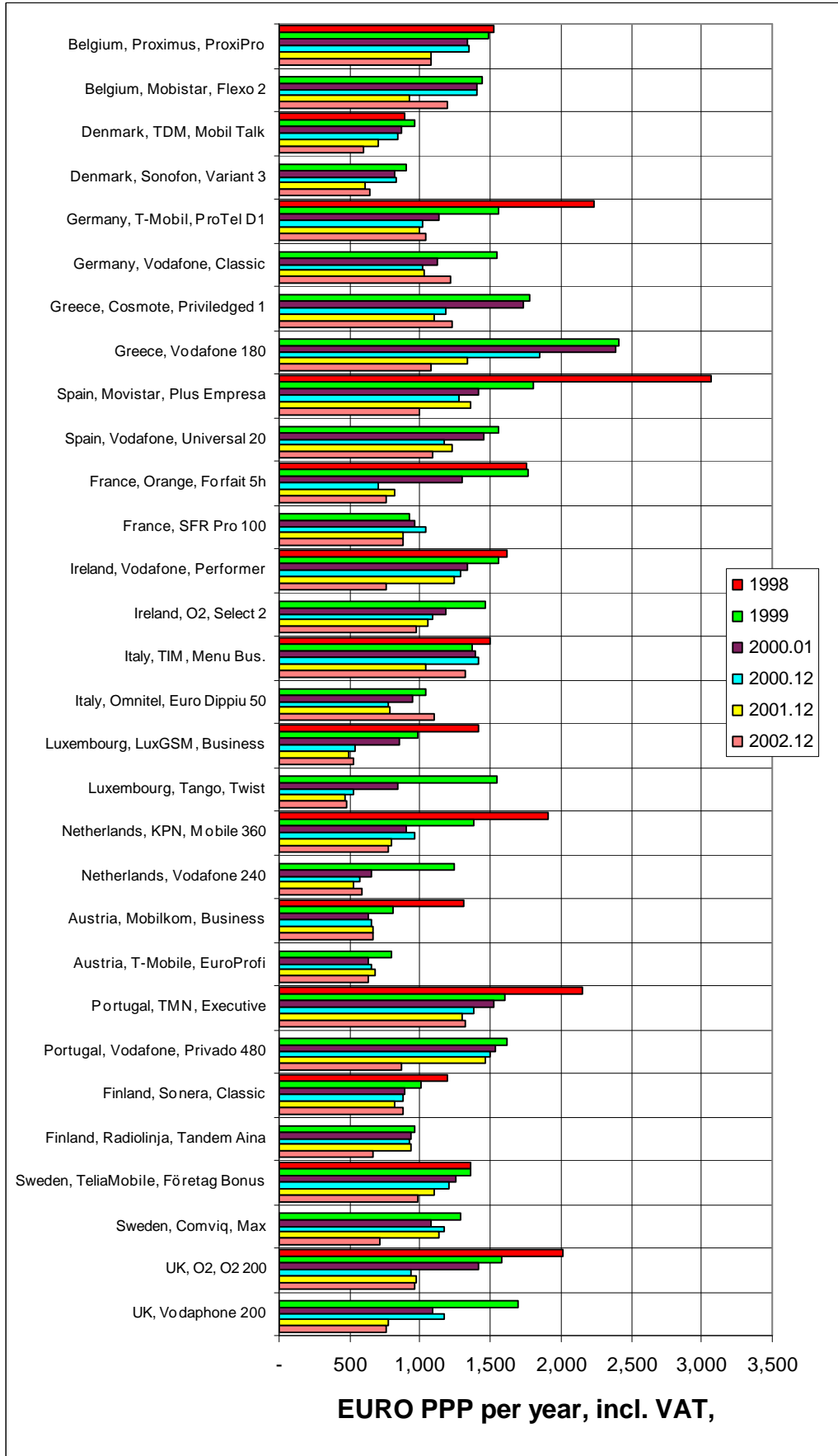


Table 4.2.2 Annual high intensity basket comparisons 1998 – 2002.12, using PPP

	1998	1999	2000.01	2000.12	2001.12	2002.12
Belgium, Proximus, ProxiPro	1,527.52	1,488.89	1,339.43	1,343.45	1,076.80	1,079.56
Belgium, Mobistar, Flexo 2	-	1,442.93	1,401.85	1,406.05	924.26	1,194.18
Denmark, TDM, Mobil Talk	889.74	956.98	862.42	845.19	705.89	602.35
Denmark, Sonofon, Variant 3	-	906.53	817.87	829.74	613.57	645.31
Germany, T-Mobil, ProTel D1	2,232.94	1,556.73	1,140.39	1,017.70	995.70	1,042.42
Germany, Vodafone, Classic	-	1,544.62	1,126.25	1,018.43	1,024.63	1,221.12
Greece, Cosmote, Priviledged 1	-	1,775.46	1,730.45	1,184.35	1,097.61	1,232.61
Greece, Vodafone 180	-	2,410.72	2,389.87	1,845.25	1,333.22	1,079.76
Spain, Movistar, Plus Empresa	3,062.63	1,805.44	1,420.92	1,276.28	1,355.33	999.58
Spain, Vodafone, Universal 20	-	1,561.02	1,448.98	1,168.81	1,233.74	1,090.13
France, Orange, Forfait 5h	1,755.33	1,764.99	1,303.03	702.27	815.45	760.40
France, SFR Pro 100	-	923.48	961.13	1,039.74	876.15	874.53
Ireland, Vodafone, Performer	1,616.21	1,562.27	1,338.53	1,286.18	1,246.49	765.10
Ireland, O2, Select 2	-	1,465.20	1,182.72	1,087.63	1,051.98	971.94
Italy, TIM, Menu Bus.	1,493.17	1,372.29	1,390.36	1,421.80	1,039.70	1,319.72
Italy, Omnitel, Euro Dippiu 50	-	1,044.16	944.44	777.33	781.62	1,100.09
Luxembourg, LuxGSM, Business	1,414.52	988.68	858.60	535.13	487.11	521.18
Luxembourg, Tango, Twist	-	1,550.97	843.13	523.62	472.33	479.17
Netherlands, KPN, Mobile 360	1,906.43	1,385.66	902.53	956.87	794.16	775.60
Netherlands, Vodafone 240	-	1,244.35	656.96	572.68	529.09	588.25
Austria, Mobilkom, Business	1,306.77	806.80	637.58	657.50	669.77	671.95
Austria, T-Mobile, EuroProfi	-	799.93	630.72	650.42	683.42	626.72
Portugal, TMN, Executive	2,156.78	1,600.90	1,519.75	1,381.11	1,296.61	1,326.50
Portugal, Vodafone, Privado 480	-	1,615.59	1,534.66	1,501.60	1,466.65	869.70
Finland, Sonera, Classic	1,198.30	1,007.26	888.36	873.14	814.81	877.43
Finland, Radiolinja, Tandem Aina	-	964.18	939.81	923.70	937.44	663.02
Sweden, TeliaMobile, Företag Bonus	1,355.98	1,356.23	1,253.68	1,207.12	1,105.28	979.96
Sweden, Comviq, Max	-	1,289.97	1,080.27	1,175.83	1,134.95	718.53
UK, O2, O2 200	2,016.74	1,574.93	1,417.94	936.23	967.33	961.62
UK, Vodafone 200	-	1,694.78	1,085.04	1,166.22	776.97	756.69

Note: Nominal prices in Euro PPP, including VAT.

Exchange rates are average market rates from December 2001 / 2002 converted to PPP.

Prices are based on relevant tariff packages.

Report on
Telecoms Tariff Analysis
Using basket methodologies
for the period
January 1998 – December 2002

Appendix A: Exchange rates, VAT and deflators

Produced for:

European Commission
Information Society DG

**The opinions expressed in this Study are those of the authors and do not necessarily reflect the views of the European Commission.
ECSC-EC-EAEC, Brussels - Luxembourg 2003**

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1. Exchange rates

The following table lists the exchange rates used in this report. For the euro-zone countries the exchange rates are given for the years up to that point in time. Data after beginning of 2002 use the 2002 exchange rates. This is done to avoid the change to euro in the euro-zone countries. Countries outside the euro-zone use the 2002 exchange rates.

Table A.1 Exchange rates

	2001.12 EURO	2001.12 PPP	2002.12 EURO	2002.12 PPP
Belgium	0.02479	0.02531	1	0.98731
Denmark	0.13459	0.10902	0.13459	0.11056
Germany	0.5113	0.47304	1	0.96912
Greece	0.00294	0.00401	1	1.31315
Spain	0.00601	0.00746	1	1.1854
France	0.15245	0.14434	1	0.96806
Ireland	1.26968	1.32802	1	0.90782
Italy	0.00052	0.00057	1	1.13023
Luxembourg	0.02479	0.02342	1	0.92781
Netherlands	0.45378	0.44131	1	0.985
Austria	0.07267	0.06828	1	0.98775
Portugal	0.00499	0.00737	1	1.38701
Finland	0.16819	0.1537	1	0.90837
Sweden	0.11013	0.0948	0.11013	0.09476
UK	1.56986	1.41844	1.56986	1.42626

2. VAT percentages

The following table lists the VAT rates used in this report. VAT rates are used as applicable for each year.

Table A.2 VAT percentages (1998-2002)

	VAT	VAT	VAT	VAT	VAT	VAT
	01.01.98	01.01.99	01.01.00	01.12.00	01.12.01	01.12.02
B	21%	21%	21%	21%	21%	21%
DK	25%	25%	25%	25%	25%	25%
D	15%	16%	16%	16%	16%	16%
EL	18%	18%	18%	18%	18%	18%
E	16%	16%	16%	16%	16%	16%
F	20.6%	20.6%	20.6%	19.6%	19.6%	19.6%
IRL	21%	21%	21%	21%	21%	21%
I	19%	20%	20%	20%	20%	20%
L	15%	15%	15%	15%	15%	15%
NL	17.5%	17.5%	17.5%	17.5%	19%	19%
AUT	20%	20%	20%	20%	20%	20%
P	17%	17%	17%	17%	17%	19%
FIN	22%	22%	22%	22%	22%	22%
SWE	25%	25%	25%	25%	25%	25%
UK	17.5%	17.5%	17.5%	17.5%	17.5%	17.5%