



The International Communications Market 2008

2 Comparative International Pricing

Contents

2.1 Comparative international pricing	55
2.1.1 Introduction	55
2.1.2 Methodology	56
2.1.3 Summary of findings: 'multi-play'	59
2.1.4 Summary of findings: Fixed voice	61
2.1.5 Summary of findings: mobile	63
2.1.6 Summary of findings: fixed-line broadband	66
2.1.7 Summary of findings: TV	67
2.1.8 Basket 1: a low-use household with basic needs	68
2.1.9 Basket 2: A broadband household with basic needs	71
2.1.10 Basket 3: A mobile 'power user'	73
2.1.11 Basket 4: A family household with multiple needs	76
2.1.12 Basket 5: An affluent two-person household with high use of mobile, internet and premium TV	80
2.1.13 Conclusion	83

2.1 Comparative international pricing

2.1.1 Introduction

There is wide international variation in the consumer experience of communications services. Super-fast broadband is more readily available in some countries, while others have a greater range of radio and television stations, or offer more developed innovative services such as mobile broadband or high-definition television. However, when comparing markets for communications services across the world, the metric which probably matters most to the greatest number of consumers is the price they pay for their services.

Unfortunately it is difficult to provide meaningful international comparisons to help place UK pricing in context. The complexity of tariffs, the wide range of usage profiles across households within countries, large variation in 'average' use between countries, the rise of 'service bundling' (where more than one service is offered on a single bill from the same provider), and the variations of installation and hardware costs, all require a holistic and multifarious approach if a price benchmarking exercise is to be meaningful.

To try to address these issues, we have developed a methodology for comparing prices which is based on consumption across 'typical' household types in the UK, France, Germany, Italy, Spain and the US (where we have used Illinois as a representative state), and which considers issues such as the impact of hardware subsidies and multi-service discounts. The 2008 analysis builds on that developed in the 2006 and 2007 International Communications Market Reports, but marks a step-change in terms of:

- the range of tariffs considered (4,849 in total across the six countries);
- the incorporation of additional complexities, both in terms of the baskets (for example, a range of call lengths are included in the fixed and mobile baskets); and
- the inclusion of more complex components of tariffs (for example, including promotional offers, subject to certain criteria).

We have organised our analysis of comparative international pricing into the following sections:

- **Methodology** - essential to understanding the basis of the findings, so we begin our analysis with a summary of methodological principles.
- **Summary of findings** - we provide an overview of the findings, providing details and commentary on the savings available through purchasing services as part of a 'multi-play' bundle, and on single-service pricing for fixed-line voice, mobile, fixed-line broadband and television.
- **Basket analysis** - we detail the relative prices for baskets of communications services representative of five household types. These include 'average pricing' analysis and the 'best offer' available, including where appropriate multi-service tariffs such as 'triple-play' deals offering fixed voice, broadband and television services on a single bill.
- **Conclusion** - we summarise findings across the baskets, highlighting that much of the variation is caused by mobile, which forms both the largest component of spend and has the greatest variation across countries. We also identify the savings that

some consumers can achieve by purchasing two or more communications service in a 'bundle' from one operator.

2.1.2 Methodology

Full details of the methodology are provided in Appendix B (available at: www.ofcom.org.uk/research/cm/icmr08), but the basic principles are as follows:

- We constructed five 'typical' household types, which collectively may be seen as representative of the average population across our countries. and defined a basket of communications services (fixed-line voice, mobile, broadband, TV) appropriate for each household type.

Figure 2.1 Household types

'Typical' household type	Fixed voice	Intern'l voice	Mobile voice	Mobile messaging	Fixed-line broadband	Mobile broadband	Television
1 A retired low-income couple	Low	-	-	-	-	-	Basic
2 A couple of late adopters	Medium	Low	Low	-	Low	-	Basic
3 A single mobile-only user	-	Medium	High	High	-	High	Pay TV
4 A 'networked' family	High	Medium	Medium	High	Medium	-	Pay TV
5 Affluent couple with sophisticated use	Low	High	High	Medium	High	-	Premium pay TV

Source: Ofcom

- We included a wide range of components within the baskets to ensure as accurate as possible a representation of the real costs consumers pay. For example:
 - Fixed voice minutes were distributed by whether they were to fixed or mobile lines, by call distance (local, regional, national and international, including a range of international destinations), and time of day (day, evening, weekend).
 - In addition, mobile calls (and messaging) were split between 'on-net' and 'off-net', and voicemail was included.
 - Call set-up costs and per-minute charging were incorporated, and a range of call lengths were used (distributed around a defined mean based on averages across 30 OECD countries).
 - Incoming calls to mobile phones were included in recognition of the different pricing mechanism in the US.
 - The broadband component was defined both by minimum headline speed and by minimum data and time online requirements.
 - The television element included the licence fee, a digital receiver and (for some baskets) a digital video recorder (DVR). Because of difficulties in comparing channels and their programmes, two tiers of pay-TV were considered: the most basic pay service available over and above the channels available on free-to-air TV; and a premium service defined by first-run movies from the major Hollywood studios and the best package of top-tier football matches.

- The average monthly use across the baskets was adjusted to ensure that it was closely aligned with average use in households across the six countries (for example, based on operator and regulator data, the actual average number of SMS per households across the six countries in 2007 was 115, so our average number of SMS across our five households is 115).
- Mobile phones, broadband routers, digital set-top boxes and DVRs are included within the baskets (and amortised over an appropriate period in order to attribute a monthly cost). This is necessary because they are often inseparable from the service price, as operators frequently include subsidised or 'free' equipment (for example, a mobile phone or a wireless router), but seek to recoup the cost of these devices from subscriptions and service payments across the life of a contract. For similar reasons, we include connection and/or installation costs.
- In July 2008, detailed data of every tariff and every tariff combination from the largest three operators in each country by retail market share were collected (or for more than three operators, if required to ensure that a minimum of 80% of the overall market was represented). Multi-play tariffs (i.e. those which incorporate more than one service) were also collected. Only those tariffs which were published on the website of the operators were included.
- Across the six countries, the tariff data included consisted of:
 - fixed voice: 742 tariff options;
 - mobile: 2481 tariff options;
 - broadband: 324 tariff options;
 - television: 502 tariff options; and
 - multi-play: 800 tariff options.
- Our model identifies the tariffs that offer the lowest price for meeting the requirements of each of the household baskets.
- All prices are converted back to UK currency using a Purchasing Power Parity (PPP) adjustment based on OECD comparative price levels and an exchange rate in July 2008.

In order to provide both an illustration of representative prices for the individual services in each country, and an illustration of the best value that consumers could get for their full basket of services, we have provided two types of analysis for each basket.

The first (which we call 'average single service' pricing) illustrates the price of each individual service, as defined by the average of the lowest price tariff offered by three operators which provide the service in each country. These are then weighted by the market share of the service provider in order to ensure fair representation. This provides a useful comparison of the relative costs of communications services, but an important limitation is that single-service offers are sometimes not available from leading suppliers. For example, in the UK, TalkTalk only offers broadband together with fixed voice. In Spain over 80% of broadband is purchased in association with another service.

The second type of analysis (which we call 'best offer' pricing) identifies the lowest price that a consumer could pay for this basket of services, including, where appropriate, by

purchasing 'bundled' services. Our view is that this type of analysis is essential in order to provide a true picture of the position of consumers in each market, since they increasingly buy multiple services from single operators. Examples in the UK are BSkyB's *See, Surf, Talk* 'triple-play' offer, which provides TV, voice and broadband, and Virgin's 'quad-play' offer which includes TV, voice, broadband and mobile. However, there are two key limitations to this type of analysis. First, 'bundled' service offerings are typically not available to all consumers as they are generally geographically constrained to areas where premises are connected either to a cable network or to an unbundled telephone exchange. Second, even in areas where these services are available, they may not have high take-up. Therefore, although the 'best offer' provides insight into the lowest prices available to some customers, it is not as good a reflection of the prices that consumers are actually paying as the weighted average analysis - which is only possible when looking at single-service pricing.

We believe that a multi-platform, basket-based approach is the most useful way of comparing international pricing of communications services. Nevertheless, there are some limitations to our methodology and the following notes and caveats are important in interpreting the analysis below.

- The analysis assumes a systematic and rational consumer who has a full understanding of his or her usage requirements and is prepared to shop around and undertake some often quite complex calculations to identify the tariff which offers the best value. In reality, many consumers do not act in this way, but we believe the assumption is necessary in order to provide effective international comparisons. It should be noted, however, that another measure of consumer choice and the competitive environment is the complexity of tariff structures and the ease of selecting an appropriate tariff, or switching to an appropriate tariff.
- In looking only at tariffs offered by the largest operators in each country, lower prices which might be available from smaller operators seeking to disrupt markets are not included, purely for practical reasons. Nevertheless, we believe that using the prices of the largest operators is appropriate, both because they are the best reflection of the general consumer experience and because their pricing both defines and is defined by the competitive environment in which they operate.
- Although we have been as comprehensive as possible, tariffs are often highly complicated and there are some components that we have been unable to incorporate into our model; for example, the benefits available from fixed-line and mobile tariffs which include free or reduced rates to nominated 'friends and family' numbers.
- In order to calculate the weighted average, we have used market share calculations based on operators' retail customers. It should be noted that market share calculations are based on the overall subscriber base, not the subscriber base for the particular tariff (for which data are not available).
- Pay-TV services constitute a component of three of the baskets we examine. However, it has not been possible to compare like-for-like subscriptions principally because of differences in the composition of basic and premium channels across the six countries. As a consequence, quantitative comparison of international TV pricing is arguably less meaningful than for telecoms services. This is also an issue in the pricing of 'triple-play' services, where there is a wide variation in the types of TV content.
- For some communications services in some countries there are only two operators with nationwide coverage (or only one, for many premium TV offerings) and/or

significant market share. In these instances, we have identified the best-value tariff from each of them and calculated a blended average based on their market shares.

- To avoid 'skewing' the average single service pricing analysis, tariffs which are over 100% higher than that offered by the lowest price provider are excluded from the weighted average (the aim here is to exclude tariffs which are clearly not targeted at the usage profile we are analysing).
- Some services are not available nationwide. This is particularly true for services which are available only where local exchanges have been unbundled, and for IPTV, which requires a high-speed broadband connection, but is also true for cable TV and all types of broadband.
- In this year's analysis, we have not defined whether the mobile phone component in a basket is pre-pay or post-pay. We believe this enables better international comparison, given the very different pre-pay / post-pay splits in different countries (for example, around 90% of Italian mobile connections are pre-pay, while around 90% of US mobile connections are post-pay). However, a consequence of this is that the analysis does not recognise the different characteristics of the services; for example, a pre-pay mobile may be the only option available to consumers with a poor credit rating and also offer advantages to those who vary their use month-by-month.
- Representative pricing in the US as a whole is difficult, due to large regional variations as a result of local incumbent telco operators and cable operators offering localised prices for fixed-line services. We only use the tariffs available within the state of Illinois, chosen because it is reasonably representative of the US as a whole in terms of its relative wealth and rural-urban split (it incorporates the city of Chicago as well as large agricultural regions). Nevertheless, US pricing should not be viewed as representative of the whole country.

2.1.3 Summary of findings: 'multi-play'

For the three of the five baskets that include broadband, consumers in the European countries can make savings by purchasing multiple services in a multi-play 'bundle' from one provider, rather than purchasing each service on a standalone basis.

Figure 2.2 below indicates that the lowest price available in the UK for Basket 2, which includes a basic broadband connection and a fixed-line voice line, is around £29. This involves purchasing a voice tariff which includes 'free' broadband, and saves nearly £15 compared to the lowest prices available by buying the services separately (Figure 2.3).

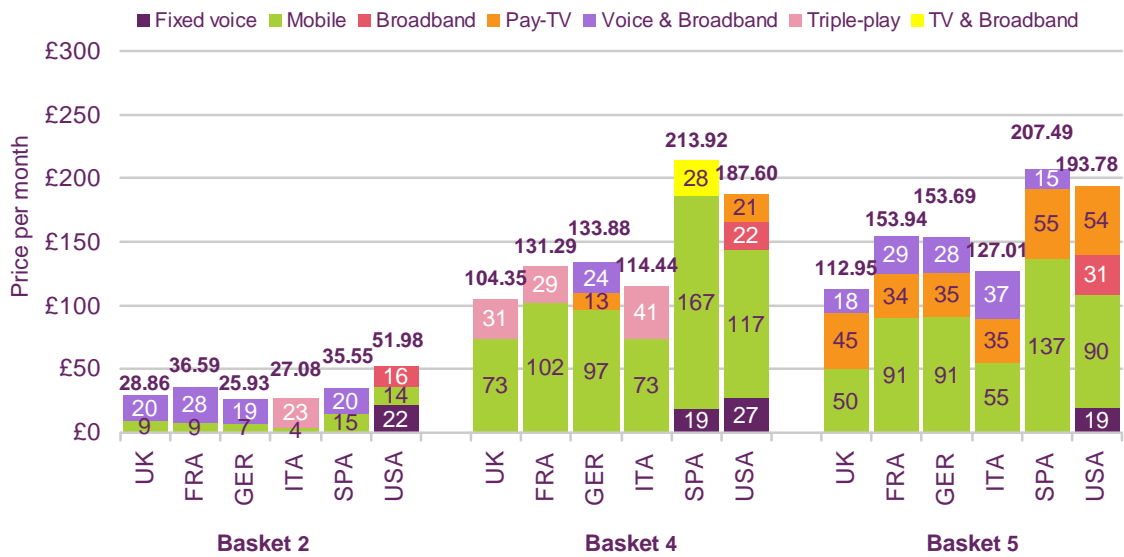
For Basket 4, which includes a basic pay-TV deal, the lowest prices available in the UK, France and Italy involve purchasing broadband, fixed-line voice and television services in a 'triple-play' bundle. In the UK and Germany, consumers can save around £18 a month through these deals rather than the equivalent lowest price deals for single services.

Basket 5 includes premium pay-TV services (top league domestic football and first-run Hollywood movies), and because these packages are typically offered as an 'add-on' to basic level services, they do not generally offer savings if bought within a triple-play subscription rather than on a standalone basis. However, in all of the European countries, the lowest prices achievable for this basket of services involve purchasing fixed-line voice and broadband together.

In the US, there are no savings available by purchasing services in ‘bundles’ rather than purchasing the lowest price single services. This is probably the consequence of less diversification in local markets, with the incumbent telco and the local cable operator typically competing in a duopoly to serve voice, broadband and TV services to customers. In this environment, the bundling of ‘free’ broadband with voice is value-destroying for operators who generally view voice, broadband and TV as three separate revenue streams.

This contrasts with Europe, where local loop unbundling and wholesale line rental with regulated price controls has led to a competitive landscape characterised by alternative network operators building market share by launching bundled services (the incremental costs of adding a broadband service to a voice service are low, and the consumer benefits high) - and incumbents have responded by doing the same.

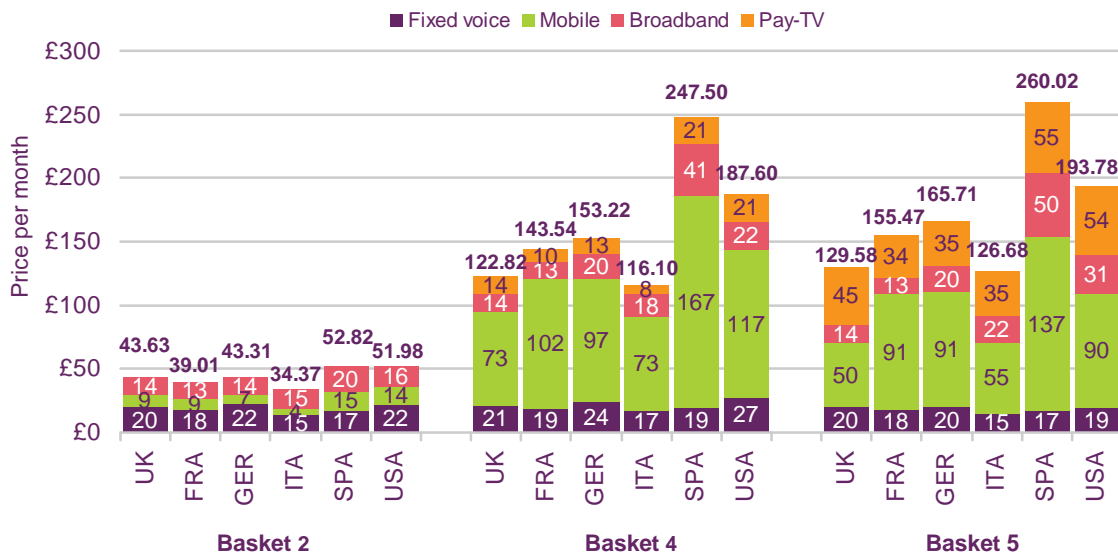
Figure 2.2 Best prices available, including multi-play offers



Source: Ofcom using data supplied by Teligen

Note: Weighted average of best-value tariff from each of the three largest operators by market share in each country; July 2008; PPP adjusted

Figure 2.3 Best prices available for standalone services



Source: Ofcom using data supplied by Teligen

Note: Weighted average of best-value tariff from each of the three largest operators by market share in each country; July 2008; PPP adjusted

2.1.4 Summary of findings: Fixed voice

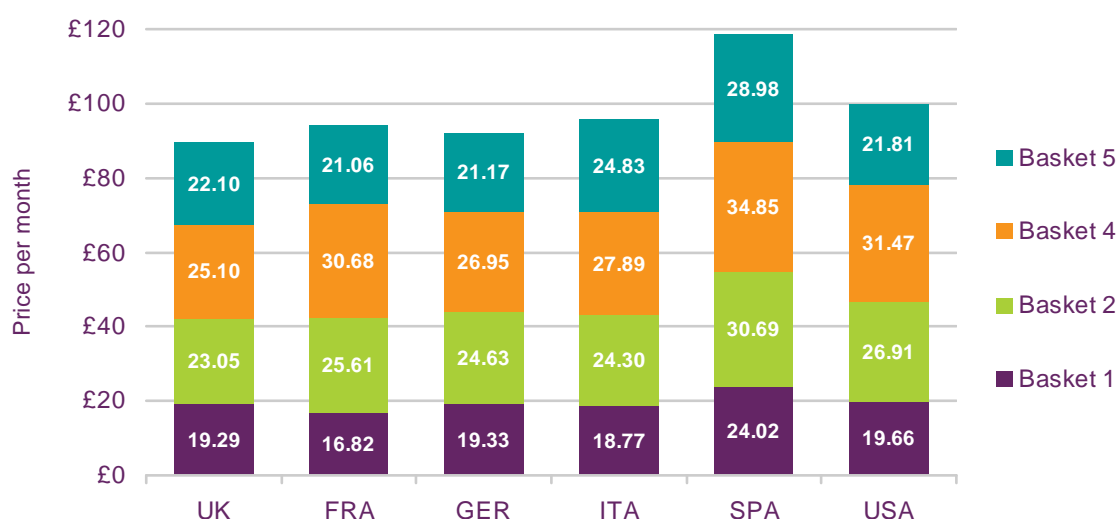
Figure 2.4 and Figure 2.5 below look at the costs of the fixed-line voice components of those baskets which include a fixed-line phone. In terms of overall pricing, as calculated from the weighted average of the best value tariffs from the three largest operators in each country (Figure 2.4), Germany is the least expensive, although there is little difference between it and the UK, Italy and France. However, there are some notable differences between the baskets arising from different tariff structures within each country.

The UK is more expensive than France and Italy for the lowest-usage Basket 1, because it has relatively high line rental charges. However, it is the least expensive for the highest-usage Basket 4, due to the relatively low cost of purchasing enhanced tariffs or add-ons which offer unlimited any-time national calls, or reduced prices on international calls or calls to mobiles. By contrast, Italy and France offer the lowest prices for the lowest-usage Basket 1, but are significantly more expensive than the UK and Germany for the higher-usage Basket 4.

Spain comes out as the most expensive country, due to the tariffs offered by incumbent Telefonica (which has around 80% retail market share) being more expensive than those of incumbents in the other European countries. Unlike basic tariffs offered by BT, Deutsche Telekom, France Telecom and Telecom Italia, Telefonica's basic tariff does not offer any inclusive calls.

The US appears more expensive than the European countries (other than Spain) as the cost of national calls more than outweighs the low line rental and free local calls. The US also offers the lowest price of calls from fixed lines to mobiles (as a consequence of the 'receiving party pays' interconnect regime, which means that mobile users typically pay for incoming calls). However, because the fixed-to-mobile call element in our baskets is small, this feature of the US market has little impact on the overall findings.

Figure 2.4 Comparative single-service ‘weighted average’ fixed-line voice pricing



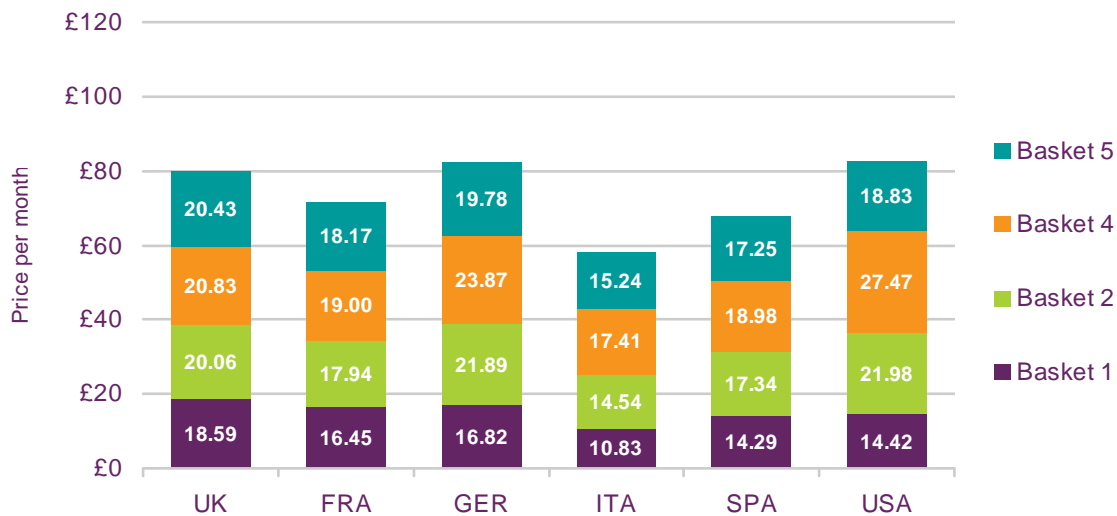
Source: Ofcom using data supplied by Teligen

Note: Weighted average of best-value tariff from each of the three largest operators by market share in each country; July 2008; PPP adjusted

In looking at the best tariff available from the three largest operators in each country (Figure 2.5), there are some striking differences from the ‘weighted average’ analysis.

While the ‘weighted average’ analysis is to a considerable extent a reflection of incumbent pricing (with incumbents having retail market share of over 60% of fixed-line voice connections in all the European countries), the ‘best offer’ analysis gives prominence to tariffs from the largest alternative network (‘alt-net’) operators. Germany and the UK offer the lowest and second lowest overall prices on the ‘weighted average’ basis, but because of a much lower differential between the pricing of the incumbent and of the two largest alternative networks, they have the highest overall prices of all the European countries when only the best tariff for each basket is considered. The UK is the only country in which a tariff from the incumbent appears as a ‘best offer’ tariff for one of the baskets.

By contrast, the best alt-net pricing in Spain typically undercuts the incumbent by around 50%, while alt-nets in Italy and Spain can offer savings of between 20% and 30% on incumbent pricing. However, it must be noted that while there is the potential for some consumers in these countries to achieve lower fixed-line pricing for these baskets than is available in the UK, alt-nets typically do not have nationwide coverage, and tariffs are often available only in areas where the local exchange has been unbundled (typically, in areas of high population density).

Figure 2.5 Comparative single-service 'best offer' fixed-line voice pricing

Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for the fixed-line voice component of each basket from any of the three largest operators by market share in each country, July 2008; PPP adjuste.

2.1.5 Summary of findings: mobile

The UK offers the lowest 'weighted average' prices for the mobile component of every basket except the lowest-use basket, where Italy offers the lowest mobile pricing (Figure 2.6). In general, the UK and Italy are significantly cheaper than all the other countries.

This is perhaps indicative of higher levels of price competition in Italy and the UK than in the other countries, driven by:

- saturated markets (in both countries the number of mobile connections has exceeded the population since 2005); and
- the disruption caused by new entrant Hutchison 3G (branded as '3'), which launched in both countries in 2003 and since then has sought to gain market share through low-priced offers. (Note that as Hutchison 3G is the fifth largest operator in the UK and the fourth largest in Italy, its tariffs are excluded from this analysis).

Section 5.2.4.11 of this report illustrates that the Herfindahl-Hirschman Index (often used as an index of the level of competition in the market) finds that the UK has the least concentrated mobile market in Europe.

However, although they offer the lowest prices, the characteristics of the mobile markets in the UK and Italy are very different.

In the UK, around 40% of mobile connections are post-pay, and these tariffs are characterised by heavily subsidised (or even 'free') handsets, with operators recouping the value over the course of the contract. Fixed monthly line rentals typically include a large number of inclusive any-time any-network minutes and SMS texts. The result is that high users tend to pay a 'flat-rate' for most of their use, and the value available from these tariffs is evident in the low relative prices for the high-use mobile connections in Basket 3, Basket 4 and Basket 5 (although of course, this assumes that consumers know their regular monthly usage level and select the correct tariff accordingly).

By contrast, around 90% of mobile connections in Italy are pre-pay and there is little by way of handset subsidy even for post-pay tariffs, where line rental is typically much lower than in

the UK, with correspondingly lower numbers of inclusive minutes and SMS. Indeed, there is little variation between pre- and post-pay in Italy; they tend to have the same basic call charges. The result is that Italian tariffs are characterised more by metered than 'flat rate' pricing. Prices for consumers with low monthly use tend to be lower than in the UK (as in Basket 2, and for two of the connections in Basket 4). Although not captured in our findings, this pricing structure has benefits to consumers in that it offers greater flexibility to consumers who either do not know their monthly usage or, typically, vary it from month to month.

Higher prices in Spain are a feature of all our mobile baskets, and our findings are consistent with other research, including that published by the OECD. The structure of the Spanish market may go some way to explaining the relatively high prices, with just three mobile operators, of which the largest two combined have more than 75% share of the retail market. The Herfindhal-Hirschman Index of market concentration, shown in 5.2.4.11 of this report, indicates that the Spanish mobile market is less competitive than those of the other countries considered.

Another factor may be that mobile termination rates (MTRs) (i.e. the cost that a calling network must pay a receiving network in return for connecting the call) in Spain have historically been higher than in the other countries. Although MTRs were cut by over 40% in 2007, they remain higher than in all the other countries with the exception of Italy, and it could be that these cuts have not yet translated into equivalently lower retail prices for consumers.

However, it should be noted that two characteristics of our methodology may discriminate against the pricing regime in Spain – making mobile calls appear more expensive than they would be with a different methodology.

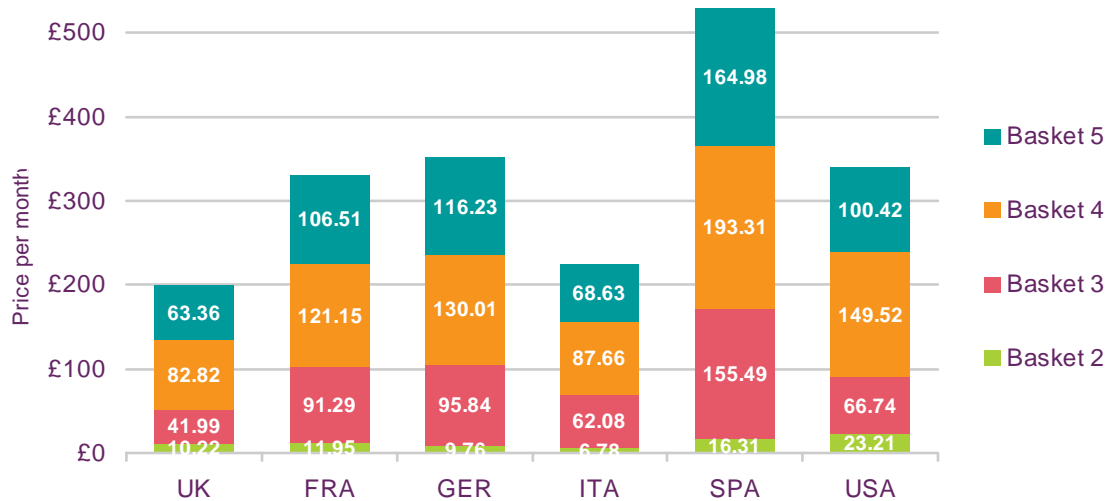
- Firstly, our approach has an average mobile call length of between 1.5 and 1.8 minutes, depending on the mobile profile (this is based on average call lengths across OECD countries). Unlike the other countries analysed, which overwhelmingly have only per-second or per-minute charging, Spanish mobile pricing is characterised by an initial call set-up charge for virtually all calls (prices vary between call types and operators but are typically between 12c and 30c). This therefore constitutes a large proportion of the overall price of calls. The absolute and relative price of Spanish mobile calls would fall significantly if the average call length was increased.
- Secondly, our methodology assumes that consumers have an exact understanding of their usage requirements and select the tariff which offers the lowest price available to them. It attributes no benefits to the flexibility offered by tariffs which allow users to vary their usage from month to month and pay accordingly. This is the case with most Spanish post-pay tariffs, where line rental is typically low but there are few inclusive minutes or messages, with a much larger proportion of the charging being on a metered basis than is the case with tariffs in other countries.

The US mobile market is very different from that in Europe because of a different interconnect regime which results in charges for incoming as well as outgoing calls; a consequence is that US mobile contracts typically include a very high number of inclusive (inbound and outbound) minutes in order to provide a 'flat-rate'-style tariff which incentivises consumers to leave their phone switched on.

This has an impact on our pricing analysis in two related ways. Firstly, basic line rental is typically much higher in return for many more minutes, meaning that there are very few US tariffs targeted at the low users present in Basket 2 and Basket 4 of our analysis. Secondly,

overall average mobile phone use in the US is much higher than in European countries (722 combined inbound and outbound minutes per mobile connection in 2007, compared to 116 outbound minutes in the UK and 62 in Germany). So, even though the baskets have been created to be representative of average use across the six countries, the mobile baskets collectively have a much lower usage profile than the US average. Because the baskets are less representative of the US market than of the European market, they contain a bias against the US. Put simply, were our baskets to contain much higher mobile usage, the US would be relatively less expensive; a sensitivity analysis we ran on this basis found that the US had the lowest price of all six countries for a basket of 1,000 mobile voice minutes.

Figure 2.6 Comparative single-service ‘weighted average’ mobile pricing



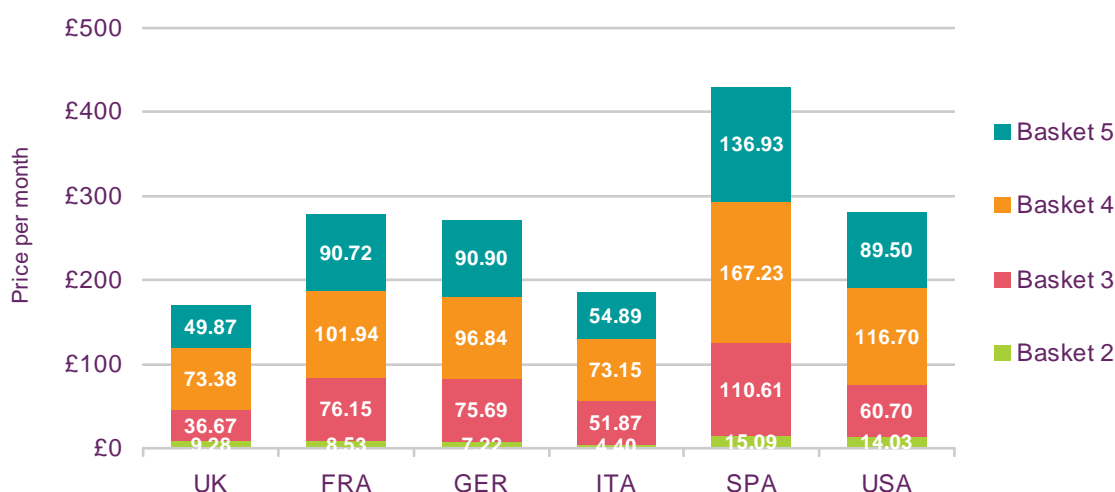
Source: Ofcom using data supplied by Teligen

Note: Weighted average of best-value tariff from each of the three largest operators by market share in each country; July 2008; PPP adjusted

In looking at the lowest prices available for the mobile phone components of each basket, the pattern is broadly similar to the ‘weighted average’ analysis. Generally, in all countries, there is a greater proportional difference between the ‘average’ pricing and the ‘best offer’ pricing for the higher-use baskets, largely a result of greater variation between post-pay and pre-pay tariffs (Figure 2.7).

The greatest difference between the ‘best offer’ and the ‘average’ pricing is in Germany. This is due to the significantly lower prices offered by the third largest operator, E-Plus, which offers the lowest German prices for all but one of the eight mobile connections in our five household baskets.

Figure 2.7 Comparative single-service 'best offer' mobile pricing



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for the mobile phone component of each basket from any of the three largest operators by market share in each country, July 2008; PPP adjusted

2.1.6 Summary of findings: fixed-line broadband

Single-service broadband pricing comparison should be treated with some caution, as broadband is very frequently bought as part of a multi-service bundle, and many operators do not even offer standalone broadband. (For example, Sky in the UK offers broadband only to its pay-TV customers, while every broadband tariff from France Telecom has IPTV included). In all of the countries that we analyse (except the US), some operators offer a basic broadband service at no incremental cost with some fixed-voice tariffs.

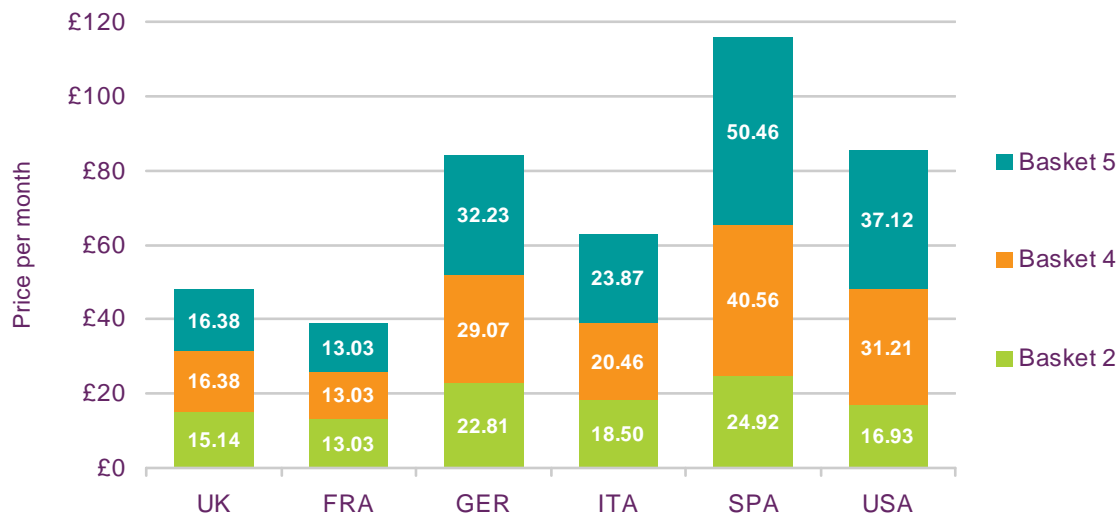
The high pricing of standalone broadband in Spain is largely due to operators generally targeting consumers with multi-play offerings, with less than 20% of all broadband connections billed as a single service. ('Double-play' voice and broadband tariffs in Spain are comparable to those available in other countries).

The lowest prices are available in France, where it is also notable that the most basic packages from all three of the leading operators meet the requirements of the highest specification basket (8Mbit/s and 5GB per month).

The UK offers the second-lowest prices, with 8Mbit/s basic tariffs offered by all the leading DSL operators, and relatively low prices being maintained by a competitive environment in which no one provider has more than 30% market share.

However, it should be noted that none of our baskets include genuinely high-speed broadband. This is because the very limited availability of next-generation access broadband in most countries would make price comparisons meaningless. Nevertheless, it should be recognised that high-speed alternatives, often at no great incremental cost, are available to many households in the US and to significant numbers of households in Italy, France and Germany.

Figure 2.8 Comparative single-service 'weighted average' fixed-line broadband pricing



Source: Ofcom using data supplied by Teligen

Note: Weighted average of best-value tariff from each of the three largest operators by market share in each country; July 2008; PPP adjusted

2.1.7 Summary of findings: TV

The variation in numbers and types of channels and different types of programme content makes like-for-like comparison of the pricing of television services difficult. This is an issue which has been discussed in some detail in the context of Ofcom's pay-TV market investigation⁹. Our current view is that it is difficult to draw strong conclusions from an analysis of comparative pricing levels for pay-TV packages¹⁰. For the purposes of this analysis we have used some headline prices of common pay-TV packages, but this is not intended to either supplement or replace the analysis conducted for the pay-TV investigation.

Licence fees are highest in Germany and the UK, which have the highest investment per head in public service broadcasting. There is no licence fee in Spain and the US, where public funding is raised by alternative means.

'Basic pay-TV' is defined as the lowest subscription required to receive channels in addition to those available on free-to-view television. Italy and Germany offer the lowest costs for this 'entry-level' service. In Italy this is primarily due to a €15 offer from satellite operator Sky Italia, which has a 90% share of the country's pay-TV subscriptions, while in Germany packages are available from both cable and satellite operators at around €17 a month.

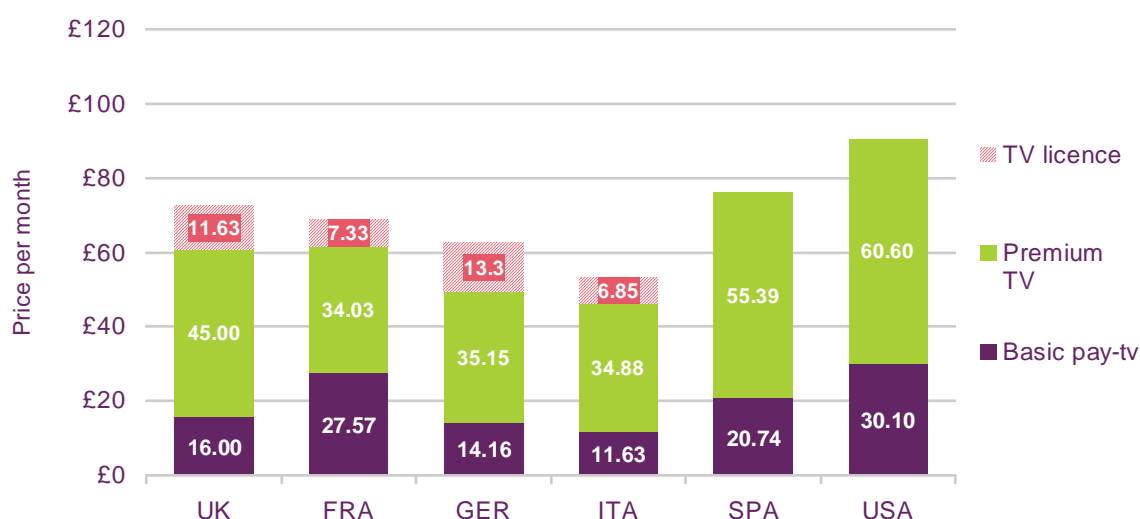
Under this analysis, the UK and Spain have higher prices than Italy, Germany and France for a basket of premium services consisting of the best package of top-flight football and first-run major Hollywood studio movies (Figure 2.9).

The US is the most expensive country for this premium package, although this may be misleading as in some respects it is driven by the range of choice in the US, where both NFL viewing packages and movie packages are wrapped up in many different tariffs. The requirement of this basket to have the best set of NFL matches led us to choose the most expensive of many options, which may not necessarily have the highest take-up.

⁹ <http://www.ofcom.org.uk/tv/paytv/>

¹⁰ See paragraphs 7.56 to 7.71 of the Pay TV Second Consultation: http://www.ofcom.org.uk/consult/condocs/second_paytv/

Figure 2.9 Comparative single-service TV pricing



Source: Ofcom using data supplied by Teligen

Note: Basic pay-TV is defined as the minimum price required to purchase a pay-TV packages which includes channels not available over free-to-air TV; Premium TV is defined as the best package of top-league football (NFL in the US and first run films from major Hollywood studios; PPP adjusted).

Having provided an overview of findings on a single-service basis, we now detail the relative total prices for baskets of communications services representative of five household types.

2.1.8 Basket 1: a low-use household with basic needs

Our first basket contains a usage pattern typical of a retired low-income couple in any of our comparator countries. They rely on a fixed-line phone for communications and spend around seven and a half minutes a day making calls, the majority of which are local. They only occasionally make calls to mobiles and do not make any international calls. They watch free-to-air multichannel digital television, which is available in all of our countries (largely via satellite in Germany and via the terrestrial platform in the other countries).

Figure 2.10 Composition of Basket 1

Fixed-line voice	Mobile	Broadband	Television
Total outbound: 225mins - Local: 61% - Regional: 14% - National: 22% - To mobile: 3% - Daytime: 58% - Evening: 25% - Weekends: 17%	No connection	No connection	Free-to-air digital television --- 1 digital receiver / set-top box

Source: Ofcom

Using a weighted average of the best-value tariffs from the three largest operators in each country, the lowest prices for this basket of fixed voice calls are available in France, followed by Italy and Germany. Prices in the UK are around 18% more expensive than in France, while Spain is the most expensive, with prices over 40% higher than in France (Figure 2.11).

With a large proportion of local calls, this basket favours those countries where local calls are typically included free of charge, as is the case in France and the US. Despite reasonably low use, in most countries there are advantages to users who opt to purchase an

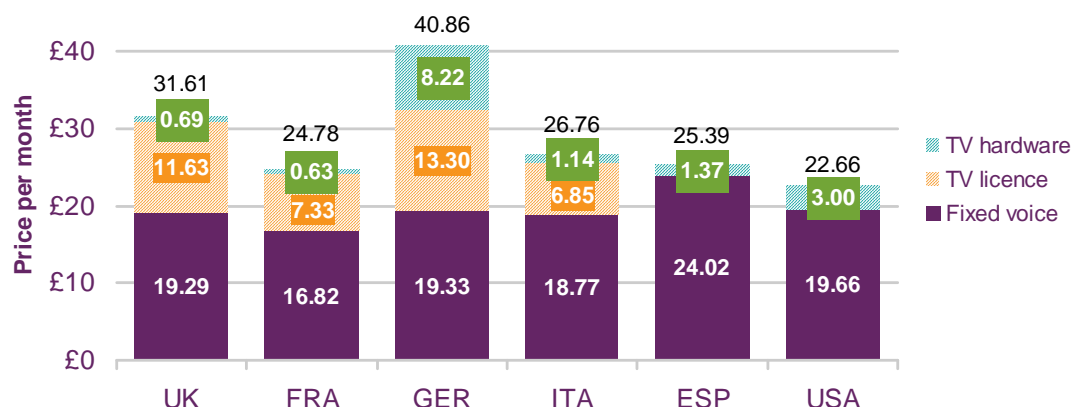
additional 'add-on', or pay a higher line rental for a service which offers inclusive calls (or much lower-priced calls), rather than simply taking a basic package with line rental and metered calls. For example, the lowest prices for two of the three operators considered in the UK requires the consumer to pay additional monthly rental fees for 'Anytime' plans which offer inclusive calls to any UK fixed number at any time of day. This emphasises that the lowest prices are available only to consumers who have a good understanding of their requirements and do the research necessary to identify the tariff combination which best meets these requirements.

As these data represent an average of the lowest prices available from the largest operators, weighted by the market share of this operator, the fixed voice pricing, to a large extent, reflects the pricing of incumbent operators, which have over 60% retail market share in each of the European countries. The relatively high pricing in Spain is the consequence of incumbent operator Telefonica having 80% market share and not having a suitably priced 'add-on' available for this basket of use – meaning that although the price of line rental is in line with other countries, the metered price of calls is significantly more expensive.

There is significant variation in the cost of the television licence across the six countries (which, along with the cost of a receiver / set-top box, represents the only television costs for this basket, which does not take pay-TV services). With higher investment per head in public service broadcasting than in the other countries, the TV licence is most expensive in Germany and the UK. By contrast, there is no licence fee in the US or in Spain, where public funding for television is raised by alternative means (and is lower per head than in the other countries).

Digital terrestrial television is the largest platform for basic TV services in the UK, France, Italy and Spain - so the prices in Figure 2.11 are an accurate reflection of what the majority of people pay. Digital terrestrial television has also been used for the US as the cheapest way of receiving basic multichannel services, even though only around 15% of households receive terrestrial rather than cable or satellite television. In Germany, because less than 5% of households receive terrestrial television on their main set, we have used the free satellite service (received by over 20% of households) as the basic service, resulting in higher hardware and installation costs. The largest TV platform in Germany is cable (with around 60% market share), with monthly prices for access to a basic set of channels beginning at around €4 (£3) for apartment dwellers to €17 (£13) for those living in houses.

Figure 2.11 Basket 1: ‘weighted average’ single-service pricing



Source: Ofcom using data supplied by Teligen

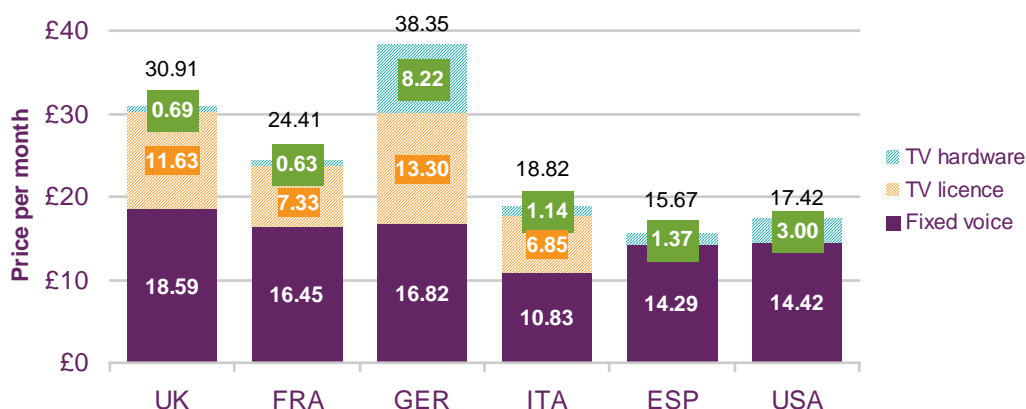
Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted

There are significant differences when looking at the lowest priced fixed-line voice tariff available from any of the largest operators, rather than the weighted average of tariffs (Figure 2.11). (Note that the television component remains the same, because the basket has free-to-air television, where the only costs are the licence fee and hardware).

In Spain, the third largest operator, Euskatel, with less than 5% market share, offers a price that is over 40% less expensive than the best deal available from the incumbent (Telefonica). An alternative network operator, Tele2, in Italy offers the lowest price across the six countries – its tariff being more than 45% less expensive than the equivalent tariff from the incumbent, Telecom Italia.

By comparison, there is much less variation between the prices of the three largest operators in the UK and Germany.

Figure 2.12 Basket 1: comparative ‘best offer’ pricing



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted.

2.1.9 Basket 2: A broadband household with basic needs

The second basket is representative of a couple of 'late adopters' who are fairly heavy users of the fixed-line phone, have one mobile between them which they use occasionally and have a basic broadband connection.

Figure 2.13 Composition of Basket 2

Fixed-line voice	Mobile	Broadband	Television
Total outbound: 430mins - Local: 65% - Regional: 18% - National: 11% - International: 3% - To mobile: 3% - Daytime: 58% - Evening: 25% - Weekends: 17%	One basic handset Voice: Total outbound: 60mins To national fixed: 24% To on-net mobile: 38% To off-net mobile: 38% Total inbound: 60mins Daytime: 58% Evening: 25% Weekend: 17%	Basic fixed-line connection Minimum speed: 1Mbit/s Minimum usage: 0.5GB Minimum hours: 10	Free-to-air digital television --- 1 digital receiver / set-top box

Source: Ofcom

There are some significant differences between the relative pricing of the fixed-line voice component of this basket and the lower-usage Basket 1 (Figure 2.10). The UK is the cheapest of the six countries for this basket, which is a reflection of the value available to UK consumers in purchasing 'add-ons' or paying a higher monthly line rental in order to receive inclusive calls (UK costs are just 19% higher than for Basket 1, despite this basket including almost twice as many minutes). Prices in the US for this basket are 37% higher. This is partly due to much higher prices for international calls and partly due to a market characterised by relatively low-cost line rental, but relatively expensive metered national calls, meaning that costs increase proportionally more with higher use.

The low use of the mobile phone in this basket is typical of a pre-pay mobile user. Around 90% of mobile connections in Italy are pre-pay, resulting in competition which focuses heavily on price-per-minute charges, which is reflected in the fact that Italy offers the lowest pricing for this basket. The second lowest prices are available in Germany, which may reflect the current focus of competition in the German pre-pay market - Germany is the only country among the six considered in which the number of pre-pay connections grew more quickly than the number of post-pay connections during 2007.

By contrast, mobile prices for this basket are high in the US. This is the consequence of two features of the US market. Firstly, pre-pay has a much lower take-up than in any of the European countries, resulting in the availability of a narrower range of tariffs; indeed, of the three tariffs included in the average pricing calculation of the US, two are post-pay (whereas for the European countries all the tariffs are pre-pay). Secondly, retail pricing in the US is characterised by consumers typically being charged for incoming calls (this is a consequence of the interconnect regime, which differs from that in Europe in that the call-receiving operator bears the cost for the incoming call, rather than the operator from which the call originated paying an 'interconnect' charge to the call-receiving operator). The response from many operators is to incentivise customers to purchase large numbers of additional minutes (in order to ensure that they keep their phone switched on), either included with the monthly line rental or, for pre-pay, through higher value top-ups. The result is that the price per minute for low users is higher than in other countries.

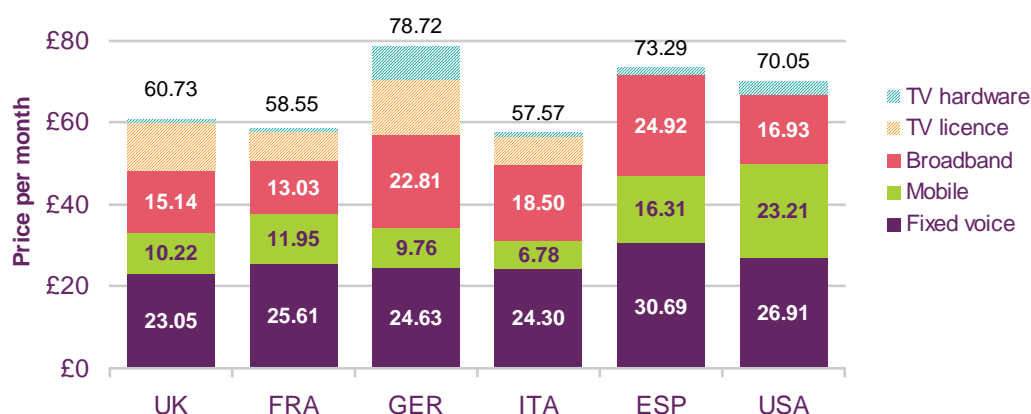
The highest mobile prices for any of the European countries are in Spain, with prices 35% higher than in France (the next most expensive European country). This is largely due to

Spanish mobile pricing being characterised by call set-up charges in addition to per-second charging (the other countries in our analysis generally have only per-second or per-minute charging). This basket, like the other mobile baskets, has average mobile call lengths of less than two minutes, which gives heavy weight to these call set-up charges. Our call lengths are based on the OECD average, but if Spanish mobile call lengths are longer than this average, then our pricing for Spain is over-stated.

Single-service broadband pricing comparison should be treated with some caution, as broadband is very frequently bought as part of a multi-service bundle. Prices for this basket are highest in Spain, but this may in part be due to the fact that Spanish operators generally target consumers with multi-play offerings, and less than 20% of all broadband connections are billed as a single service. With the low usage requirements of this basket, most tariffs offer a flat-rate price, although there is a volume-driven usage element, in addition to the monthly fee, for one of the tariffs used for the average German pricing and one for the average Italian pricing.

France offers the lowest pricing for the basic broadband requirements of this basket, as a result of offers from two alternative network providers. The UK is the next cheapest, with little variation between the three largest operators, perhaps a reflection of a relatively mature market with long-established alternative networks and no one provider having more than a 30% retail market share of broadband connections.

Figure 2.14 Basket 2: 'weighted average' single-service pricing



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted

In all of the European countries, the lowest prices available for this basket of services require the consumer to buy broadband in a package with other services (Figure 2.15). Indeed, in the UK, Italy, Germany and Spain the 'best offer' available for a package of voice and broadband services is cheaper than the weighted average of the best-value deals for voice services only; this reflects the fact that alternative network operators typically offer a 'free' basic broadband service in association with voice services. The best-priced voice and broadband offer in Italy (from the incumbent) also includes an IPTV offering.

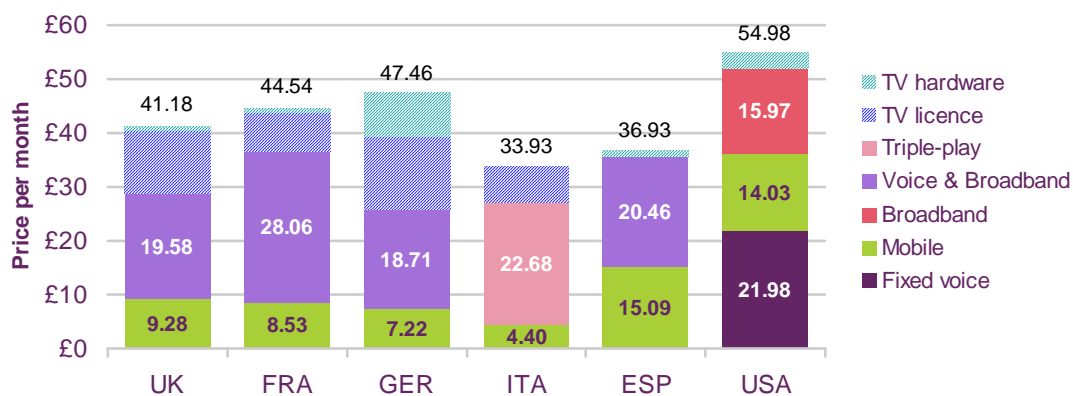
In the US, the lowest price for this basket of services comes from purchasing broadband and fixed-line voice separately. This reflects pricing which is related to the market structure in the US, where, in the majority of areas, a local duopoly is in place, with the incumbent telecoms company in competition with the local cable operator for the supply of voice and broadband services. Whereas in European countries, new entrants have sought to gain market share by

offering bundled services, the US has not seen the same level of market disruption and operators have looked to the incremental pricing of services, particularly at the lower end of the market.

Although the requirements of this basket are for a basic broadband service with a headline download speed of 1Mbit/s or more, in several countries the lowest price package offers headline speeds significantly in excess of this; the lowest-price Spanish tariff has speeds of 10Mbit/s, the UK 8Mbit/s and the Italian 7Mbit/s.

In terms of the best prices available for the mobile element of this basket, there is a similar pattern to the average prices, with pre-pay tariffs in Italy and Germany offering the lowest prices. There is less variation between the best-priced tariff and the average of the best tariffs available in the UK than in other countries.

Figure 2.15 Basket 2: comparative 'best offer' pricing



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country including multi-play offers July 2008; PPP adjusted

2.1.10 Basket 3: A mobile 'power user'

The third basket represents a single-person household typical of a young professional or student. This person has eschewed fixed-line telecoms and is instead a heavy user of both a mobile phone and of mobile broadband (using a mobile 'dongle' to connect to the internet on a laptop computer).

Figure 2.16 Composition of Basket 3

Fixed-line voice	Mobile	Broadband	Television
No connection	One high-end handset Voice: Total outbound: 550mins To national fixed: 13% To on-net mobile: 37% To off-net mobile: 37% To international: 6% To voicemail: 7% Total inbound: 550mins Daytime: 60% Evening: 19% Weekend: 21% Messaging and data: SMS: 150 MMS: 10 Internet: 100MB / 300mins	Mobile broadband connection Minimum speed: 1Mbit/s Minimum usage: 3GB Minimum hours: 15	Entry-level pay-TV subscription (including channels which are not available via free digital television) --- 1 digital receiver / set-top box

Source: Ofcom

There is greater variation between countries in the total cost of this basket than for any other, ranging from £87.46 in the UK and £99.57 in Italy (the two countries with the highest mobile phone user per head) to £196.43 in Spain (Figure 2.17).

The three UK mobile phone tariffs included in this analysis all contain enough minutes and SMS to meet the needs of this basket within their basic line rental, with additional charges incurred for the international call, picture messaging (MMS) and data elements. Two of the tariffs also include a 'free' handset, while the third is heavily subsidised.

By contrast, operators in Italy rarely offer substantial handset subsidies (around 12% of the mobile phone cost in the Italian basket is accounted for by the purchase of the high-end mobile phone required) and line rental is typically lower than in the UK, as are the numbers of inclusive minutes and SMS texts. The result is that Italian tariffs are characterised more by metered than by 'flat rate' pricing - for this basket over 60% of the pricing in Italy is usage-related, compared to just 20% of the total price of the UK tariffs.

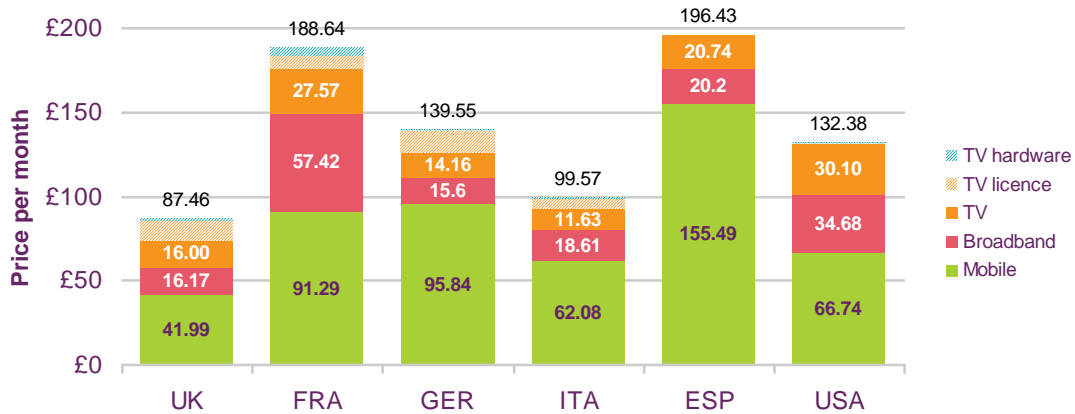
The largest 'buckets' of inclusive minutes are typically included within the US tariffs (this is related to the interconnect regime in the US, as discussed above), with higher-end tariffs typically including unlimited weekend, evening and on-net calls and/or 1,000 or more any-time, any-network minutes. However, for this particular basket, the US comes out as more expensive than both the UK and Italy as the consequence of usage charging for SMS and data browsing (both of which are used less in the US).

Spanish tariffs do not typically include any-time, any-network minutes, or SMS, within monthly line rental fees, and this, combined with call set-up charges, makes the metered usage charges much higher than in the other countries.

Mobile broadband prices are lowest in Germany, Italy, the UK and Spain, reflecting the fact that by July 2008 operators in these countries had launched mass-market consumer propositions via their HSDPA networks. The price for mobile broadband in these countries compares favourably with the pricing for standalone broadband, as used in Basket 2. By contrast, mobile broadband was largely a business proposition in France and the US (which have been slower to launch HSPA networks), and this is reflected in higher tariffs.

This basket also includes basic ‘entry-level’ pay-TV services, which is defined as the lowest subscription required to receive channels in addition to those available on free-to-view television. Because of the variation in numbers and types of channels and quality of programming, like-for-like comparison is more problematic than for telecoms services. Germany and Italy have the lowest pay-TV costs. In Italy, this is primarily due to the €15 monthly cost of the lowest price service from the country’s satellite operator (Sky Italia), which has over 90% market share of the country’s pay-TV subscriptions, while in Germany entry-level packages are available both from cable and satellite operators at around €17 a month.

Figure 2.17 Basket 3: ‘weighted average’ single-service pricing



Source: Ofcom using data supplied by Teligen

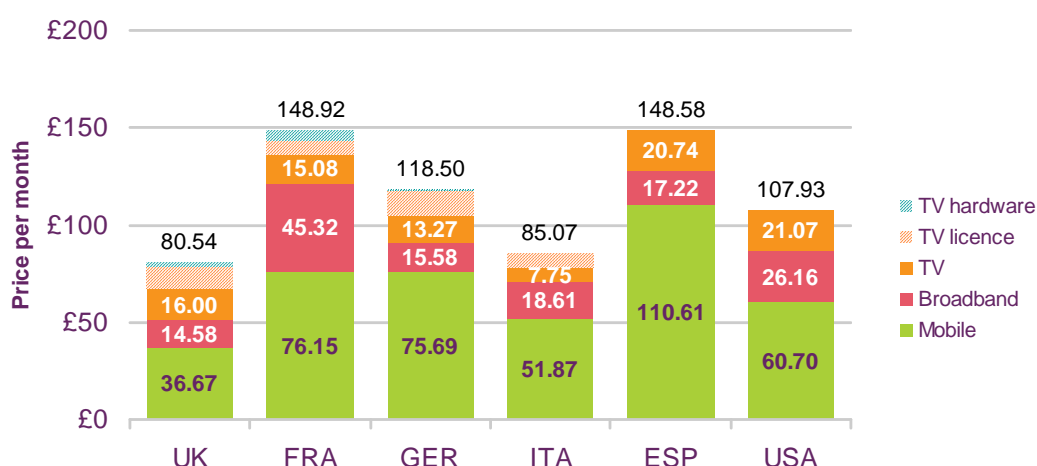
Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted

The lowest price tariff available for the mobile phone element of this package comes from a UK operator, T-Mobile (Figure 2.18), which offers all the voice minutes (including international calls), messaging and data required by this basket within a £35 monthly tariff. (The only additional cost of £1.67 a month is the £59.99 cost of the handset, which is amortised over three years).

In terms of mobile broadband, there is little variation between the best prices available and the average prices, although the range of tariffs available is much narrower – indeed, the relatively recent launch of mobile broadband had the result that, in July 2008, the UK was the only country in which all of the largest operators had consumer tariffs appropriate for this basket.

An IPTV operator in Italy (MediaSet) offers the lowest price for entry-level television (the availability of naked DSL in Italy means that this tariff is available to our Italian household, even though it does not have a fixed voice service).

Figure 2.18 Basket 3: comparative 'best offer' pricing



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted

2.1.11 Basket 4: A family household with multiple needs

Basket 4 represents a family of two parents and two children, all with their own mobile handset but with different mobile needs, with the adults using more voice and the children more messaging. However, they are cost conscious and favour using the fixed-line phone whenever possible, which gets fairly heavy use. The family are also heavy users of the internet, requiring a minimum connection speed of 4Mbit/s, and subscribe to entry-level pay-TV services.

Figure 2.19 Composition of Basket 4

Fixed-line voice	Mobile	Broadband	Television
Total outbound: 600mins - Local: 68% - Regional: 9% - National: 14% - International: 7% - To mobile: 2% - Daytime: 59% - Evening: 25% - Weekends: 16%	One high-end handset One mid-range handset Two basic handsets Mobile connection 1 Voice: Total outbound: 300mins To national fixed: 17% To on-net mobile: 33% To off-net mobile: 33% To international: 10% Voicemail: 7% Total inbound: 300 mins Messaging and data: SMS: 30 Internet: 30MB / 100mins Mobile connection 2 Voice: Total outbound: 180mins To national fixed: 20% To on-net mobile: 34% To off-net mobile: 34% Voicemail: 12% Total inbound: 180mins Messaging and data: SMS: 160 MMS: 4 Mobile connection 3 Voice: Total outbound: 60mins To national fixed: 30% To on-net mobile: 30% To off-net mobile: 30% Voicemail: 10% Total inbound: 60mins Messaging and data: SMS: 70 MMS: 2 Mobile connection 4 Voice: Total outbound: 60mins To national fixed: 30% To on-net mobile: 30% To off-net mobile: 30% Voicemail: 10% Total inbound: 60mins Messaging and data: SMS: 65 MMS: 2	Fixed-line broadband connection Minimum speed: 4Mbit/s Minimum usage: 5GB Minimum hours: 50	Entry-level pay-TV subscription (including channels which are not available via free digital television) --- 1 digital receiver / set-top box

Source: Ofcom

Overall, the UK and Italy offer the lowest prices as a result of lower mobile prices, which account for over 50% of the total costs of this basket in every country (Figure 2.20).

There is little variation in the costs of fixed-line voice services. At this volume of calls, the UK offers the lowest prices as a combination of the availability (from all of the leading three operators) of 'Anytime' plans, which offer inclusive calls to any fixed line, and separate 'add-ons' which offer savings on calls to mobile and international calls. The UK is also the only one of the six countries where there is typically no difference between the cost of a local and a national call.

Fixed-line voice tariffs for this basket are available from alternative networks in Italy, France and Spain, which are cheaper than the lowest-priced UK tariffs, but in all three countries the higher cost of the incumbents' tariffs (all of which have retail market share of over 60%) mean that the weighted average cost of the best value tariffs from the three largest operators is higher than the equivalent cost for the UK.

Germany has the least variation between the prices offered by the three largest operators, with the most expensive tariff just 15% more expensive than the cheapest. Basic line rental charges and local and regional calls are low in the US, but overall, the pricing for this basket is higher than for most of the European countries because of the higher prices for national and international calls.

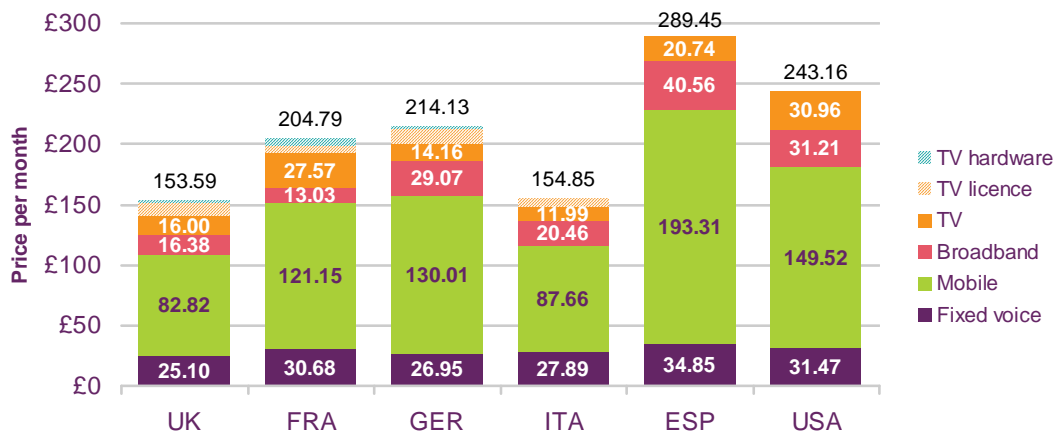
In most countries, the two mobile phones with the highest usage requirements (connections 1 and 2) achieve the lowest prices with post-pay tariffs, and the two phones with the lowest usage (connections 3 and 4) achieve the lowest pricing with pre-pay tariffs. Overall, the prices for connections 1 and 2 are lowest in the UK and the prices for connections 3 and 4 are lowest in Italy. This is the result of the UK having a post-pay market characterised by offering 'free' handsets and a large number of inclusive minutes for tariffs in the £20 to £30 range, and the Italian market having a greater focus on pre-pay, which accounts for around 90% of mobile connections.

Pricing in the US compares favourably to most of the European countries for mobile connections 1 and 2, and would be on a par with the UK but for the much higher cost of the international call element in connection 1. International calls from US mobiles cost typically more than double those from European mobiles, largely as a result of the introduction of the Euro-tariff in the European Union in 2007, which put a cap on the prices of mobile calls between EU countries. However, pricing for the lower-use connections 3 and 4 are more than double that in France, Germany, Italy and the UK.

Overall, the highest mobile costs are in Spain, largely as a consequence of call set-up charges, as detailed in the analysis of Basket 2.

The lowest broadband prices for this basket are in France, where, despite the higher speed and data use requirements, the costs are exactly the same as for Basket 2 - a reflection of the fact that the large majority of broadband tariffs offer a headline speed of at least 8Mbit/s and unlimited data use. By contrast, the price for broadband in Spain and the US for this basket is significantly higher than for Basket 2, as a result of higher charges for the higher-speed product. Pricing in Germany is higher relative to the other countries, because of the requirement to pay an installation fee and purchase a router, both of which are typically offered 'free' or at a much lower price in other countries. However, a benefit to the German consumer is that the broadband connection is not generally associated with a minimum contract length, whereas a commitment of between 12 and 24 months is generally required for broadband subscriptions in the other countries.

The television element in this basket is the same as in Basket 3.

Figure 2.20 Basket 4: 'weighted average' single service pricing

Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted

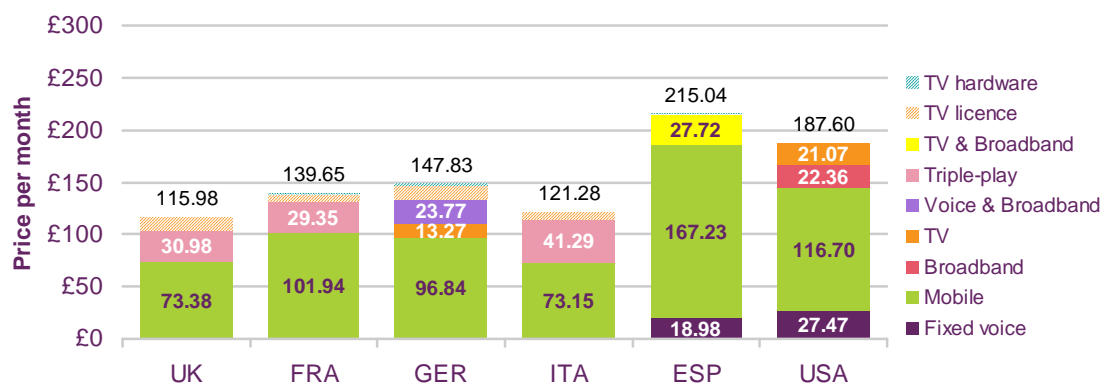
As with Basket 2, there are considerable savings to be made in all European countries by purchasing services within a bundle (Figure 2.14).

Although the UK, followed by Italy, again offers the lowest overall prices as a consequence of its lower mobile prices, the lowest prices for the combined fixed-line voice, broadband and TV is in France.

In France, in the bid to win and retain market share, alternative operators Neuf Cegetel and Free have invested in unbundling telephone exchanges, and offer triple-play services using ADSL2+ technology and (particularly in Paris) high-speed fibre networks. Incumbent France Telecom has responded by offering its own triple-play services, and matching the €30 a month offers for basic triple-play services. The usage requirements of the voice element of this basket mean that this package is considerably more than €30, but it is still nearly £6 cheaper than the equivalent UK service. However, it should be noted that IPTV offers are available only in areas where the operators have installed the necessary equipment within the exchange and are able to guarantee actual connection speeds of greater than 3Mbit/s, the minimum for receiving standard definition TV.

Triple-play offers incorporating television, broadband and fixed-line voice also offer the lowest prices in Italy and the UK, while our German household achieves the lowest price by purchasing voice and broadband together, alongside a separate TV package. In Spain, the lowest-price combination is purchasing a broadband and TV package from a cable operator, combined with a separate fixed-line voice service from an alternative network operator.

Figure 2.21 Basket 4: Comparative 'best offer' pricing including multi-play tariffs



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country including multi-play offers July 2008; PPP adjusted

2.1.12 Basket 5: An affluent two-person household with high use of mobile, internet and premium TV

Our final basket is typical of a young couple of high-end users who have low price sensitivity. They both have mobile connections and are fairly high users of voice and (to a lesser extent) SMS. They also have a fixed line, but this has relatively low use. They have a fast broadband connection and are heavy users, and have a premium television package for watching sport and the latest movies, and also a digital video recorder (DVR).

Figure 2.22 Composition of Basket 5

Fixed-line voice	Mobile	Broadband	Television
Total outbound: 250mins - Local:60% - Regional:7% - National: 13% - International: 8% - To mobile: 12% - Daytime: 59% - Evening: 25% - Weekends: 16%	One high-end handset One mid-range handset Mobile connection 1 Voice: Total outbound: 400mins To national fixed: 20% To on-net mobile: 29% To off-net mobile: 29% To international: 14% Voicemail: 8% Total inbound: 400mins Messaging and data: SMS: 80 Internet: 30MB / 100mins Mobile connection 2 Voice: Total outbound: 200mins To national fixed: 30% To on-net mobile: 30% To off-net mobile: 30% Voicemail: 10% Total inbound: 200mins Messaging and data: SMS: 20	Fixed-line broadband connection Minimum speed: 8Mbit/s Minimum usage: 5GB Minimum hours: 50	Premium pay-TV subscription, including: - Best package of live top-flight football / NFL - Film package including first-run major studio movies - PVR service --- 1 digital receiver 1 DVR

Source: Ofcom

As for Basket 4, the UK and Italy offer the lowest pricing for this basket because of significantly lower prices for the mobile component than in the other countries (Figure 2.23)

However, for the relatively low use of the fixed-line, France and Germany offer the lowest prices, due to the availability of tariffs typically offering unlimited calls to national fixed lines, combined with relatively low prices for the international calls element of this basket. In general, prices are similar to those of Basket 1, which has a similar volume of calls, although prices are notably more expensive in Italy than for equivalent tariffs in France, Germany and the UK, as a result of higher charges for this volume of international calls. Prices in the US are in the middle of the range, with low line rental and free local calls offset by higher prices for national and international calls.

The UK offers the lowest price for both of the mobile connections in this household. The higher usage of mobile connection 1 is served by £35 or £30 contracts, with a high-end handset offered free of charge on 18- or 24-month contracts for two of the three contracts included within the calculation of the 'average' price, and with additional fees only for the international calls and the data requirements. The lower-use mobile connection 2 achieves the lowest prices from all three operators, through £15-a-month SIM-only contracts. These low-cost contracts have emerged in the last year in the UK and are typically targeted at consumers who already have a mobile, either from a pre-pay connection or an expired post-pay contract. Our analysis shows that for some consumers these tariffs are still the best available, even when a mid-range handset is purchased (our analysis adds on the price of purchasing the handset and amortises it over three years in order to identify the monthly cost). By contrast, at least two of the three lowest price tariffs in France, Germany, Italy and Spain for mobile connection 2 in this household are pre-pay tariffs, and in Italy and Spain pre-pay tariffs are also the best option from one of the three operators, even for the higher-using mobile connection 1.

Once again, France offers the lowest price for broadband; indeed, the three tariffs which offered the lowest price for Basket 1, which only required a minimum speed of 1Mbit/s and 0.5GB usage a month, are all still valid for the higher requirements of this household (8Mbit/s and 5GB per month). The UK is the second least expensive, with most operators, including the incumbent BT, offering 8Mbit/s and 5GB a month within their basic tariffs.

Among the European countries, Spain and the UK have the most expensive TV pricing for this top-end package of premium top-league football rights and first-run movies from the major Hollywood studios. This is partly a consequence of the cost of football rights, which are highest in the UK, followed by Italy and Spain, and partly because of the structure of the rights packages and the channel bundling strategies of the operators. BSkyB in the UK and Audiovisual Sport in Spain both own rights to most of the biggest games, and control access to them by bundling them for a relatively high monthly fee. (The requirements of this bundle are that the 'best package' of football rights is purchased; for example, the package offered by Setanta in the UK does not meet this criterion).

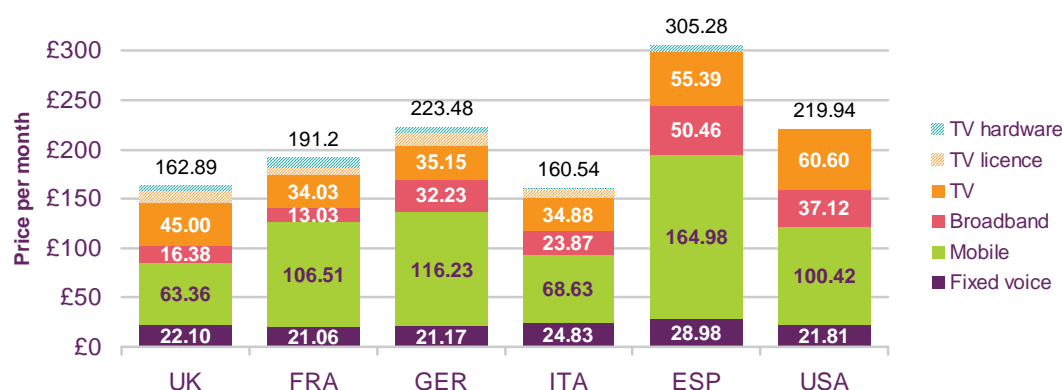
In Italy a fragmented football rights market creates more pressure on pricing; rights are sold on a club-by-club basis, and separate packages are sold to the terrestrial and satellite platforms. As a result, even though satellite operator Sky Italia has been able to secure a better overall package of rights than its competitors, the availability of a wide range of matches on digital terrestrial television (many on a pay-per-view basis) combines to create competition between the two platforms, while also putting an added burden on the wallet of the committed fan who wishes to purchase services from both suppliers. Lower prices for the equivalent premium television package in Germany and France are largely a feature of lower-priced football rights.

Comparisons with the US are harder to make, partly because we are comparing NFL with football, but also because a characteristic of the US market is that NFL viewing packages are wrapped up in many different ways and offered through a combination of pay-per-view and subscription. The requirement of this basket to have the best set of matches led us to

choose the most expensive of many options, which may not necessarily have the highest take-up.

This basket does not contain the requirement for high-definition (HD) television, because of its low take-up in some countries. However, it is worth noting that the services in France and the US do include HD channels, an HD receiver and a DVR. If HD were included as a requirement, the relative pricing of this premium television package would be even higher in the UK, with an additional £10 monthly fee for the HD sports and movies and a higher cost for the DVR.

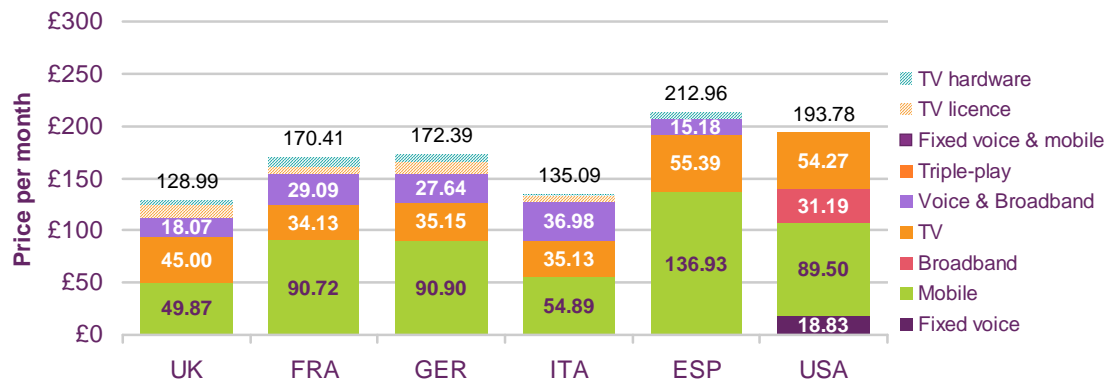
Figure 2.23 Basket 5: ‘weighted average’ single-service pricing



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country, July 2008; PPP adjusted

There are not many triple-play tariffs in any of the countries which meet the requirement of containing premium football and movies. Premium television packages are typically offered as an ‘add-on’ to a basic level service and so do not generally offer savings if purchased within a triple-play subscription rather than on a standalone basis, and none of the triple-play services available offer better value than purchasing TV separately. In all five of the European countries, a voice and broadband bundle offers the best value and the largest savings, compared to purchased services on a standalone basis, are found in Spain. (Indeed, with the price of combined voice and broadband considerably lower than buying a standalone broadband subscription for this basket, it is little wonder that more than 80% of Spanish broadband is bought in a bundle).

Figure 2.24 Basket 5: comparative 'best offer' pricing including multi-play tariffs

Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country including multi-play offers July 2008; PPP adjusted

2.1.13 Conclusion

Figure 2.25 and Figure 2.26 below summarise the service pricing of each basket in each country (TV licence and equipment costs are excluded). The findings enable us to draw some general conclusions about the pricing of communications services, as well as highlighting differences between the six countries.

Consumers in all the European countries can make significant savings by purchasing communications services in bundles, compared to purchasing single services. Broadband and voice can typically be purchased in all countries except the US for little more than the price of voice alone, because broadband services are often offered 'free' in association with other services. This is usually fixed-line voice, but for some tariffs in this analysis it is offered with a pay-TV subscription (for example, as offered by BSkyB in the UK). It is sometimes also bundled with mobile voice (for example, as offered by Orange in the UK) and recently, even with mobile broadband (for example, as offered by O2 in the UK).

The mobile phone component is easily the largest cost for all of the baskets 3, 4 and 5. This is in line with the relative sizes of the fixed-line voice, broadband and mobile industry sectors – with mobile generating over 50% of telecoms industry revenue in all of the countries (see the Telecoms section of this report). However, it is also notable that it is the mobile component which shows greatest variation across the countries analysed. This is perhaps indicative that there is greater variation in mobile operators' recent capital expenditure between the countries than is the case for fixed-line services (due to variations in spectrum licensing costs and network roll-out costs). It is also probably the consequence of the more complex industry structures. Unlike the fixed-line sector, mobile markets in all of the countries in our analysis do not involve a heavily-regulated incumbent operator in competition with alternative network operators.

The interplay between these operators, together with the evolution of network and handset technology (the migration from analogue to digital, to GPRS, to 3G, to HSPA; and the related move from voice-only to voice and messaging to multi-media) has resulted in very different market structures. For example:

- the Italian market is 90% pre-pay, whereas the US market is 90% post-pay;
- nearly 30% of Germany's mobile connections are with mobile virtual network operators (MVNOs), while in Italy less than 1% of connections are with MVNOs; and

- in Italy and the UK the award of 3G licences led to a new 3G-only operator entering the market, whereas in Germany, Spain and France 3G licences only went to existing operators.

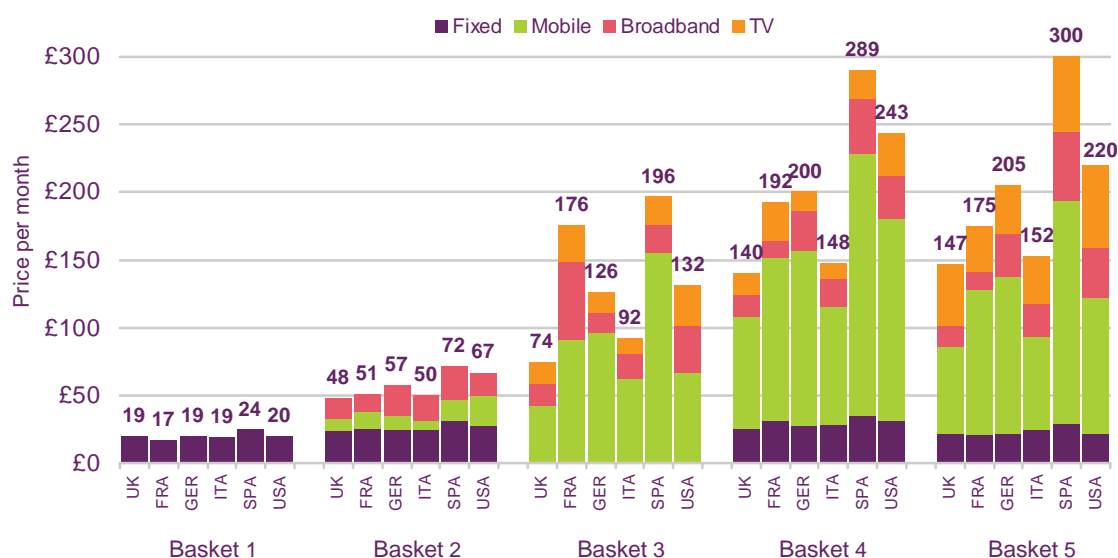
All of these factors have contributed to complexity within national markets (our analysis included 2,481 tariff options for mobile, compared to 742 for fixed-line voice, 496 for pay-TV and 324 for broadband), and large variation between the national markets. Large differences in pricing are a manifestation of this.

In terms of overall pricing, the UK and Italy generally offer the lowest pricing both for single-services and in terms of the ‘best offer’, largely through lower mobile prices. Only in the basic baskets do consumers from other countries get comparable, or even better, pricing. France offers the lowest average pricing for Basket 1, which consists solely of fixed voice services; Germany offers the lowest average pricing for Basket 2, driven by a low cost voice and broadband tariff.

Spain is the most expensive country overall. However, this is primarily due to much higher mobile prices, driven largely by the use of call set-up charges. The difference between ‘average pricing’ and ‘best offer’ pricing is greater in Spain than in any other country, as a result of alternative networks offering much lower prices than the incumbent for fixed-line voice services, and the prevalence of bundled voice and broadband services.

‘Double-play’ voice and broadband tariffs have the lowest prices in the UK, France and Italy. This is the consequence of alternative-network providers unbundling exchanges (and also rolling out fibre networks in France and Italy) and aggressively looking to win market share from the incumbent by focusing on bundled tariffs which offer line rental and voice and broadband services for a flat fee.

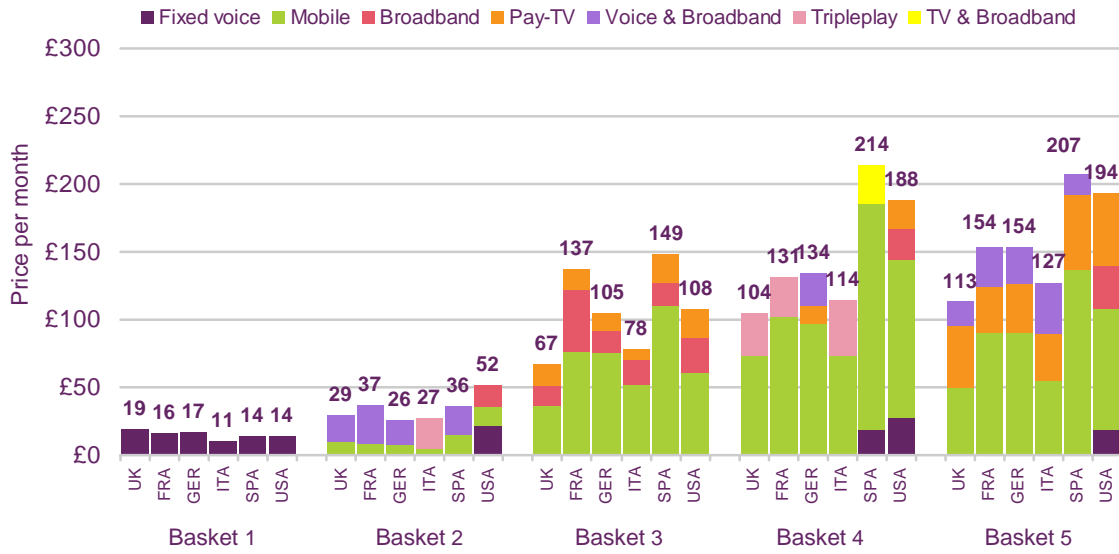
Figure 2.25 Comparative average pricing of ‘single services’ for all countries



Source: Ofcom using data supplied by Teligen

Note: Weighted average of best-value tariff from each of the three largest operators by market share in each country; July 2008; PPP adjusted

Figure 2.26 Comparative cost of lowest price services, including multi-play, for all countries



Source: Ofcom using data supplied by Teligen

Note: Lowest tariff available for each service type from any of the three largest operators by market share in each country including multi-play offers July 2008; PPP adjusted