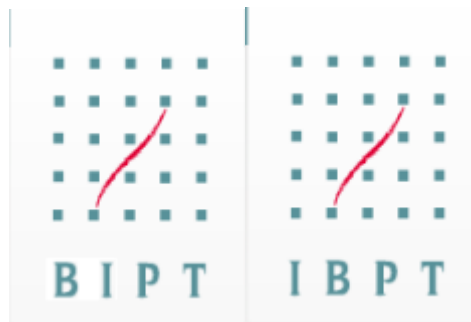


Telecommunications Price Benchmarking: A study into business pricing in Belgium in 2015



A report for BIPT

Study and report produced by



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Disclaimer: This price benchmarking analysis provides a general view on telecommunications costs for professional users across the study countries, making use of a basket methodology as set forth in this report. It focuses solely on the cost of the various telecommunications services and does not take into account aspects related to quality of service, additional features and conditional discounts.

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1. Executive Summary

This tariff benchmarking study compares the prices of telecommunications services in Belgium with those of four neighbouring countries, namely France, Germany, Netherlands and the United Kingdom. Prices are compared for a range of business services, and, where relevant for business use, residential services: fixed and mobile voice, fixed and mobile broadband. For the purpose of this study a number of usage profiles have been developed based on traffic data provided by the Belgian operators, covering typical Belgian business usages.

The study uses a basket¹ methodology to compare the telecommunications charges paid by eight business entities, which are constructed to represent different combinations of services and usage levels. The eight businesses can be split into two broad groups, depending on how many active communications service users there are in the business.

- Business types 1 to 4 consider single user businesses
- Business types 5 to 8 consider businesses with multiple users, ranging from 5 to 50 users

The results are based on information collected from telecom company websites and the offers available at the time of the data collection, which was in February / March 2015. Hence, this study does not analyse the real expenditure of businesses for telecom services, but analyses the supply side of the telecoms market at a given point in time.

With regards to the outcome of this study, the telecommunications costs faced by Belgian businesses are broadly mid-range compared to the other study countries, although the relative costs and rankings vary somewhat by business type, and whether we consider the cheapest overall offer, or the average of the three cheapest providers.²

Belgian businesses with generally low to moderate reliance on communications, as is the case with the local-based individual business (business type 1) and the home-based professional (business type 2), will generally rank mid-range across the study countries. For these two business types, multiplay often features as a more attractive proposition compared to single service procurement in a number of the study countries, more so than

¹ A “Basket” is a usage profile describing how a theoretical user uses a service or a combination of services. The basic methodology behind this has been established over the years by the Teligen division of Strategy Analytics for benchmarking prices for the OECD.

² When reference is made in the report to the cheapest overall offer (business types 1 to 4), this is taking into account both single service and multiplay calculations. For business types 5 to 8, the cheapest overall offer will be based on single service calculations only, as multiplay is not a relevant proposition for these organisations.

in Belgium; notably France and the UK. In this study, abstraction is made of non-price related benefits of purchasing multiple products through the same provider (such as single or consolidated billing, and a single point of contact for account management).

Belgian businesses with a heavier reliance on and higher use of mobile services are generally among the most expensive of the study countries, partly due to higher mobile costs in Belgium related to such intensive usage, while we observe some very competitive mobile tariffs in other countries, which are continually being driven down by strong competition. This is evidenced in the rankings and relative cost positions of the mobile professional 2 (business type 4) in particular for Belgium, where Belgium ranks from 4th to 5th (most expensive) depending on whether the results are based on the cheapest overall offer or cheapest overall offer based on the average of the three cheapest providers. For the mobile professional 1 (business type 3), where mobile usage is much more moderate compared to the heavy use experienced by mobile professional 2, Belgium ranks 3rd (i.e. mid-range) for both the cheapest overall offer or cheapest overall offer based on the average of the three cheapest providers.

Similarly, businesses with a strong focus on international calling will generally not fare as well in Belgium as a result of this type of call being more costly. This is the case with the local trading company and the local service company (business types 6 and 8), where Belgium is either second most expensive or most expensive, depending on the business and calculation type.

By contrast, Belgian businesses with a high proportion of local and national fixed voice traffic will enjoy more competitive tariffs, and consequently lower overall costs compared to some of the other study countries, and this can be seen in the rankings and absolute results for the retail outlet and the local production company (business types 5 and 7). The retail outlet in Belgium has the cheapest costs across the study countries, irrespective of whether the cheapest overall offer or the average of the three cheapest providers is considered. For the local production company, Belgium ranks second, for the cheapest overall offer, and third for the average of the three cheapest providers.

In terms of the other study countries, France and the UK are often, although not exclusively, among the cheapest for smaller businesses, while the Netherlands is more favourable for SMEs and Germany often rank as the most expensive.

As far as Belgium is concerned, the changes in price since 2014 across the eight business types have been a mix of increases and decreases, and have, for most business types, been relatively modest, and within the bounds of what might typically be expected, i.e. up to 5% in either direction. It is important to consider that an overall change in the results seen in this report for a business will be the compound result of changes to individual services, which may be changing in the same way - for example all increasing, or all decreasing - or increases in some services may be countered by decreases in others.

The changes seen for business types 3 and 4, which mainly rely on mobile services, were larger than for other business; for business type 3, prices fell by up to 8%, depending on whether the cheapest overall offer or the cheapest overall offer, average of the three

cheapest providers, was taken into account. For business type 4, the cheapest overall offer increased by just over 8%, while the average of the three providers' calculation saw a small decrease. Such movements are driven by changes in packages and call charges for some mobile tariffs, and tariffs being removed from a portfolio, which can result in an apparent increase. Such price movements can be very typical, particularly for mobile services, where pricing is highly competitive and constantly changing.

In terms of changes to rankings, based on the cheapest overall offers, Belgium has maintained its position across 4 of the 8 business types, namely the home-based professional (business type 2), the mobile professional 1 (business type 3), the retail outlet (business type 5) and the local production company (business type 7). For the remaining business types, the Belgium has moved down in rank by one place.

When we consider the change in ranking since 2014 for the average of the three cheapest providers, these remain unchanged for two of the eight businesses; namely the mobile professional 1 (business type 3) and the retail outlet (business type 5). For three of the eight businesses - the local-based individual business (business type 1), the home-based professional (business type 2) and the mobile professional 2 (business type 4), the ranking improved by one place, while the local trading company (business type 6), local production company (business type 7) and local service company (business type 8) all fell by one place from their 2014 position. It is important to note that changes to country rankings are not solely driven by changes to pricing in Belgium, but are also influenced by changes/market dynamics in the neighbouring countries

While it is difficult to draw any firm conclusions from the non-price related data, it is important to view the findings alongside the benchmarking results. Many single user businesses will subscribe to residential services, which are often cheaper and more flexible in terms of contract duration (i.e. six months period in Belgium), but may have limitations, for example, lower speeds and/or quality of service, This may be a trade-off that they need to consider.

The analysis of the non-price related elements is of a quantitative nature, whereas some qualitative aspects would also need to be taken into consideration. In connection to the element "speed offered through fixed networks" e.g. it is important to note that advertised higher speed services are not always available to each customer in a certain country. In Belgium, for example, NGA (Next Generation Access) broadband is widely available across the country, and that is not always the case in other countries. Such in-depth analysis is however not part of the scope of this study.

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2 Background to the study

In 2014 the Belgian Institute for Postal services and Telecommunications (BIPT) carried out a competitive study into prices levels of telecommunications for self-employed individuals and Small and Medium Enterprises (SMEs). The study covered Belgium, Netherlands, France, Germany and the United Kingdom.

Following the publication of the report, BIPT has commissioned a repeat of the 2014 study, to consider the position of business pricing for Belgium compared to the same set of countries in 2015, and to assess how prices have evolved since 2014. Similar to 2014, this study is being conducted by the Teligen division of Strategy Analytics Ltd. (UK), and will report on the prices and price evolution of such services for professionals and small and medium enterprises in Belgium compared with France, Germany, the Netherlands and the United Kingdom (“the study countries”).

The study uses a basket methodology to compare the telecommunications charges paid by eight types of business entities, which are constructed to represent different combinations of services and usage levels. These eight businesses can be split into two broad groups, depending on how many active service users there are.

- Business types 1 to 4 consider single user businesses (“SoHos”), comprising the Local-based Individual Business, the Home-based Professional and two types of Mobile Professionals.
- Business types 5 to 8 consider businesses with multiple users, ranging from 5 to 50 users (“SMEs”), including the Retail Outlet, the Local Trading Company, the Local Production Company and the Local Service Company.

The following business services are covered within the study:

- Fixed voice FV (PSTN, managed VoIP)
- Mobile voice MV (including SMS and handset data usage)
- Fixed broadband FBB (over DSL, Cable, Fibre)
- Mobile broadband MBB (based on laptop/tablet/dongle modem usage)
- Any bundles / combinations of these services

For some of these services it is also relevant to include residential services as many business users opt for a residential fixed internet and/or mobile voice or broadband product rather than a professional product, since the qualitative specifications of the residential offer will in many cases meet the demands of (mainly small) business users.

The scope of the study in terms of target audience is limited to self-employed and small and medium enterprises. Only tariffs available in the public domain and listed on provider websites will be included. Offers/tariffs that are presented to the professional market may be subject to further negotiations and additional discounts, but as such variations to the prices are outside the public domain, that aspect cannot be taken into account in the framework of this comparative study.

3 Overview of benchmarking methodology

This section presents a brief overview of the benchmarking methodology used. Additional information on the methodology can be found in the Appendix to this report.

3.1 The business concept

An important part of the study methodology is the concept of “businesses”³. This is an expansion of the basket concept, creating a “super-basket” for a business covering all the communications service requirements of all users and all services. The business definition uses the baskets for the individual services to establish how each service is used within that business, and combines the costs to produce the total cost per month for all communications use in the company.

The benchmarking methodology looks separately at both individual (single) services, and bundles consisting of two to four different services. With bundled services, in order to complete the picture, a multiplay or bundled offer that does not fulfil all the requirements of a business is expanded with the cheapest possible single services in the market, from any provider.

The table below describes in broad terms the communications requirements for each type of business that have been defined for the purposes of this study. A more detailed description of the businesses is given in the business results summary.

Figure 1: Communications service requirements for the 8 business types

		FBB	MBB	FV nat	FV intrn	MV	MV mess	MV data	Users
1	Local based individual business	Low		Low loc		Low	Low	Low	1
2	Home-based Professional	Medium	Medium	Medium nat	Medium	Low	Low	Medium	1
3	Mobile Professional 1	Low	High			Medium	Low	Medium	1
4	Mobile Professional 2	Low	High			High	Medium	High	1
5	Retail Outlet	Medium	Medium	Medium loc	Low	Medium	Low	Low	5
6	Local Trading Company	Medium	Medium	High Nat	High	Low	Low	Medium	10
7	Local Production Company	Medium	Low	High loc	Low	Medium	Medium	High	10
8	Local Service Company	Medium x 3	Low	High loc	High	Medium	Medium	High	50

Low, Medium and High suggests usage levels per User.

For Fixed Voice: Loc means predominantly local usage, Nat means predominantly national (long distance) usage.

Number of Mobile Broadband users will be half of the total number of users.

x3 is indication of the number of lines/connections that will be required.

2% of Mobile Voice (MV) traffic is allocated to international calls.

The average Belgian usage profile is identified as “medium” usage. Profiles for lower and higher usage are defined in relation to this medium profile, with usage levels that are typically 1/3 (for “low”) and 3 times (for “high”) of the medium.

³ The concept was originally developed for “Households”, analysing the telecommunications services used by a home, including television services.

Note: The approach does not take into account the use of television (TV) services, as these are not considered relevant for the businesses considered, however, as some services may include TV as part of a bundled offer. Where this is the case, such tariffs are considered, but do not take into account any variable costs related to the TV component

While there have been no changes to the basic structure of the business types since 2014, there has been a revision (increase) of the levels of mobile broadband used by the different businesses, based on feedback from the Belgian operators. This increase applies both to mobile data on a mobile handset and mobile broadband over a dongle, laptop or tablet. The increase is important as it reflects the changing usage of mobile data, and provides a more accurate representation of current usage levels. The impact of this on the results is relatively limited, and the changes have been applied retrospectively to the 2014 baskets, to ensure consistency of the time series 2014-2015.

3.2 The baskets

The usage profile definition for an individual service is called a “basket”, which describes all important elements the user can control or select, including, for example usage (call or data) volume, distribution of voice calls, requirements for access speed on data services and amount of data transferred.

The contents of the basket will depend on the service type; for example, requirements for a fixed broadband service are relatively simple, while the basket for a mobile voice service can contain many different elements.

In addition to usage levels there may be different categories of baskets; for example for fixed voice service with focus on national calls, or international calls. These differences have been based on statistics provided by BIPT and Belgian operators.

For the calculation of end user costs the usage requirements described by the basket is applied to all tariffs from all operators, calculating the monthly cost which takes into account initial one off price elements, monthly fixed price elements, and usage related price elements, to derive the end user cost per month.

The main objective of the study is to assess prices in Belgium in relationship to prices in other countries.

For this kind of analysis it is more relevant to use typical Belgian usage profiles as a base, and refer any comparisons to those. Using international profiles (e.g. OECD baskets) will not show the results for Belgium in a way that is easily recognizable or sufficiently relevant for the Belgian market. With the Belgian profiles (baskets) the results for Belgium will be more in line with what the Belgian businesses actually experience. However, results for other countries will reflect the cost that would be seen by a Belgian user (business) in each of the other countries.

The Belgian baskets have been developed based on actual traffic information provided by Belgian operators, with the assistance of BIPT. Details of the Belgian baskets can be found in the appendix to this report.

3.3 The rational user

In order to ensure consistent analysis of all offers one of the ground rules is that the user (the business) makes rational buying decisions based on price only, without preference to brand or provider. When a user buys a range of different services the analysis will assume that the cheapest available service in the market is used in each separate case, even for multiple mobile users within a business.

While non-price related factors may play a part in provider selection, the primary purpose of this study is to look the cost of telecoms services faced by business users in different countries. As different users will place different emphasis on non-price related factors, it is not possible to incorporate this in the benchmark in any meaningful or easy way. Rather, qualitative aspects of offerings will be considered separately in the analysis.

3.4 Geographical scope of the study

This study covers Belgium and its neighbouring countries; France, Germany, the Netherlands, and the United Kingdom.

3.5 Provider and service selection

The operators have been chosen based largely on market share information, where this is available. The basic “rule” is that the operators covered will between them have at least 80% market share in a given service market. In the case of mobile broadband it is often difficult to establish accurate market shares, and alternative information may have been used. Additionally, as there is little published data specifically on market shares for the business market, and as residential services are expected to be used by several of the business types, total market shares have been used, for all services and countries.

A full list of providers covered in the study, by service type, is given in the appendix to this report.

3.6 Tariff data

The prices for all services are taken from information available in the public domain in February / March 2015, with data taken from company websites. The system contains over almost 5,500 individual service tariffs and tariff combinations and over 4,300 multiplay service offer combinations across the five countries. Mobile operators offer by far the largest number of tariff plans and options, reflecting the competitiveness of the market and also the complexities in service combination. Offers with options are considered as separate tariff plans, and this may result in a large number of seemingly separate tariffs, in order to fully address the different permutations and combinations available to a user. This is particularly true in Germany, where many mobile plans have a range of different SMS and data plans that users can add to their subscription.

The results are based on the information collected and the offers available at the time of data collection. Great care has been taken to ensure the most complete set of data possible. The tariffs collected are in the national currencies of the respective countries. All

the study countries except the UK use Euros. All UK results have been converted from GBP to EUR. An exchange rate: £1=€1.38 has been used, and has been taken from the Oanda web service on 1 March 2015.

Although often used in international benchmarking studies, there has been no conversion of exchange rates based on Purchasing Power Parities (PPPs) within this report. This conversion is more typically used for consumer-focused benchmarking and hence has not been considered relevant for this particular study.

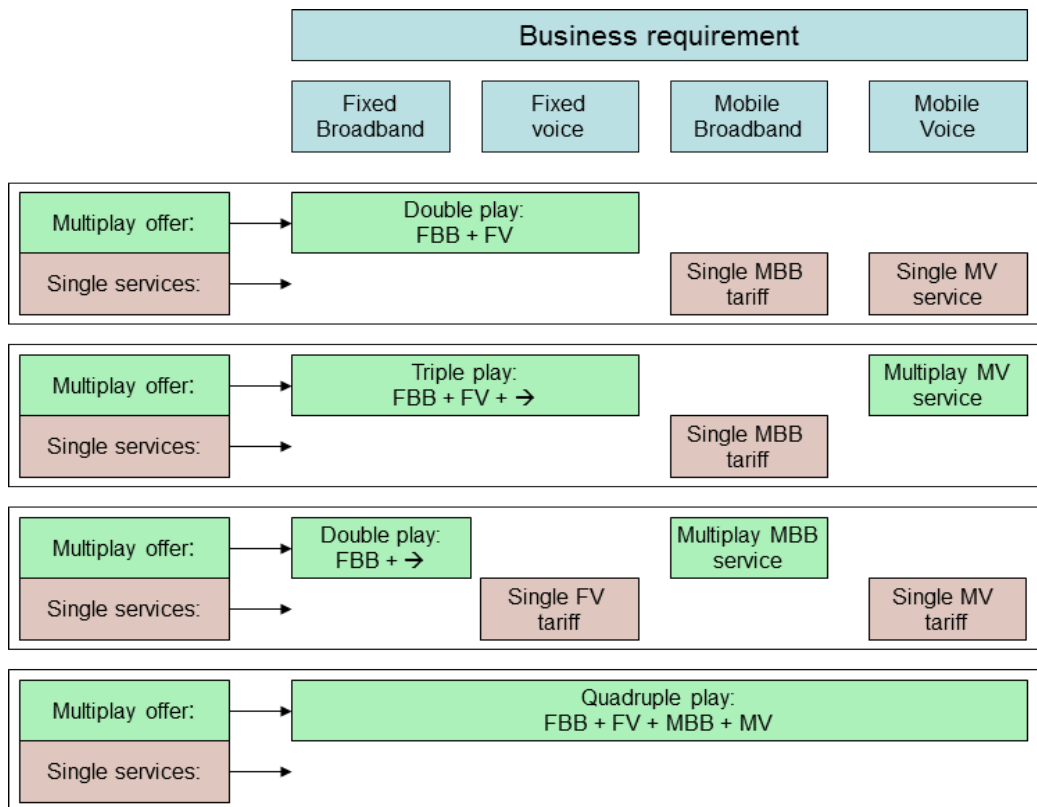
3.7 Study basis and limitations

The study focuses specifically on a comparison of costs across the five study countries. The purpose of the study is to consider how the telecommunications costs faced by typical Belgian business types compare to the same businesses in other countries. The study focuses solely on the costs of telecoms services experienced by the businesses and does not take into account non-price-related service aspects, for example guaranteed fix times. It is not possible to attach a cost value to such elements in any objective way. Additionally, such information is not always available from providers. For completeness, a separate analysis on selected non-price-related elements has been included.

3.8 The use of single and multiplay services

The analysis considers costs for each business when services are purchased singly to make up the communications requirements of the business, as well as costs when multiplay offerings are used (with additional single services where a multiplay offering does not cover the full business need). A multiplay offering is defined as a set of two or more communications services that are sold together (as a bundled offer) from a provider, typically at a lower cost than if the services were bought individually from the same provider. Examples of bundled offers include double play offers such as fixed broadband and fixed voice, or fixed broadband and mobile broadband, as well as triple play offers (e.g. fixed broadband, mobile broadband, fixed voice), and quadruple play (e.g. fixed and mobile broadband plus fixed and mobile voice).

Figure 2: Mutiplay combinations



Any combination is possible

While single service purchase is relevant for all business types, multiplay offers are only appropriate for single user profiles. Although some providers offer business multiplay services for multiple users, there are generally very few published offers, and where they are published, they are often limited to a small number of users only, e.g. less than 5. The vast majority of published business multiplay offers are based on a single-user subscription, so, for example, a business user requiring 1 broadband line and 5 voice lines would need to take 5 subscriptions to a bundled broadband and fixed voice line offer to fulfil its voice and broadband requirements, which in reality would be vastly over-specified and costly, and not how such a business would buy services. Once a business moves beyond one or two users, there is much more customization of the different service elements, and providers will typically not publish prices in such a way as to allow prospective users to build a true-to-life cost for a bundled offer. Rather, businesses with multiple users will be required to contact the providers to obtain a customized quote. Such quotes will take into account a number of factors, such as business location, and strategic importance to the provider. The pricelists used for this exercise are typically not published and it is beyond the scope of this study to produce costs for bundled services priced in this way, and costs for multiplay offers will therefore not be included in the results for SME's (business type 5 to 8).

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4 Business results summary

This section considers the results of the analysis, based on the methodology outlined in section 3. The results presented here take into account the following considerations:

- Only operators with a market share of at least 3% are considered. This is in addition to the general condition that all operators up to at least 80% combined market share per service will be included. This is to exclude potential market distorters that will typically not be used by the vast majority of businesses.
- Promotional offers are not included, as these are often short term proposals that are less relevant to the business market.
- Non-recurring costs, e.g. connection charges, are not included, to allow the analysis to focus solely on month-on-month costs faced by the businesses.
- Pre-paid mobile voice services are not included, as these would not typically be used by a business user. Pre-paid mobile broadband services are considered a valid proposition for business use.
- The results take into account residential services for single user business types. Residential services considered for such business types include fixed broadband, mobile voice and mobile broadband. Residential fixed voice services offered as standalone services are not considered valid for businesses, as a typical business will only be able to buy a dedicated business line/number. Where a residential broadband service is used for a single user business, however, and the service includes a voice service as part of the offer, in this case, it is assumed that the business will make use of the voice service, rather than buy a separate business line.
- For businesses with more than one user, the use of residential services is not considered valid, and for these business types, only business services are taken into account.
- Services are considered relevant and valid for the analysis, irrespective of where they are available geographically within a country. I.e. the analysis does not take into account any regional constraints of any given operator. Inclusion of such constraints introduces unnecessary complexity into the model. This is, in part, addressed by the use of market shares of providers when considering some results.
- Although some international benchmark comparisons will ‘normalise’ costs to take into account cost of living differences across countries, using a purchasing power parity (PPP) conversion based on comparative price levels (CPL) in different countries, this is typical a conversion used in residential benchmark studies and is less relevant for a business cost comparison. Additionally, the study countries are broadly comparable from a cost of living perspective, hence all results are presented in Euros, and no PPP conversion has been applied.

- As the results relate to business communications costs, all results are presented exclusive of VAT.
- Tariffs for both SIM-only and device-subsidized mobile voice services are considered, to ensure that all possible options are considered. Where a provider offers the same tariff as SIM-only and with a subsidized device, however, the SIM-only tariff will typically be the cheapest.
- Free or low-cost communication between user groups (colleagues) is not taken into account since it is difficult to determine the proportion of calls for this type of communication.

The analysis considers the following sets of results for each of the business baskets;

- The cheapest overall offer based on the offering of the cheapest providers per country - irrespective of whether this is based on services that are purchased separately, or a bundled offering (possibly supplemented by one or more single services), where relevant or necessary.
- The cheapest overall offer, based on the weighted average of the (up to) three cheapest providers, irrespective of whether this is based on services that are purchased separately, or a bundled offering (possibly supplemented by one or more single services). Results are weighted according to each operator's market share. In order not to distort the results, if any of the second or third cheapest offers are more than 300% of the cheapest, they will not be taken into account, but will be excluded from the calculation of the average.
- The cheapest single service offer, with the cost for each of the four telecoms services shown separately, where applicable.
- The weighted average of the (up to) three cheapest providers, based on services purchased singly, with the cost for each of the four telecoms services shown separately, where applicable.

Where there is a large difference between the cheapest and the average of the three cheapest, this is most likely caused by the cheapest provider(s) having comparatively very low cost offers.

Note: For the analysis where the four telecoms services are shown separately, it is not possible to present results based on multiplay offers, as the prices for all parts of the bundled offer will show as one price only. There is no meaningful way to allocate the general bundle price to the respective services within the bundle.

Results are presented graphically, with accompanying analysis. In addition, a summary table of country rankings across the two main calculation types is included for each business type.

While the absolute cost of each business profile in each country is presented in the results, this is meant to be indicative rather than absolute. The analysis of the results is focused on the comparative levels across the 5 study countries, rather than the absolute value.

Note: For business types 5 to 8, which address businesses with more than one user, results for multiplay are not included as generally, this is not a valid proposition for this type of business. Multi-user businesses will typically negotiate offers on a case by case basis, and it is not possible to include data for such bespoke deals in this study.

Graphical results for a full set of calculation types, can be found in the appendix to this report. Results are shown for each business type, where relevant.

4.1 Local based individual business

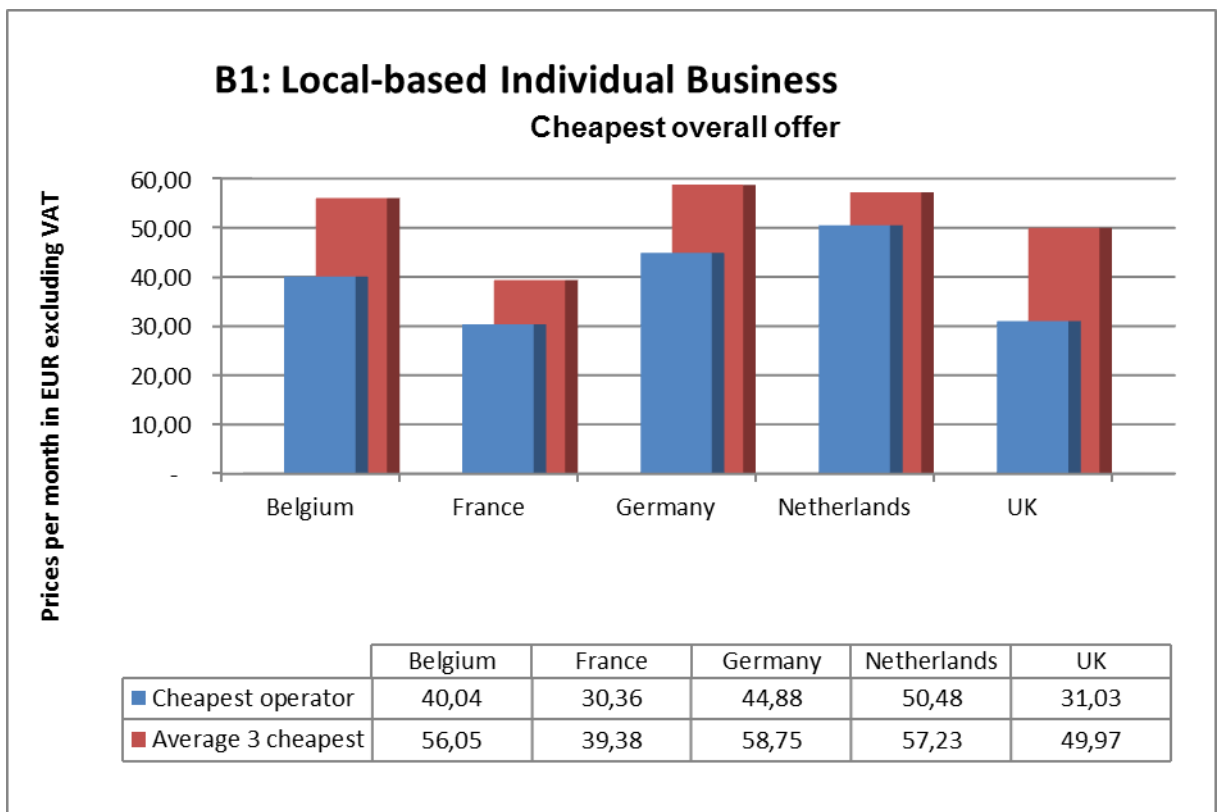
This business describes a business individual primarily working from one location, e.g. a butcher shop or a barber. Such a business is not communications-intensive. It will have a low requirement for fixed broadband, to support general search enquiries and possibly a small web presence. Similarly both fixed and mobile voice use will be low, while there will be no requirement for mobile broadband due the relatively static nature and low data requirements of the business. A summary of the communications' usage for this business is shown in the table below.

Business type 1: Local-based Individual Business			# of communications users:		1	
	Usage level	Value		Additional info		
Fixed broadband	Low	20	GB/month	Minimum speed	10	Mb/s
Mobile broadband		0	GB/month	Minimum speed	0	Mb/s
Fixed voice, national	Low loc	40	Calls/month	Call duration	180	seconds
Fixed voice, international		0	Calls/month	Call duration	180	seconds
Mobile voice, national	Low	39	Calls/month	Call duration	126	seconds
Mobile voice, international	Low	1	Calls/month	Call duration	126	seconds
Mobile voice, messages	Low	25	SMS/month			
Mobile voice, data	Low	0.1	GB/month			

4.1.1 Cheapest overall offer

The results for the local based individual business basket calculation based on the cheapest overall offer available are shown in the graph below, taking into account the cheapest of single service or multiplay offers.

Figure 3: Cheapest overall offer, local based individual business



The detailed results table below shows the costs for both the single service and multiplay calculations, along with the cheapest overall offer price.

Figure 4: Detailed results by calculation type, local-based individual business

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	51,21	40,04	40,04	56,05	65,29	56,05
France	45,21	30,36	30,36	64,98	39,38	39,38
Germany	60,26	44,88	44,88	71,42	58,75	58,75
Netherlands	59,93	50,48	50,48	71,78	57,23	57,23
UK	59,54	31,03	31,03	65,50	49,97	49,97

When we look only at the cheapest offer, the cost of services bought singly are very competitive for a local-based individual business based in Belgium, compared to most of the other study countries. However, the limited range of multiplay offers in Belgium, coupled with the especially low cost multiplay offers in both France and the UK, and the more competitive multiplay offer in Germany results in an overall mid-range position for Belgium when the cheapest overall offer is considered. The savings from multiplay for a Belgian business with this profile are just under €11; a similar level of saving is seen for Netherlands, which is the most expensive study country.

When the weighted average of the three cheapest providers is taken into account, the position of Belgium remains the same relative to the other study countries, however, it is more on par in terms of cost with the two most expensive countries, Netherlands and

Germany. The variation between cheapest and average of three cheapest ranges from just over €9, for France, to almost €19 for the UK; for Belgium, the cost variation is €16.

4.1.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 5: Country rankings by calculation type, local-based individual business

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	2	3	3	1	5	3
France	1	1	1	2	1	1
Germany	5	4	4	4	4	5
Netherlands	4	5	5	5	3	4
UK	3	2	2	3	2	2

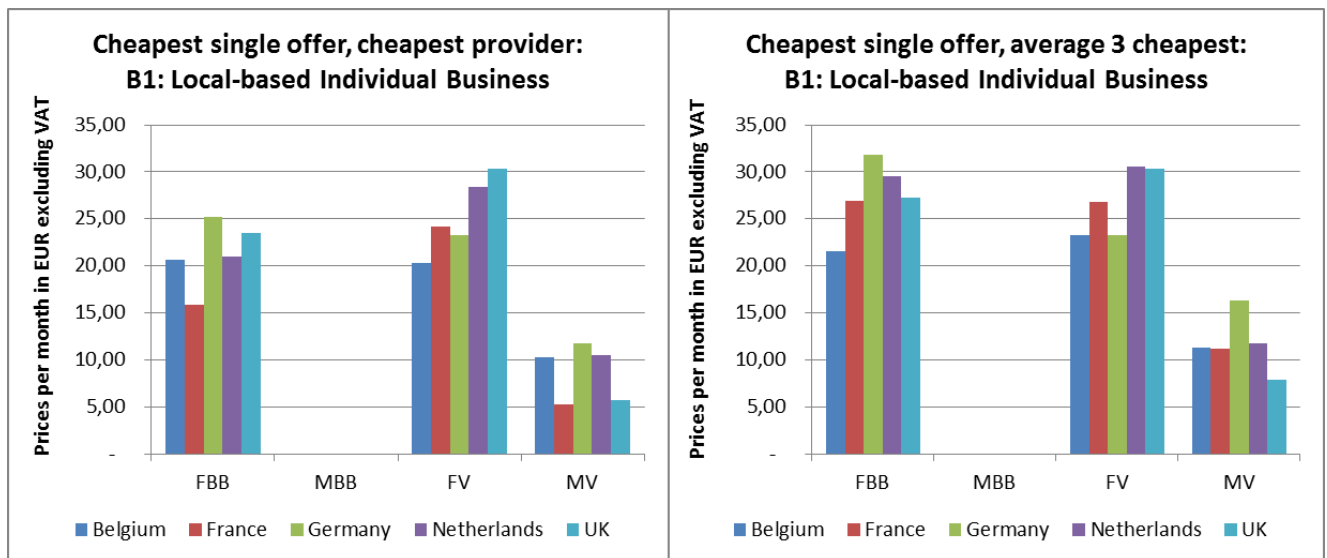
The cheapest overall offer is the most useful ranking to consider, as this looks at the cheapest way for a business to buy services, irrespective of whether they are bought singly or as a bundle. For the local-based individual business, Belgium ranks third overall, both for the cheapest offer, and the average of the three cheapest offers. The cheapest country overall is France, while Germany and the Netherlands are the most expensive.

It is worth noting the less favourable ranking for the average of the three cheapest providers, based on multiplay offers, which is driven by higher cost bundles which include fixed broadband (the cheapest multiplay result for Belgium for this business type incorporates a low priced standalone broadband service).

4.1.3 Cheapest single offers, broken down by service

The graphs below show the results for the local based individual business for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. Because of how multiplay offers are priced, this analysis can only be shown for single service offers, and the overall result may not correspond directly to the cheapest overall offer graph shown above.

Figure 6: Cheapest single offers, broken down by service, local based individual business



The costs for the local-based individual business are dominated by fixed broadband and fixed voice, which account for up to 90% of the overall cost, depending on the country and calculation type. Even though this business has relatively low usage across its required communications services, the two dominant services attract comparatively high recurring charges. The costs for Belgium are particularly favourable for these two services, at this usage level, resulting in positive result for Belgium (based on single services).

4.2 Home-based professional

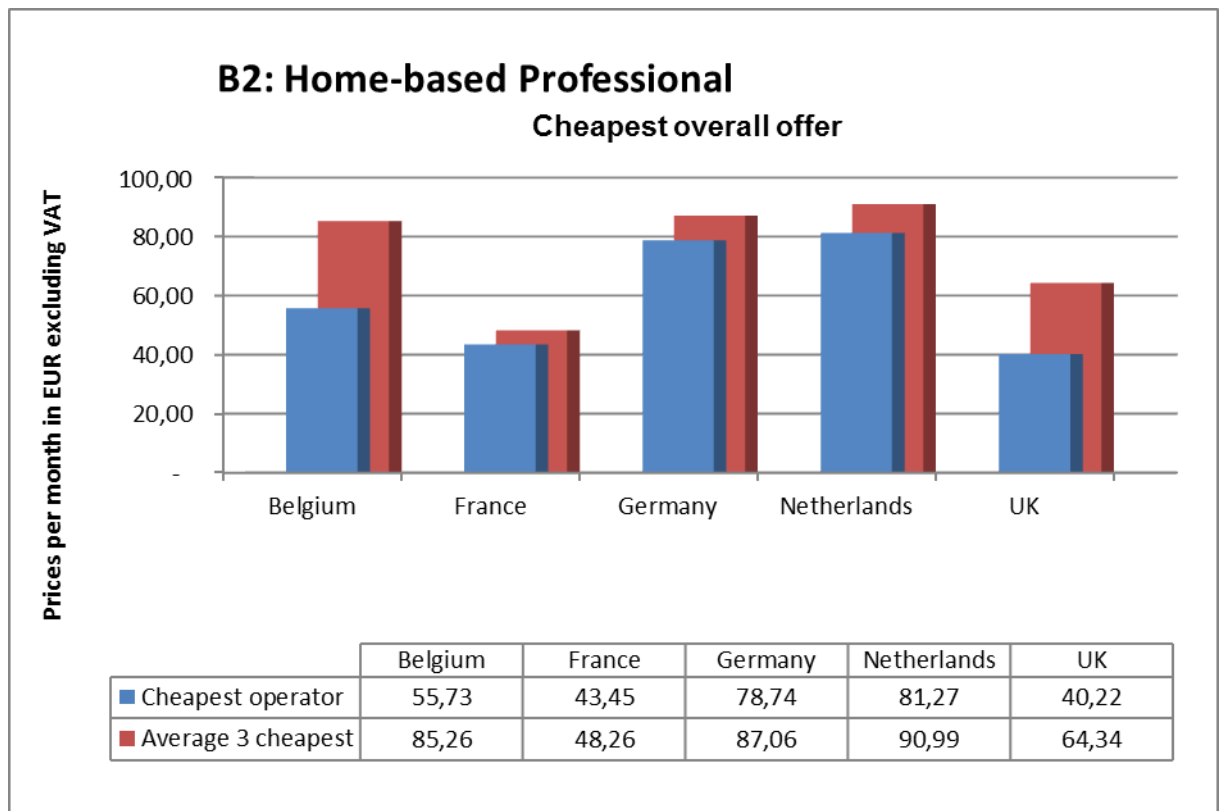
This business describes a business individual primarily working from home, e.g. a home based consultant. The home-based professional will be much more communications-intensive than the local based individual business, with a significant proportion of time spent in outbound/inbound communications activities. As a result, there is moderately high use across all communications services, with the exception of mobile voice which is relatively low due to the more static nature of the business. A summary of the communications' usage for this business is shown in the table below.

Business type 2: Home-based Professional		# of communications users:		1		
	Usage level	Value		Additional info		
Fixed broadband	Medium	50	GB/month	Minimum speed	15	Mb/s
Mobile broadband	Medium	0.8	GB/month	Minimum speed	3	Mb/s
Fixed voice, national	Medium nat	109	Calls/month	Call duration	240	seconds
Fixed voice, international	Medium	11	Calls/month	Call duration	240	seconds
Mobile voice, national	Low	39	Calls/month	Call duration	126	seconds
Mobile voice, international	Low	1	Calls/month	Call duration	126	seconds
Mobile voice, messages	Low	25	SMS/month			
Mobile voice, data	Medium	0.4	GB/month			

4.2.1 Cheapest overall offer

The results for the home-based professional basket calculation based on the lowest priced offers available are shown in the graph below, taking into account the cheapest of single service and multiplay offers.

Figure 7: Cheapest overall offer, home-based professional



The detailed results table below shows the costs for both the single service and multiplay calculations, along with the cheapest overall offer price.

Figure 8: Detailed results by calculation type, home-based professional

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	74,41	55,73	55,73	85,26	92,75	85,26
France	68,72	43,45	43,45	93,39	48,26	48,26
Germany	93,39	78,74	78,74	105,52	87,06	87,06
Netherlands	81,27	91,40	81,27	100,03	90,99	90,99
UK	75,67	40,22	40,22	83,09	64,34	64,34

For the home-based professional, based on the cheapest offer, the UK has the most competitively priced environment, followed closely by France. For this user, multiplay generally delivers significant cost savings - up to almost 50% depending on the country, with the exception of the Netherlands, where the multiplay calculation is 12% more expensive than the single service one, as a result of a particularly expensive multiplay offer and comparatively cheap single services from several providers. Belgian users can achieve savings of 25%, or almost €19 from taking a multiplay offer, to position it behind the UK and France.

When we consider the average of the 3 cheapest providers, the benefits of multiplay are less clear cut. France has particularly attractive multiplay offers, which positions it as the cheapest country for this calculation type. Several French providers have similar priced, highly competitive, multiplay offers, and the three cheapest are within a few euros of each other. For the other countries, including Belgium, however, there is often a significant difference in cost across the offers.

4.2.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 9: Country rankings by calculation type, home-based professional

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	2	3	3	2	5	3
France	1	2	2	3	1	1
Germany	5	4	4	5	3	4
Netherlands	4	5	5	4	4	5
UK	3	1	1	1	2	2

For both the cheapest overall offer and the average of the three cheapest providers, Belgium ranks third. The rankings vary, according to whether single services or multiplay offers are considered, however.

Similar to the local-based business, the rankings for Belgium for this business type are better when single services only are considered, both for the cheapest provider and average of the three cheapest providers. The position of Belgium worsens when multiplay offers are considered, most notably for the average of the three cheapest providers. This is a result of a large variation in cost between the cheapest and the other multiplay results in Belgium. Two of the three results (the two more expensive ones) use multiplay bundles which include fixed broadband and which are expensive. The cheapest multiplay result does not include fixed broadband; this is added separately as a standalone service to make up the total cost, and is comparatively cheap.

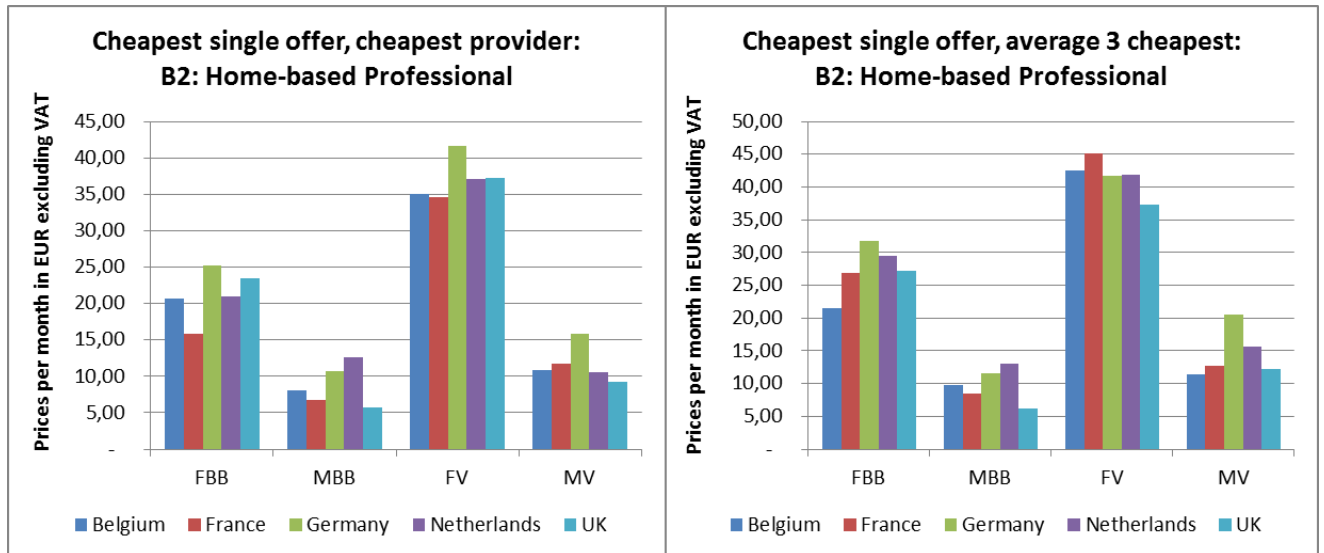
The UK presents a similar picture in terms of the diversity of costs between the cheapest and three cheapest providers for multiplay.

4.2.3 Cheapest single offers, broken down by service

The graphs below show the results for the home-based professional for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual

services compare in the study countries. Because of how multiplay offers are priced, this analysis can only be shown for single service offers, and the overall result may not correspond directly to the cheapest overall offer graph shown above.

Figure 10: Cheapest single offers, broken down by service, home-based professional



For the home-based professional, fixed voice is by far the dominant cost, and accounts for up to 50% of the total cost. Fixed voice for this business is centered mostly on local/national calling, which accounts for two thirds of the overall calls, while calls to mobile accounts for almost a quarter of the calls. For the cheapest single offer, the fixed voice costs for Belgium are among the cheapest among the study countries, while the costs for the other services are mid-range, i.e. not the cheapest but not the most expensive. When we consider the average of the three cheapest providers, the fixed voice costs for Belgium rise, however, they are still on par with both the Netherlands and Germany, and are cheaper than France. Additionally, the costs for fixed broadband and mobile voice are the cheapest for this calculation type.

4.3 Mobile professional 1

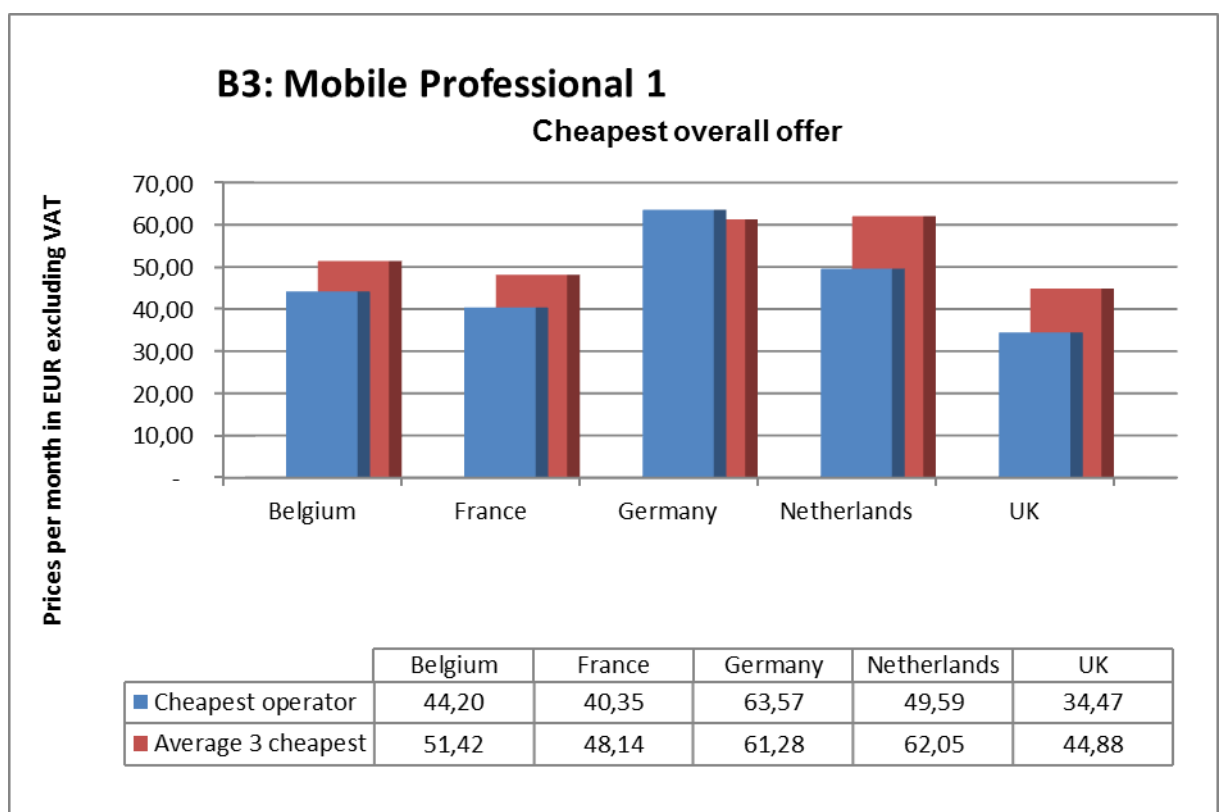
This business describes a business individual primarily working while on the move, e.g. a plumber or contractor. The communications requirements for this business are much more focused towards mobile services, to reflect the need for ‘on-the-move’ communications. Mobile usage is relatively modest, as the business is not heavily reliant on communications. For example, the user would take calls while on the move, but also might call customers to alert them of a change of schedule. Mobile broadband is used to support activities such as solution searches and ordering goods while at client premises. There is no need for fixed voice for this business, however, low use of fixed broadband is required, for web-searching for the business, and to support a web-presence. A summary of the communications’ usage for this business is shown in the table below.

Business type 3: Mobile Professional 1		# of communications users: 1				
	Usage level	Value		Additional info		
Fixed broadband	Low	20	GB/month	Minimum speed	10	Mb/s
Mobile broadband	High	2	GB/month	Minimum speed	6	Mb/s
Fixed voice, national		0	Calls/month	Call duration	0	seconds
Fixed voice, international		0	Calls/month	Call duration	0	seconds
Mobile voice, national	Medium	98	Calls/month	Call duration	138	seconds
Mobile voice, international	Low	2	Calls/month	Call duration	138	seconds
Mobile voice, messages	Low	25	SMS/month			
Mobile voice, data	Medium	0.4	GB/month			

4.3.1 Cheapest overall offer

The results for the mobile professional 1 basket calculation based on the lowest priced offers available are shown in the graph below, taking into account the cheapest of single service and multiplay offers.

Figure 11: Cheapest overall offer, mobile professional 1



The detailed results table below shows the costs for both the single service and multiplay calculations, along with the cheapest overall offer price.

Figure 12: Detailed results by calculation type, mobile professional 1

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	44,20	57,00	44,20	51,42	74,30	51,42
France	40,35	42,06	40,35	55,36	48,14	48,14
Germany	63,57	64,38	63,57	75,83	61,28	61,28
Netherlands	49,59	55,89	49,59	62,05	63,69	62,05
UK	38,37	34,47	34,47	47,22	44,88	44,88

The key point to note with the mobile professional 1 results is that there is, for most providers and most countries, little or no advantage in taking a multiplay offer. This is because multiplay bundles are typically not optimized for mobile use, but rather, focus on fixed services, typically fixed broadband and fixed voice (and, for consumers, television services).

For the mobile professional 1, based on the cheapest overall offer, Belgium is around €10 per month more expensive than the cheapest country, the UK, and almost €20 cheaper than the most expensive, Germany.

Taking into account the average of the three cheapest providers, the gap between the cheapest country, again the UK, and Belgium, narrows slightly, to just under €7, while the difference between Belgium and the most expensive country, the Netherlands is just over €10.

4.3.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 13: Country rankings by calculation type, mobile professional 1

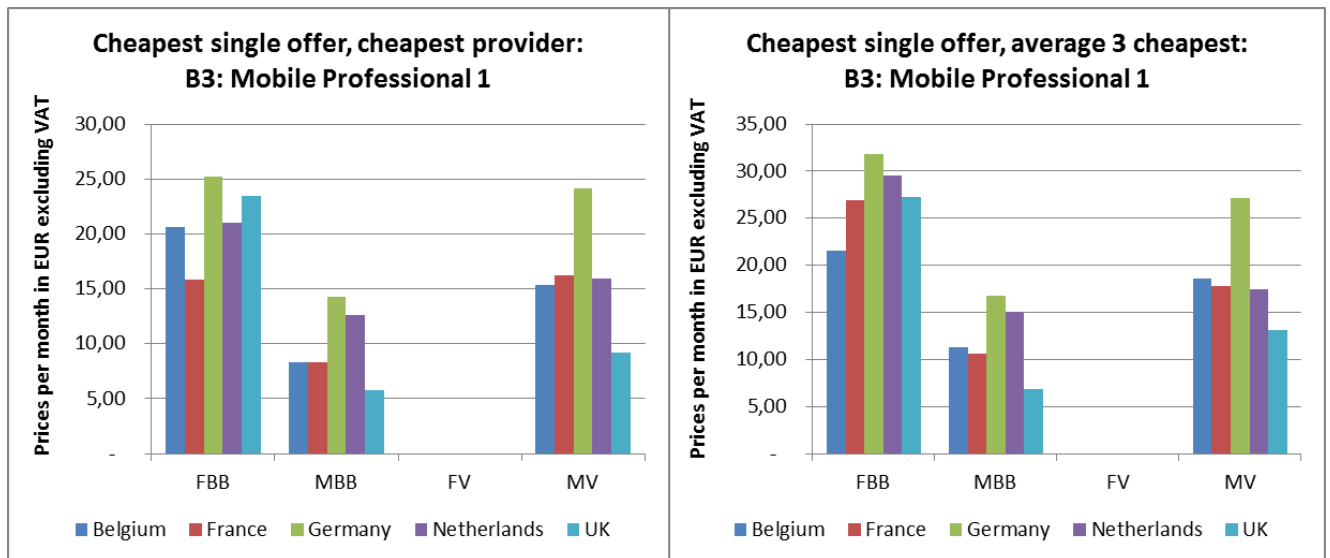
	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	3	4	3	2	5	3
France	2	2	2	3	2	2
Germany	5	5	5	5	3	4
Netherlands	4	3	4	4	4	5
UK	1	1	1	1	1	1

While the multiplay rankings for Belgium for both calculation types - cheapest and average of three cheapest - are low, due to the relatively high cost of multiplay - the rankings based on cheapest overall offer is third. This is as a result of the more competitively priced single services pushing Belgium into an overall better position.

4.3.3 Cheapest single offers, broken down by service

The graphs below show the results for the mobile professional 1 for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. Because of how multiplay offers are priced, this analysis can only be shown for single service offers, and the overall result may not correspond directly to the cheapest overall offer graph shown above.

Figure 14: Cheapest single offers, broken down by service, mobile professional 1



Although this business is predominantly mobile, actual mobile usage is relatively modest, and it is the fixed broadband cost that is most dominant, as a result of the comparatively high recurring charge for the service. Fixed broadband accounts for between 40-60% of the total cost, depending on country and calculation type. Mobile voice accounts for between 24-40%, and mobile broadband between 15-25%. For the cheapest single offer, fixed broadband costs for Belgium are mid-range, as are the costs for mobile broadband and mobile voice. For the average of the three cheapest providers, the fixed broadband cost improves for Belgium, relative to the other countries, indicating a more competitive set of offers from different providers; the costs for the other two services for Belgium compared to the other countries are again mid-range.

4.4 Mobile professional 2

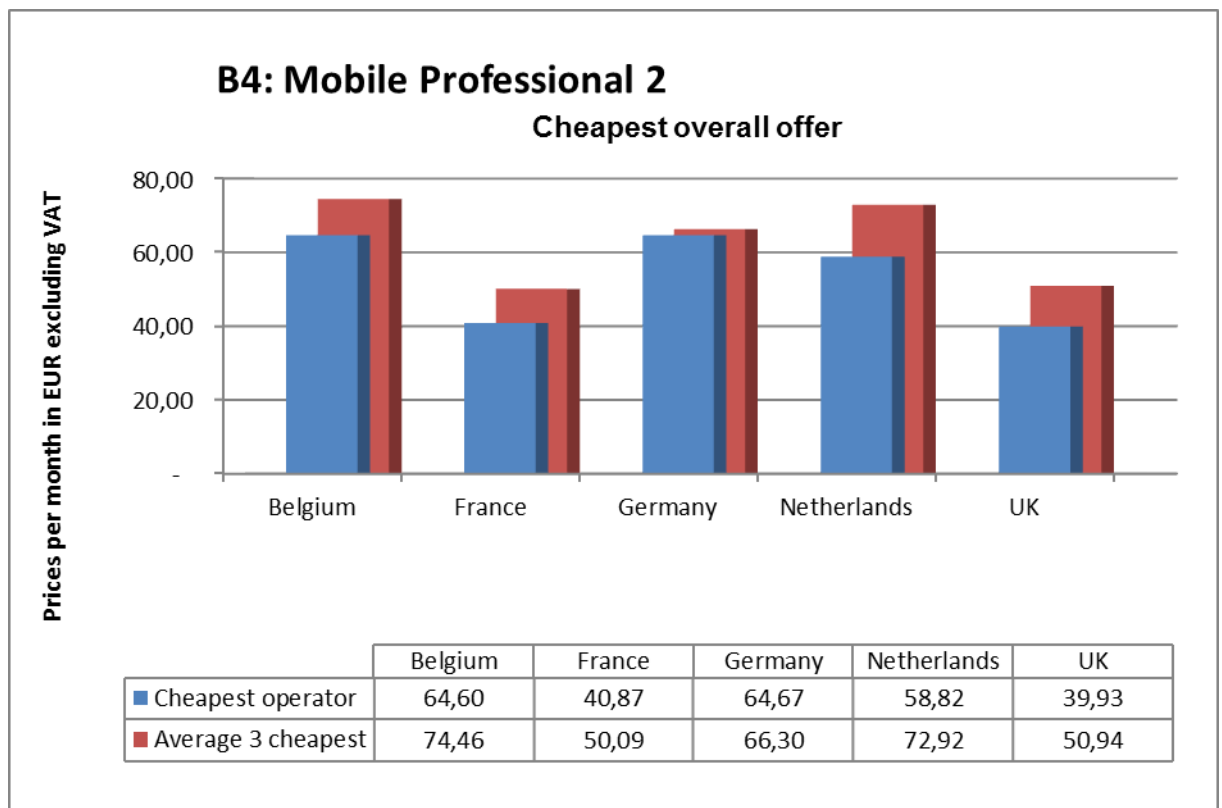
This business describes a business individual primarily working while on the move, e.g. a sales person. Communications requirements for this business are highly mobile and relatively intensive, with the sales person needing to communicate with customers and the main office on a frequent basis. Mobile broadband requirements are similarly high. In addition to the high mobile requirements, there is a need for low use of fixed broadband, to support email and general web activities when the mobile professional is not on the road. A summary of the communications' usage for this business is shown in the table below.

Business type 4: Mobile Professional 2			# of communications users: 1			
	Usage level	Value		Additional info		
Fixed broadband	Low	20	GB/month	Minimum speed	10	Mb/s
Mobile broadband	High	2	GB/month	Minimum speed	6	Mb/s
Fixed voice, national		0	Calls/month	Call duration	0	seconds
Fixed voice, international		0	Calls/month	Call duration	0	seconds
Mobile voice, national	High	245	Calls/month	Call duration	150	seconds
Mobile voice, international	Low	5	Calls/month	Call duration	150	seconds
Mobile voice, messages	Medium	60	SMS/month			
Mobile voice, data	High	1	GB/month			

4.4.1 Cheapest overall offer

The results for the mobile professional 2 basket calculation based on the lowest priced offers available are shown in the graph below, taking into account the cheapest of single service and multiplay offers.

Figure 15: Cheapest overall offer, mobile professional 2



The detailed results table below shows the costs for both the single service and multiplay calculations, along with the cheapest overall offer price.

Figure 16: Detailed results by calculation type, mobile professional 2

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	64,60	69,11	64,60	74,46	100,96	74,46
France	40,87	42,06	40,87	59,20	50,09	50,09
Germany	64,67	65,48	64,67	82,04	66,30	66,30
Netherlands	58,82	65,13	58,82	77,75	72,92	72,92
UK	43,83	39,93	39,93	50,94	58,06	50,94

For the cheapest service, similar to mobile professional 1, multiplay is often not the optimal approach for this business, with generally limited or no cost benefit in taking multiplay over single service. When looking at the average of the three cheapest, there are a wider range of providers offering comparatively more competitive multiplay bundles.

Belgium is one of the most expensive countries for this business type, for both the cheapest and the average of the three cheapest, due to relatively high cost for mobile services, which now feature heavily. For the cheapest offer, it is almost €25 more expensive than the cheapest country, the UK, for comparable services. And similarly, it is €25 more expensive than France, when we consider the average of the 3 cheapest.

4.4.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 17: Country rankings by calculation type, mobile professional 2

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	4	5	4	3	5	5
France	1	2	2	2	1	1
Germany	5	4	5	5	3	3
Netherlands	3	3	3	4	4	4
UK	2	1	1	1	2	2

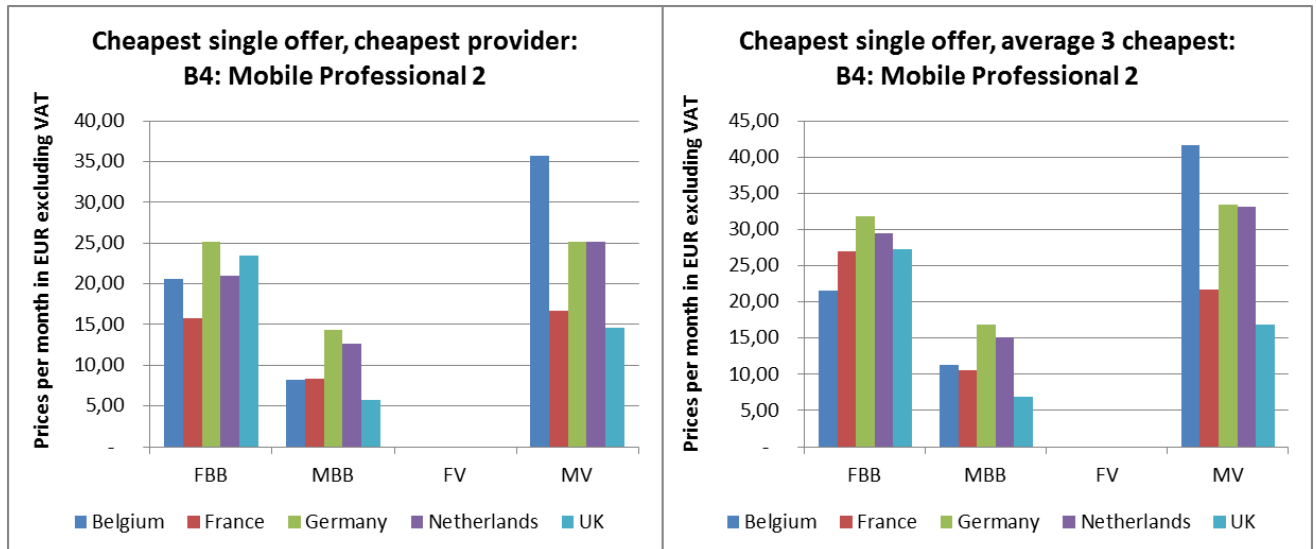
Belgium ranks between 3 and 5 across the various calculation types, and even for the average of the 3 cheapest providers mid-range ranking, it is on par with the most expensive countries, Germany and the Netherlands, in terms of cost. The cheapest countries are France and the UK, both of which have highly competitive markets for mobile services, which have put downward pressure on prices in these countries over the past few years.

4.4.3 Cheapest single offers, broken down by service

The graphs below show the results for the mobile professional 2 for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers.

The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. Because of how multiplay offers are priced, this analysis can only be shown for single service offers, and the overall result may not correspond directly to the cheapest overall offer graph shown above.

Figure 18: Cheapest single offers, broken down by service, mobile professional 2



For this business type, with more intensive mobile use, the cost of mobile services generally more dominant, with mobile voice accounting for between a third and a half of the overall cost. As Belgian users are faced with relatively higher charges for mobile voice, for this type of usage, the result is that Belgian features as among the most expensive of the study countries. The mid-range fixed and mobile broadband costs for Belgium do not make up enough of the total cost to counter the high mobile voice cost.

Mobile professional 2 business types in France and the UK enjoy relatively lower mobile voice and mobile broadband cost, and, particularly in the case of France, cheaper fixed broadband costs. By contrast, users in Germany and the Netherlands face comparatively higher costs across the three service types required by this business type.

4.5 Retail outlet

This business describes a retail business location with 5 users, each with communications needs covered by both fixed and mobile services. Note that this business (as well as the following three business types) can have more employees than the number of communication users. Voice call usage pattern focusses on local calls. The nature of the business means that fixed broadband usage is relatively high, to support email communication, web searching and ordering, and maintaining a web presence. Similarly, fixed voice communications is also relatively high, predominantly for local calls to other businesses (for example to place orders) and to locally-based customers. Mobile needs are moderate, reflecting the fact that employees are not desk-bound, and will move around, both on-site and away from the site. The local nature of the business means that

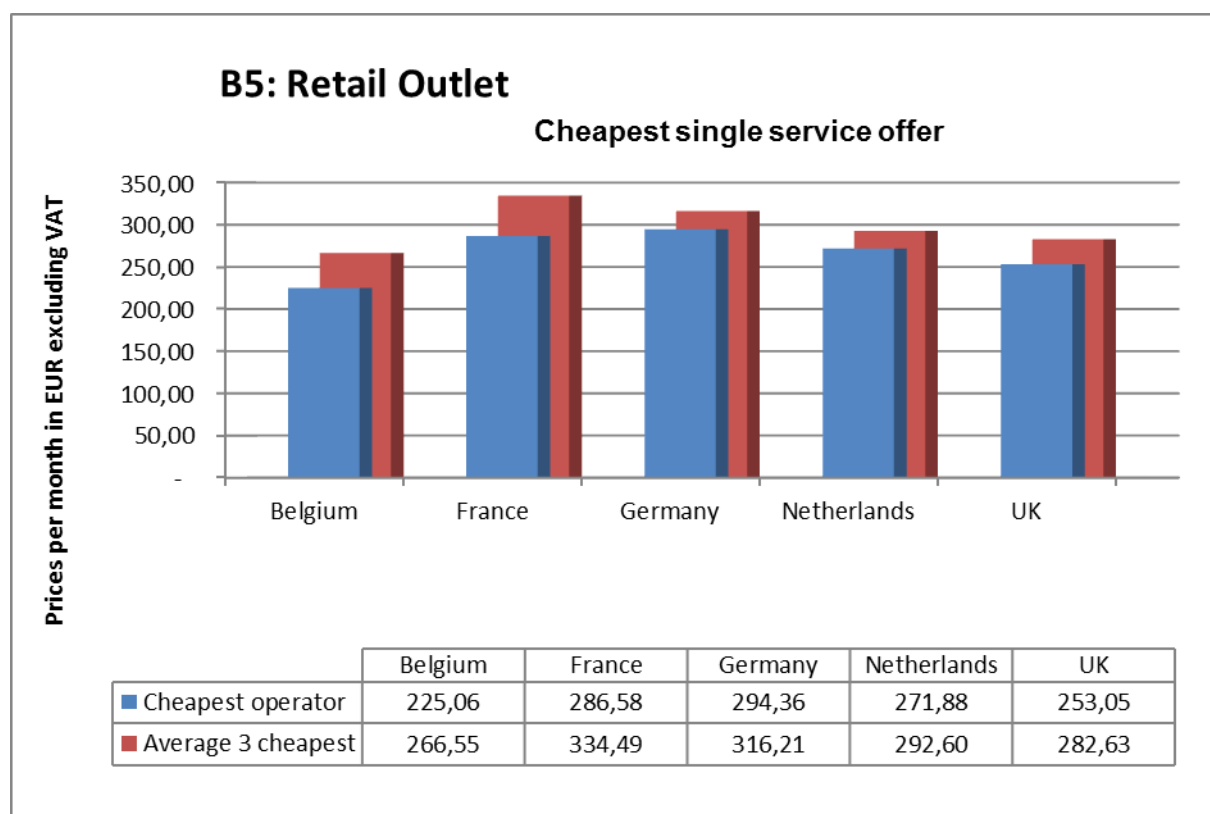
international communications are very low. A summary of the communications' usage for this business is shown in the table below.

Business type 5: Retail Outlet		# of communications users:		5		
	Usage level	Value		Additional info		
Fixed broadband	Medium	50	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Medium	0.8	GB/month	Minimum speed	3	Mb/s
Fixed voice, national	Medium loc	85	Calls/month	Call duration	120	seconds
Fixed voice, international	Low	5	Calls/month	Call duration	120	seconds
Mobile voice, national	Medium	78	Calls/month	Call duration	126	seconds
Mobile voice, international	Low	2	Calls/month	Call duration	126	seconds
Mobile voice, messages	Low	25	SMS/month			
Mobile voice, data	Low	0.1	GB/month			

4.5.1 Cheapest single offer

The results for the retail outlet basket calculation based on the cheapest single service offers available are shown in the graph below.

Figure 19: Cheapest single offer, retail outlet



The detailed results table below shows the costs for the single service calculations, for both the cheapest and average of the three cheapest providers.

Figure 20: Detailed results by calculation type, retail outlet

	Cheapest	Average of 3 cheapest
Belgium	225.06	266.55
France	286.58	334.49
Germany	294.36	316.21
Netherlands	271.88	292.60
UK	253.05	282.63

The retail business in Belgium enjoys the lowest cost, both for cheapest and average of three cheapest calculations, and is between 25-30% cheaper than the most expensive countries; Germany and France respectively, and between 6-12% cheaper than the second cheapest country, the UK. The retail outlet in Belgium will pay up to €70 per month less than the most expensive countries.

The range of prices between the cheapest and the average of the three cheapest is among the greatest for Belgium (along with France), indicating that prices are less aligned than in the other countries.

4.5.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers, based on single service offers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink.

Figure 21: Country rankings by calculation type, retail outlet

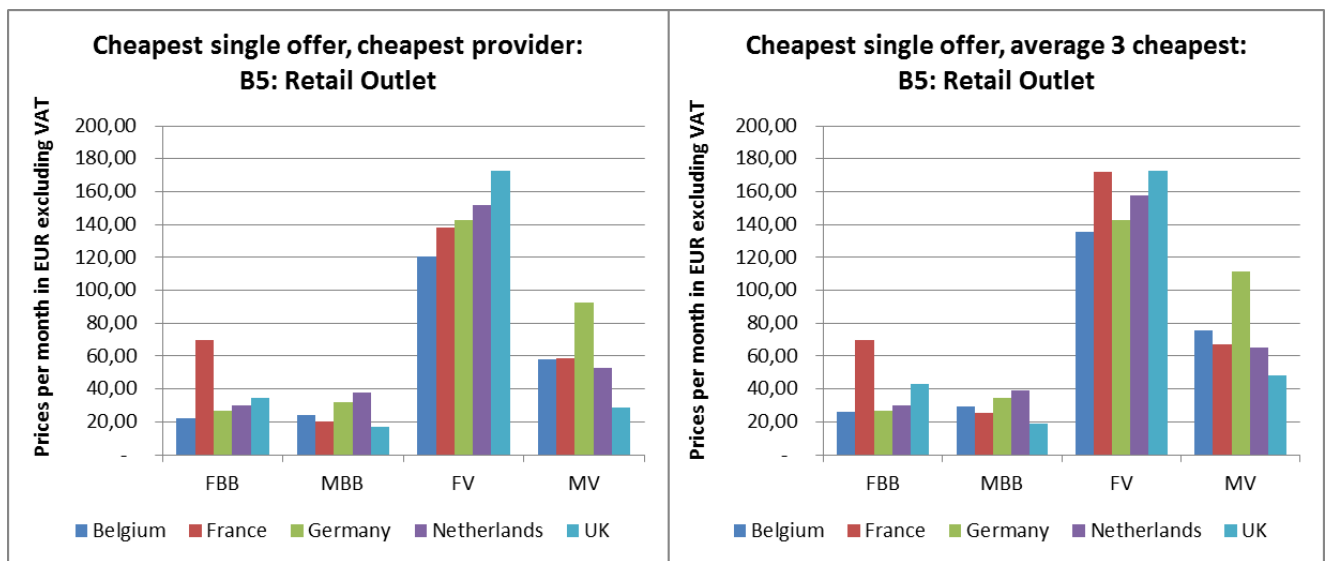
	Cheapest	Average of 3 cheapest
Belgium	1	1
France	4	5
Germany	5	4
Netherlands	3	3
UK	2	2

Belgium ranks as the cheapest country for this business type, irrespective of calculation type. The rankings for each country generally do not change across the two calculation types.

4.5.3 Cheapest single offers, broken down by service

The graphs below show the results for the retail outlet for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. As multiplay offers are not relevant for this business type, the results shown here will correspond directly to the cheapest overall offer graph shown above.

Figure 22: Cheapest single offers, broken down by service, retail outlet



The graphs above help illustrate the reasons behind the favourable outcome for Belgium for this business type. Fixed voice costs make up most of the overall communications costs for this business. Fixed voice services are prominent for this particular business, accounting for up to two thirds of the overall cost, depending on country and calculation type. It is important to note that although usage requirements are medium across the various services, the combined fixed and variable costs associated with fixed voice result in a much higher cost compared to the other services.

Belgian providers have competitive offers for business users where traffic is focused mainly on local and national calling. Business broadband, although a smaller component of the overall cost, is also competitively priced in Belgium. Both mobile voice and mobile broadband are more mid-range in terms of cost, for Belgium, however, the proportionally lower use of these services compared to fixed voice means that the outcome for Belgium is still the cheapest country. Notably, fixed broadband costs for France are among the highest in the study countries, which is in contrast to what we have observed in business types 1 to 4. A key factor is the requirement for multi-user businesses (business types 5-8) to use only standalone business broadband services, which, in France, are generally less available, and which are more expensive than residential services.

4.6 Local trading company

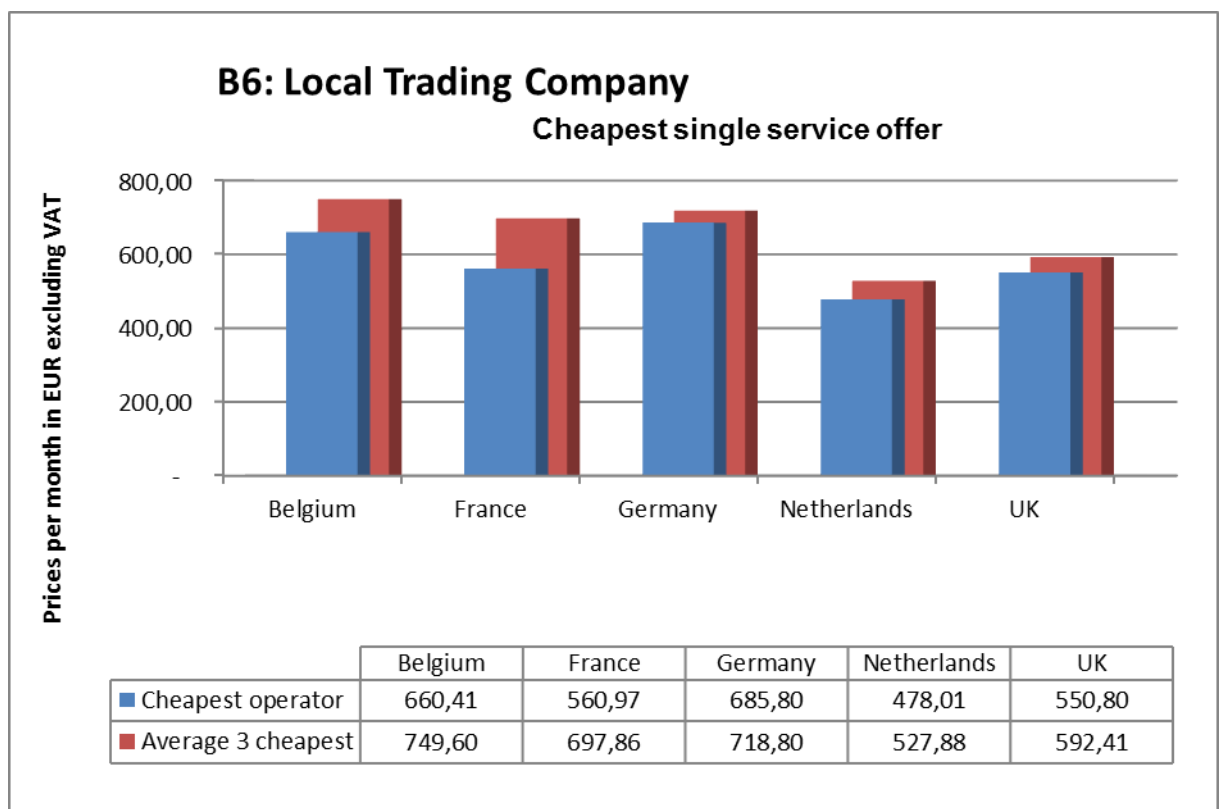
This business describes a trading company with 10 users, doing business from a fixed location, with significant national and international contacts. For this business, fixed broadband usage is relatively high, to support email communication, web searching and information exchange, and maintaining a web presence. Both fixed national and international voice communications are high, reflecting the fact that users are more likely to be desk-bound, with much of their communications taking place at their desk. By contrast, and for the same reason, mobile needs are moderate. A summary of the communications' usage for this business is shown in the table below.

Business type 6: Local Trading Company				# of communications users: 10		
	Usage level	Value		Additional info		
Fixed broadband	Medium	50	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Medium	0.8	GB/month	Minimum speed	3	Mb/s
Fixed voice, national	High nat	157	Calls/month	Call duration	240	seconds
Fixed voice, international	High	23	Calls/month	Call duration	240	seconds
Mobile voice, national	Low	29	Calls/month	Call duration	108	seconds
Mobile voice, international	Low	1	Calls/month	Call duration	108	seconds
Mobile voice, messages	Low	25	SMS/month			
Mobile voice, data	Medium	0.4	GB/month			

4.6.1 Cheapest single offer

The results for the local trading company basket calculation based on the cheapest single service offers available are shown in the graph below.

Figure 23: Cheapest single offer, local trading company



The detailed results table below shows the costs for the single service calculations, for both the cheapest and average of the three cheapest providers.

Figure 24: Detailed results by calculation type, local trading company

	Cheapest	Average of 3 cheapest
Belgium	660.41	749.60
France	560.97	697.86
Germany	685.80	718.80
Netherlands	478.01	527.88
UK	550.80	592.41

In contrast to the retail outlet, Belgium is one of the most expensive countries for the local trading company, and on par with Germany. The variation between the cheapest and average of the three cheapest is greatest for France, indicating greater divergence of prices across the cheapest French providers. By contrast, the variation for Germany, the Netherlands and the UK is relatively smaller, suggesting that prices across providers are much more closely aligned.

4.6.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers, based on single service offers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink.

Figure 25: Country rankings by calculation type, local trading company

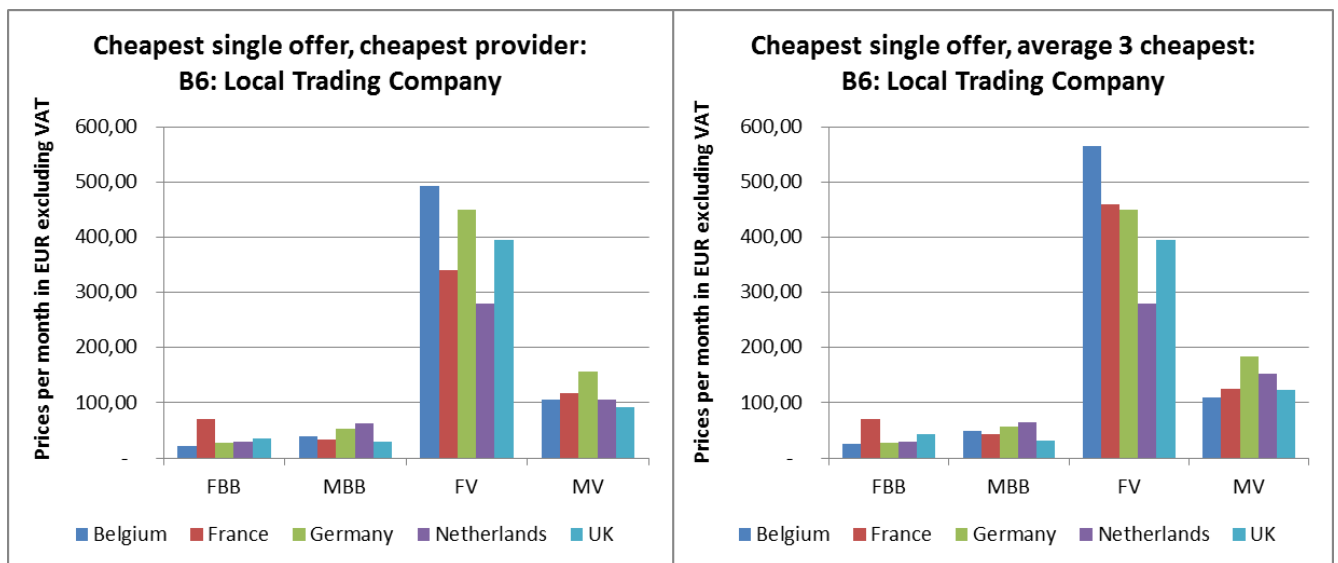
	Cheapest	Average of 3 cheapest
Belgium	4	5
France	3	3
Germany	5	4
Netherlands	1	1
UK	2	2

As already noted, Belgium ranks as one of the most expensive countries for this business type, and is on par with Germany. Notably, Netherlands, which is often one of the more expensive countries, is the cheapest for this multi-user business.

4.6.3 Cheapest single offers, broken down by service

The graphs below show the results for the local trading company for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. As multiplay offers are not relevant for this business type, the results shown here will correspond directly to the cheapest overall offer graph shown above.

Figure 26: Cheapest single offers, broken down by service, local trading company



As the graphs above show, fixed voice is the predominant cost for the local trading company. For this business type, however, unlike the retail outlet, there is a greater focus on international calling, alongside high national calling, to support the needs of the business. Depending on the country and calculation type, fixed voice can account for up to 75% of the total service cost for this business. The higher proportion of international calls for this business pushes up the overall cost for Belgium, where such calls or add-on options are comparatively more expensive, and Belgium has the highest overall fixed voice cost across the study countries. The other services make up a relatively small proportion of the costs; Belgium has much more competitive pricing here, but the effect is dwarfed by the high fixed voice cost.

4.7 Local production company

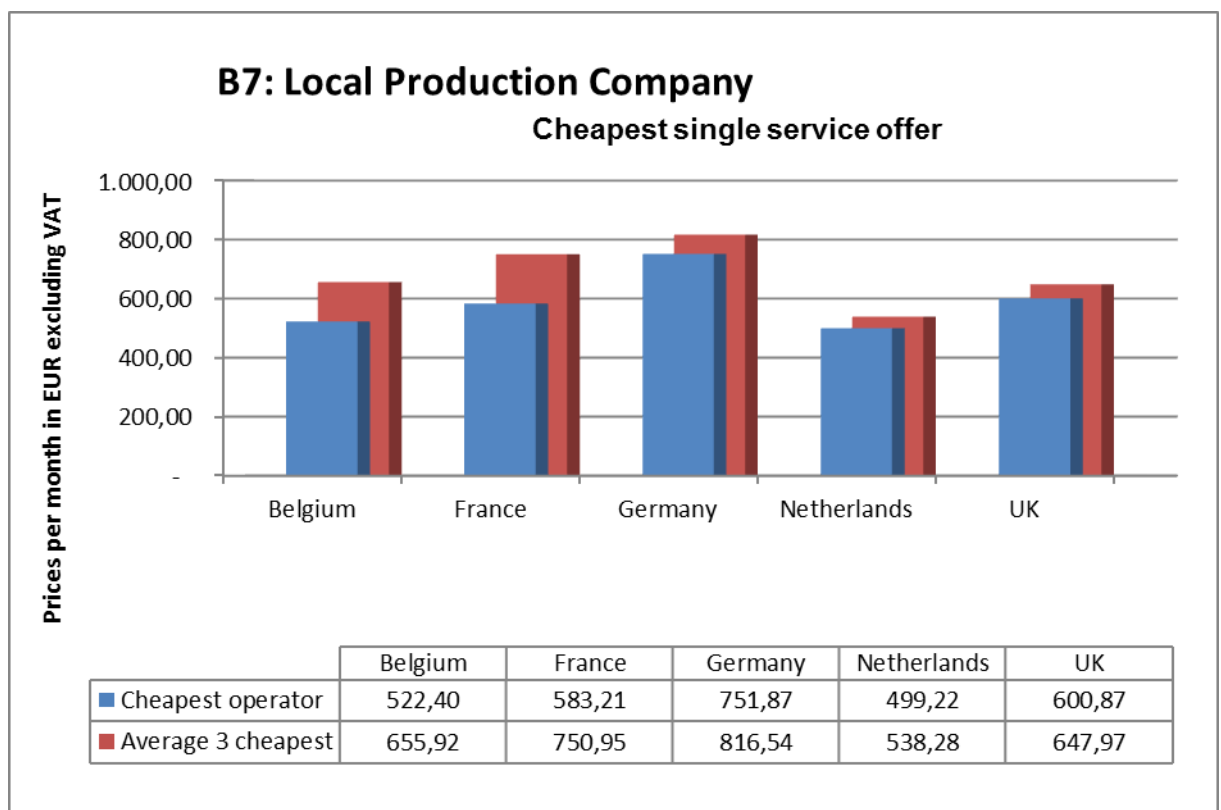
This business describes a production company with 10 users, mainly local connection needs. The nature of the business means there is a high use of fixed voice for local-based communications, as well as fairly extensive use of fixed broadband, which supports email communication, web searching and ordering, and maintaining a web presence. As the business does not need staff to be particularly mobile, there is generally little reliance on mobile communications. A summary of the communications' usage for this business is shown in the table below.

Business type 7: Local Production Company				# of communications users: 10		
	Usage level	Value		Additional info		
Fixed broadband	Medium	50	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Low	0.2	GB/month	Minimum speed	1	Mb/s
Fixed voice, national	High loc	171	Calls/month	Call duration	240	seconds
Fixed voice, international	Low	9	Calls/month	Call duration	240	seconds
Mobile voice, national	Medium	78	Calls/month	Call duration	108	seconds
Mobile voice, international	Low	2	Calls/month	Call duration	108	seconds
Mobile voice, messages	Medium	60	SMS/month			
Mobile voice, data	High	1	GB/month			

4.7.1 Cheapest single offer

The results for the local production company basket calculation based on the cheapest single service offers available are shown in the graph below.

Figure 27: Cheapest single offer, local production company



The detailed results table below shows the costs for the single service calculations, for both the cheapest and average of the three cheapest providers.

Figure 28: Detailed results by calculation type, local production company

	Cheapest	Average of 3 cheapest
Belgium	522.40	655.92
France	583.21	750.95
Germany	751.87	816.54
Netherlands	499.22	538.28
UK	600.87	647.97

When considering the cheapest provider overall, the costs for a local production company in Belgium compare well to the other study countries, with costs only €522/month or just under 5% more expensive than the cheapest country, the Netherlands. Germany, the most expensive country, is €230/month more expensive than Belgium.

Looking at the average of the three cheapest, the costs for Belgium become comparatively more expensive, and just over 20% more expensive than the Netherlands (the cheapest), Germany, again the most expensive, is €160, or 25% more expensive than Belgium.

4.7.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers, based on single service offers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink.

Figure 29: Country rankings by calculation type, local production company

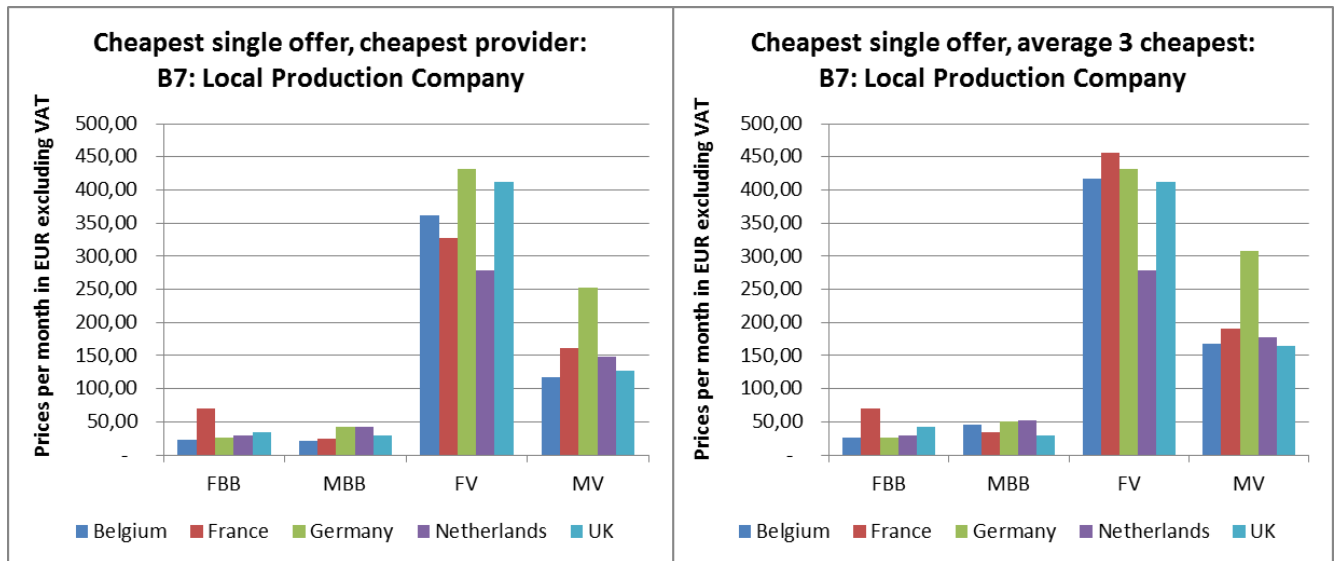
	Cheapest	Average of 3 cheapest
Belgium	2	3
France	3	4
Germany	5	5
Netherlands	1	1
UK	4	2

Belgium ranks second after the Netherlands, for the cheapest overall offer, and third for the average of the three cheapest providers. Netherlands, often one of the most expensive countries for single user businesses (business types 1-4) is, similar to the local trading company, the cheapest, for both calculation types. As is the case across many of the business types, Germany is the most expensive.

4.7.3 Cheapest single offers, broken down by service

The graphs below show the results for the local production company for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. As multiplay offers are not relevant for this business type, the results shown here will correspond directly to the cheapest overall offer graph shown above.

Figure 30: Cheapest single offers, broken down by service, local production company



Fixed voice, and to a lesser degree, mobile voice, are the dominant services in terms of cost for this business, accounting for up to 90% of the costs overall. As with other multi-user businesses, fixed voice accounts for most of the cost, and here, Belgium is mid-range to upper end compared to the other countries. Mobile voice costs are the most competitive for Belgium, and both fixed and mobile broadband are generally competitively priced. As already mentioned, the need for a business-grade broadband service for this business results in France having the highest fixed broadband cost here, as the French business broadband offering is expensive.

4.8 Local service company

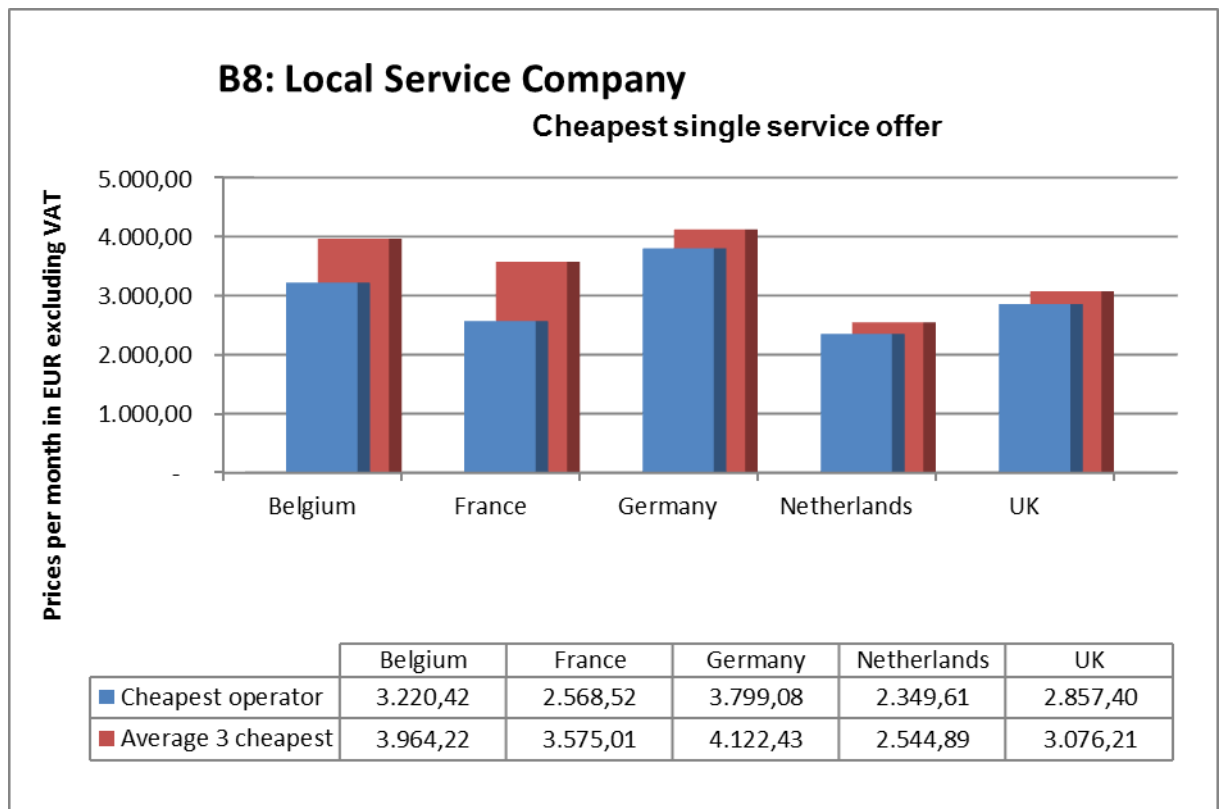
This business describes a local service company with 50 users who are both on the move and in the office. For this business, both fixed and mobile communications are important, due to the mix of employee types. The high number of users in the company means that several broadband connections are required, to support typical day to day activities such as email, information search and exchange, and maintaining a web presence. As some users are more desk-based, while others may be more mobile, both fixed and mobile voice needs are relatively high. The local nature of the business means that more emphasis is placed on fixed local as opposed to long distance calls, however, international fixed calls are also high, to support international trading activities. A summary of the communications' usage for this business is shown in the table below.

Business type 8: Local Service Company		# of communications users:		50		
	Usage level	Value		Additional info		
Fixed broadband	Medium x3	50	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Low	0.2	GB/month	Minimum speed	1	Mb/s
Fixed voice, national	High loc	157	Calls/month	Call duration	240	seconds
Fixed voice, international	High	23	Calls/month	Call duration	240	seconds
Mobile voice, national	Medium	78	Calls/month	Call duration	138	seconds
Mobile voice, international	Low	2	Calls/month	Call duration	138	seconds
Mobile voice, messages	Medium	60	SMS/month			
Mobile voice, data	High	1	GB/month			

4.8.1 Cheapest single offer

The results for the local service company basket calculation based on the cheapest single service offers available are shown in the graph below.

Figure 31: Cheapest single offer, local service company



The detailed results table below shows the costs for the single service calculations, for both the cheapest and average of the three cheapest providers.

Figure 32: Detailed results by calculation type, local service company

	Cheapest	Average of 3 cheapest
Belgium	3,220.42	3,964.22
France	2,568.52	3,575.01
Germany	3,799.08	4,122.43
Netherlands	2,349.61	2,544.89
UK	2,857.40	3,076.21

A local service company in Belgium will pay around €870 per month - or 37% - more than a similar business in the Netherlands, based on the cheapest available offer in each of the countries, and will pay around €580 per month - or 15% - less than a business in Germany (the most expensive)

Looking at the average of the three cheapest calculation, for Belgium, this is 23% more expensive than the cheapest overall offer, indicating a significant difference in costs across the Belgian providers. For Germany, the Netherlands and the UK, it is around 8%, suggesting that the prices in these markets for this business type are much more closely aligned.

4.8.2 Rankings summary

The detailed rankings of the positions of the study countries for this business are shown in the table below, for both the overall cheapest offer and the weighted average of the (up to) three cheapest providers, based on single service offers.

The countries are ranked from 1 to 5, where 1 represents the lowest price, highlighted in green, and 5 the most expensive, highlighted in pink.

Figure 33: Country rankings by calculation type, local service company

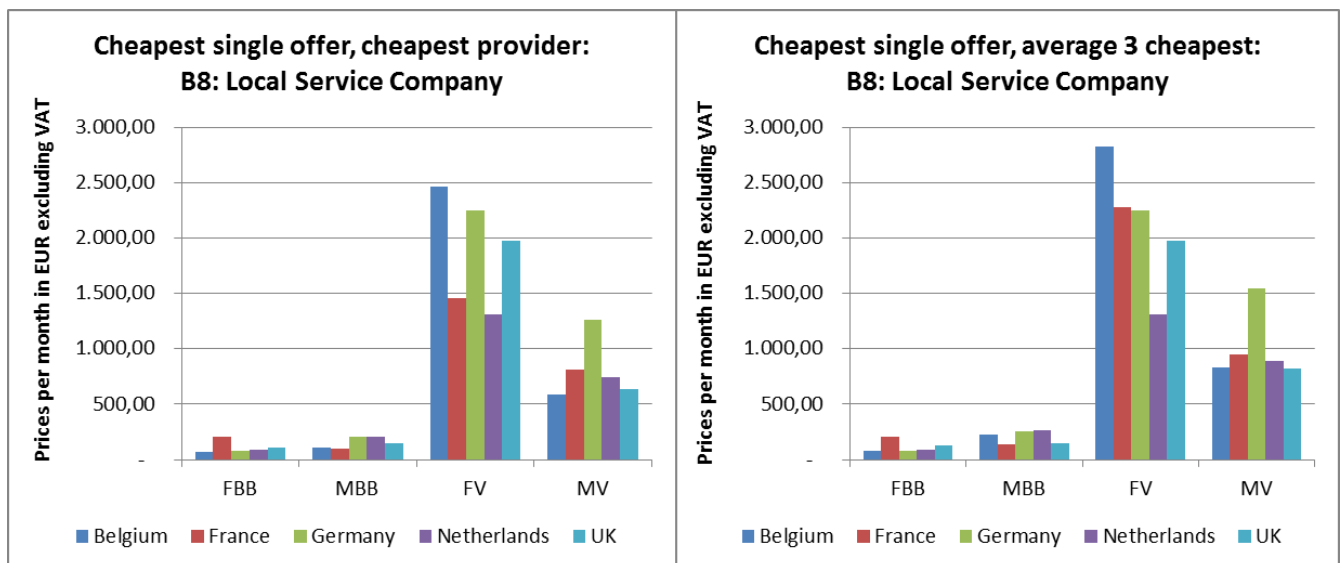
	Cheapest	Average of 3 cheapest
Belgium	4	4
France	2	3
Germany	5	5
Netherlands	1	1
UK	3	2

Belgium ranks as second most expensive for the local service company, irrespective of the calculation type, with the Netherlands as the cheapest, and Germany as the most expensive.

4.8.3 Cheapest single offers, broken down by service

The graphs below show the results for the local service company for both the cheapest single offer, and the weighted average of the 3 cheapest providers, based on single offers. The results are broken down into the cost of the individual telecoms service, to show how each service contributes to the total cost for this business and how costs of individual services compare in the study countries. As multiplay offers are not relevant for this business type, the results shown here will correspond directly to the cheapest overall offer graph shown above.

Figure 34: Cheapest single offers, broken down by service, local service company



Fixed and mobile voice costs dominate for this business, driven by the high usage levels. While broadband use is high (this business requires 3 fixed broadband lines), the cost of these relative to the voice services is very low. Fixed voice accounts for up to 75% of the total cost for this business, depending on country and calculation type, while mobile voice accounts for up to a third of the overall cost.

Similar to the local trading company (business type 6), international fixed voice usage is high, and this drives up the total fixed voice costs for Belgium, where it has the highest cost across the study countries. Other communications services in Belgium are more competitive for this business, but contribute less to the overall cost picture.

5 Evolution of prices since 2014

This section examines how the prices for the services used by each business type have changed in each of the study countries since 2014, based on the offers in the telecom market.

For most of the study countries, the tariff data has been collected in a common currency, so there is no need to take into account exchange rate fluctuations. As the UK results have been converted from Pounds to Euros, to ensure the results are fully consistent, and that any changes relate only to changes in prices, the exchange rate used in the 2015 study has also been applied retrospectively to the 2014 results.

Additionally, the changes to mobile handset data and mobile broadband use, described in section 3, have also been applied retrospectively to the 2014 baskets, so that the year on year comparison is considering identical baskets.

The graphs in the subsections below show, for each business type, the evolution of prices from 2014 to 2015.

For business types 1 to 4, the first graph shows the evolution based on the cheapest overall offer, irrespective of whether this is single service or multiplay, while the second graph considers the cheapest overall offer from the weighted average of the three cheapest providers.

For business types 5-8, the cheapest single service and the average of the 3 cheapest providers based on single services are shown.

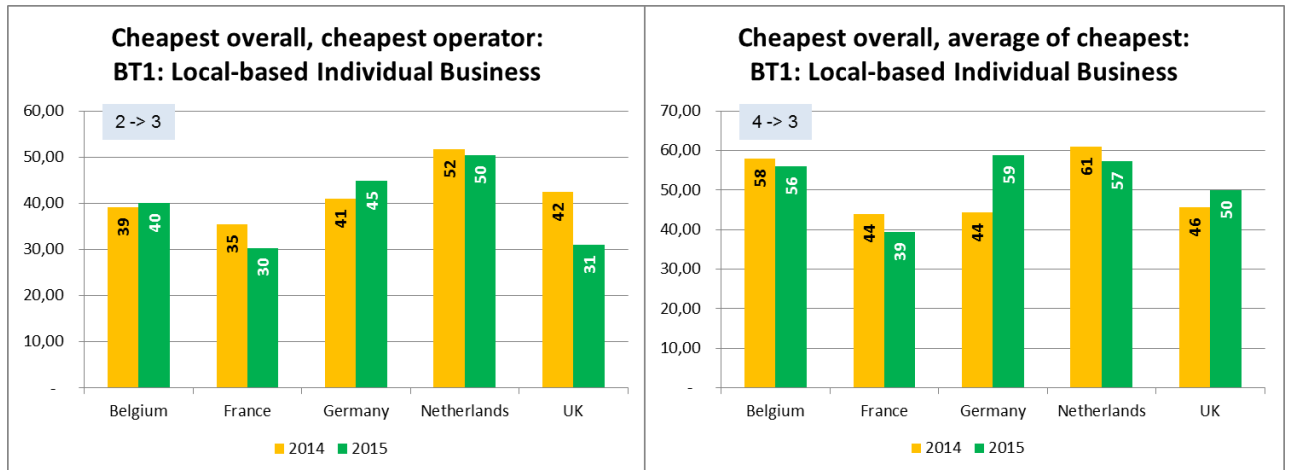
Each graph also indicates how the ranking of Belgium has changed from 2014 to 2015. It is useful to bear in mind that the ranking position of Belgium is not only influenced by price changes in Belgium but also the evolution of prices in other countries.

Additionally, it is important to bear in mind that changes in costs can be caused by the introduction of new tariffs or the removal of existing ones, as well as changes to components, or properties of a tariff. For example, the removal of a tariff from a tariff portfolio may result in a previously more expensive offer, either from the same or a different provider, becoming the cheapest. Similarly a change in download speed (in the case of fixed broadband) without a corresponding change in prices can result in the higher speed offering now fulfilling the requirements of a business type where previously it didn't; and possibly at a lower cost than the previous selection.

5.1 Local-based individual business

The two graphs below show the evolution of prices for the cheapest overall offer and the cheapest overall offer based on the average of three cheapest providers for the local-based individual business.

Figure 35: Price evolution, local-based individual business



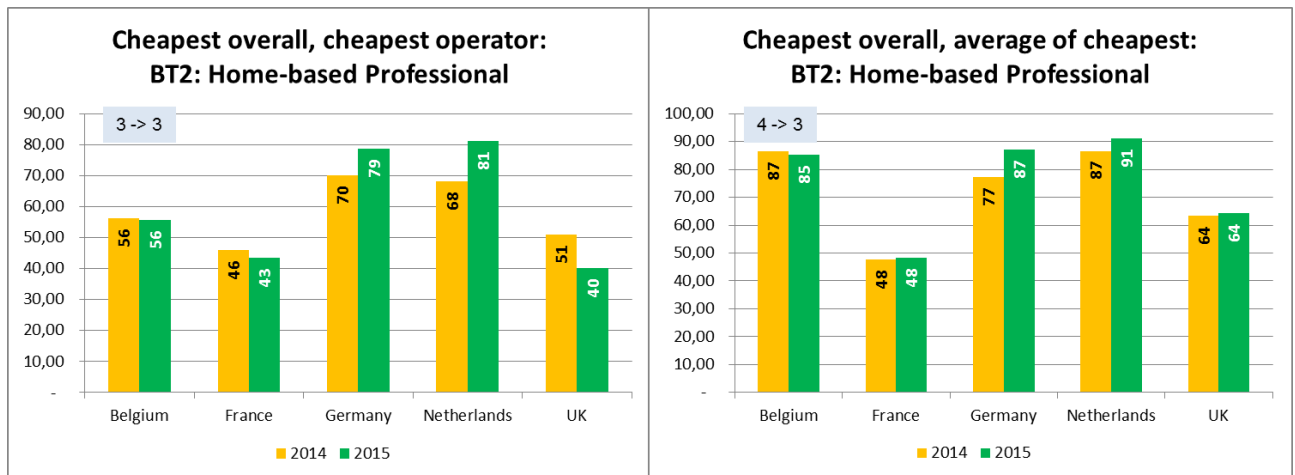
For the cheapest overall offer, the costs for the local based business have risen only very slightly since 2014 in Belgium but are broadly similar, however, the ranking has increased, as a result of costs for both multiplay offering and mobile falling in the UK as well as in France.

For the average of the three cheapest, both the absolute and relative positions of Belgium have improved, with Belgium ranking fourth in 2014 and third in 2015. The improved Belgian ranking position is more as a result of increases in costs in Germany than decreases in costs in Belgium, which have been relatively modest.

5.2 Home-based professional

The two graphs below show the evolution of prices for the cheapest overall offer and the cheapest overall offer based on the average of three cheapest providers for the home-based professional.

Figure 36: Price evolution, home-based professional



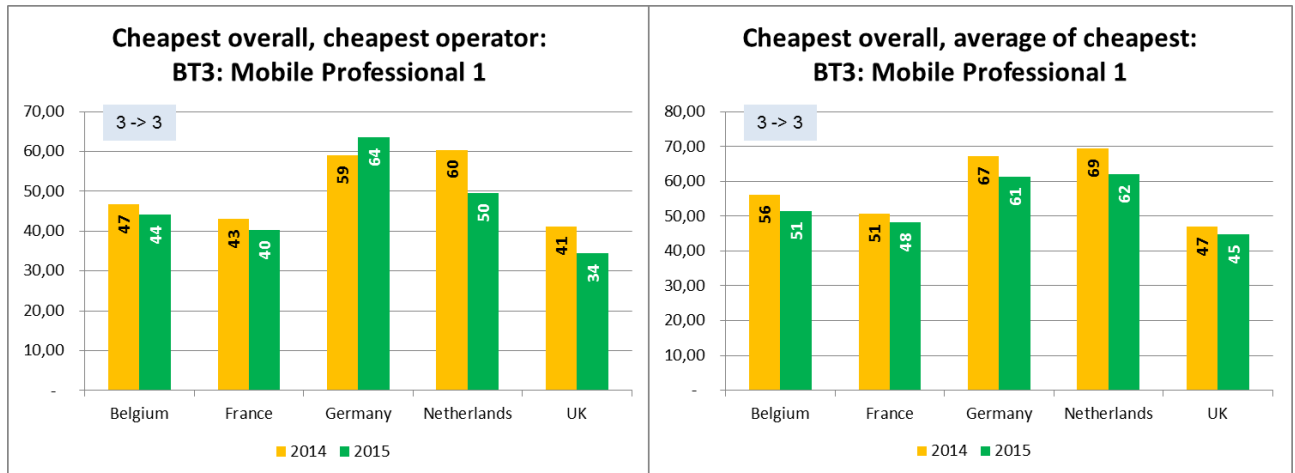
For the cheapest overall offer, costs for the home-based professional in Belgium have remained almost static since 2014, with a small decrease in fixed voice costs and a corresponding small increase in mobile voice. While the ranking remains unchanged for Belgium, its cost position relative to the other study countries does not. Costs on both Germany and the Netherlands have increased, while costs in France and the UK have fallen.

For the cheapest overall offer based on the average of the three cheapest providers, the ranking of Belgium has improved slightly. Again, the absolute cost has only changed minimally (and has fallen); by contrast, the cost in the other countries has risen, most notably in Germany and the Netherlands.

5.3 Mobile professional 1

The two graphs below show the evolution of prices for the cheapest overall offer and the cheapest overall offer based on the average of three cheapest providers for the mobile professional 1.

Figure 37: Price evolution, mobile professional 1



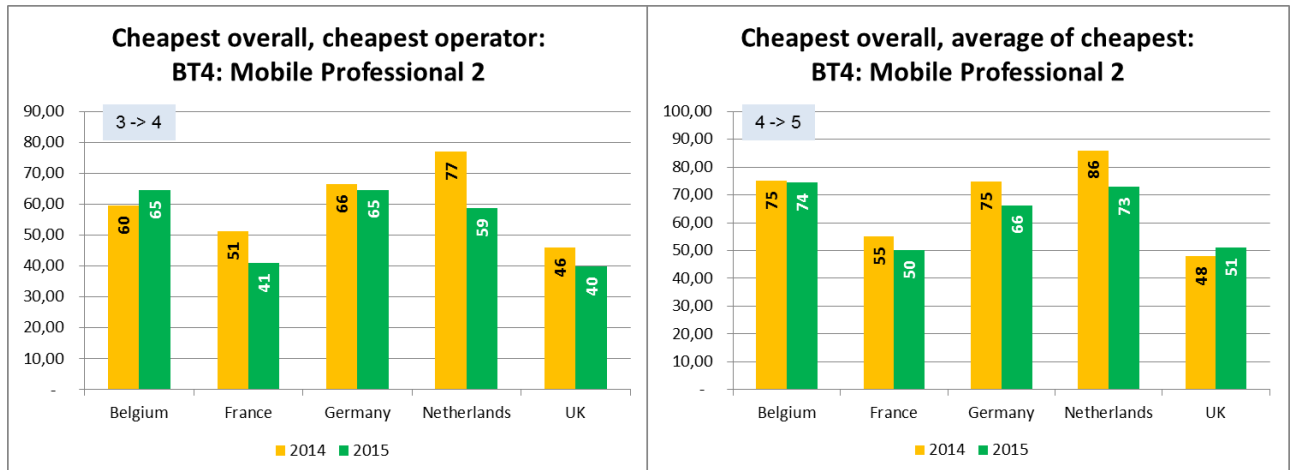
For the cheapest overall offer, the ranking for the mobile professional 1 remains unchanged from 2014, however mobile costs have fallen, resulting in a lower absolute cost. Costs in all the other study countries have fallen, as well, with the exception of Germany, which has seen a slight increase.

For the cheapest overall offer based on the average of the three cheapest providers, costs in all countries have fallen, with the biggest decreases in Germany and the Netherlands.

5.4 Mobile professional 2

The two graphs below show the evolution of prices for the cheapest overall offer and the cheapest overall offer based on the average of three cheapest providers for the mobile professional 2.

Figure 38: Price evolution, mobile professional 2



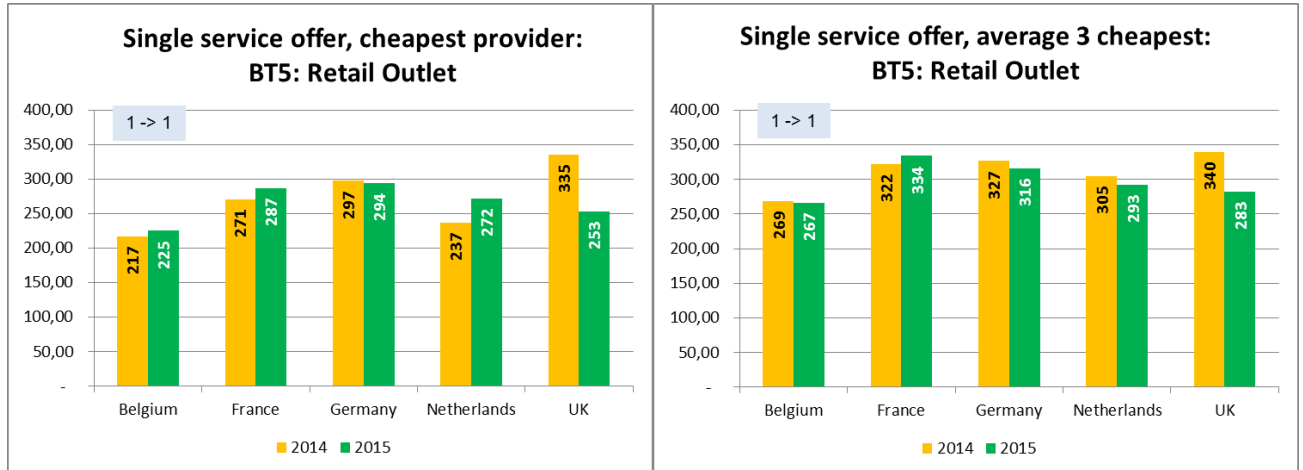
For the cheapest overall offer, the relative position of Belgium has worsened. This is in part a result of decreases in costs in the other countries, most notably for mobile services, but also because of an increase in international mobile call charges for the Belgian provider that was the cheapest in 2014, based on a fixed and mobile voice bundle. It is interesting to note the dynamics at play in this particular case, as the international call charge increase shifted the balance from a multiplay package from this provider as the cheapest to a previously more expensive Belgian provider offering a single service.

For the cheapest overall offer based on the average of the three cheapest providers, the absolute cost picture for Belgium is very similar to 2014 - mobile costs have risen slightly, while others have fallen. The ranking has changed from fourth to fifth, however, due to decreases on the previously two most expensive study countries for this business type, Germany and the Netherlands. Mobile voice and broadband cost decreases in these countries have driven this change. Costs in France have also fallen.

5.5 Retail outlet

The two graphs below show the evolution of prices for cheapest single service and the average of the three cheapest providers based on single services, for the retail outlet

Figure 39: Price evolution, retail outlet



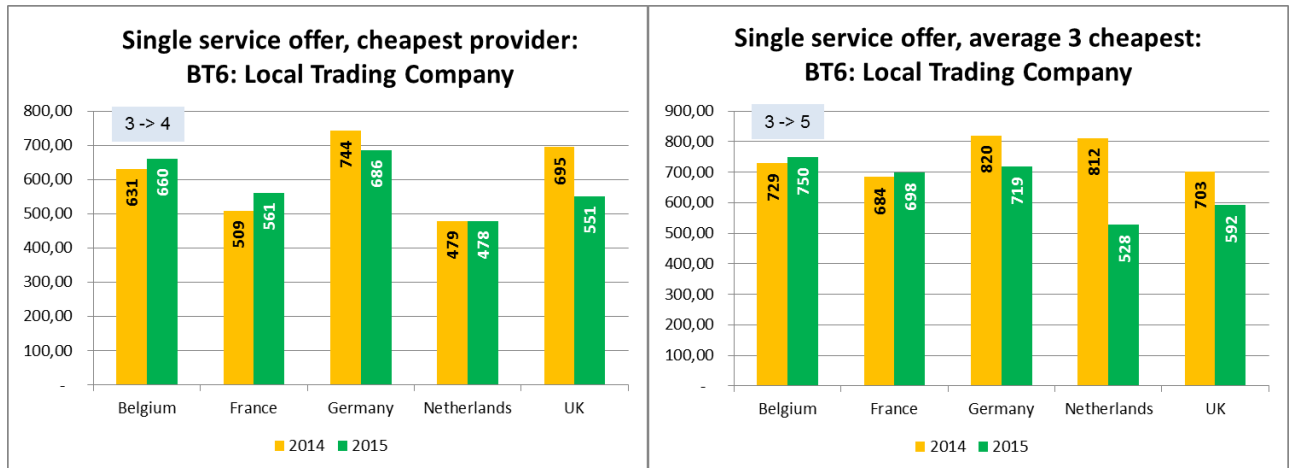
For both the cheapest and average of the three cheapest providers, Belgium has maintained its position as the cheapest study country overall, along with relatively small changes to the absolute cost. For the cheapest overall offer there were slight increases across fixed broadband and fixed and mobile voice services for Belgium, while, for the average of the three cheapest, all services increased in cost slightly, with the exception of fixed voice, which fell.

The other study countries saw a mix of increases and decreases in terms of absolute cost compared to last year, depending on the country and the calculation type. The biggest changes were in the UK, where costs fell across all service types, with the exception of mobile voice for the average of the three cheapest calculation, where the costs increased.

5.6 Local trading company

The two graphs below show the evolution of prices for cheapest single service and the average of the three cheapest providers based on single services, for the local trading company

Figure 40: Price evolution, local trading company



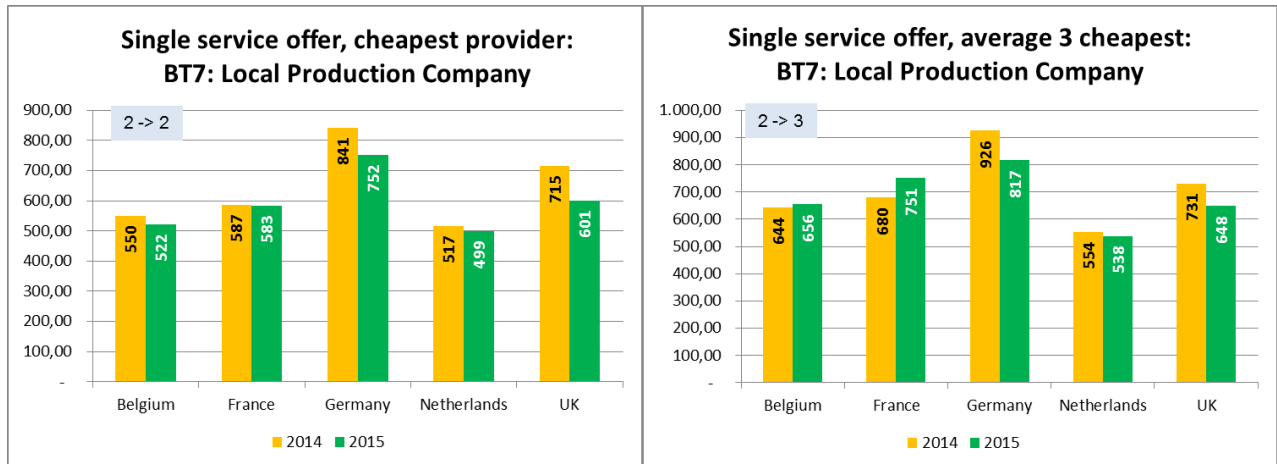
For the cheapest provider, the ranking position of Belgium has increased from 3 to 4. This is less as a result of the increase in costs for Belgium (where the absolute cost has risen 5% as a result of small increases in all services apart from mobile broadband), and more because of decreases in Germany and the UK.

For the average of the three cheapest providers, Belgium moved from third position to most expensive overall. Again this was because of decreases in other countries, some of which were significant, rather than any large price changes in Belgium.

5.7 Local production company

The two graphs below show the evolution of prices for cheapest single service and the average of the three cheapest providers based on single services, for the local production company.

Figure 41: Price evolution, local production company



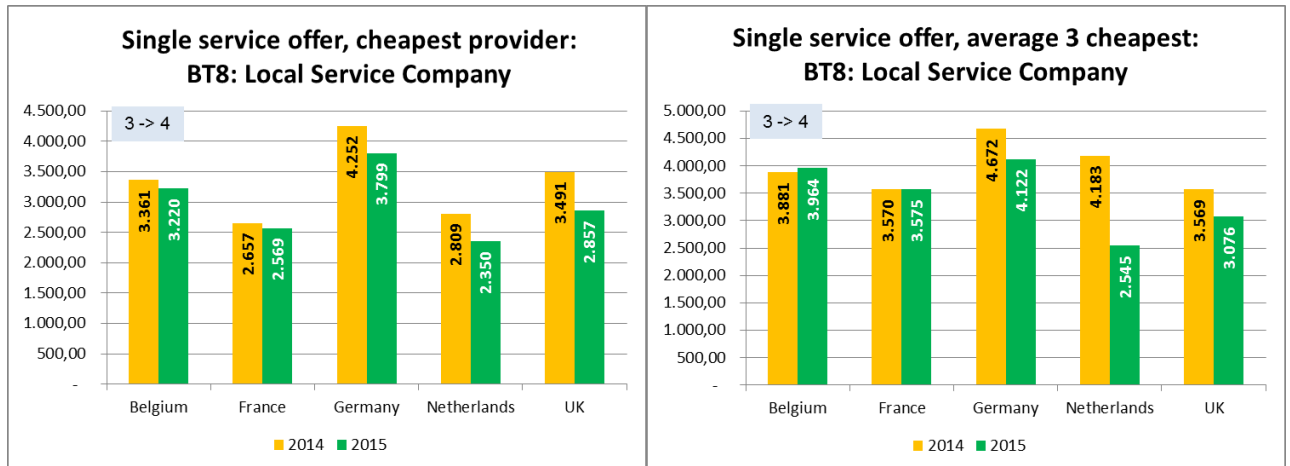
For the cheapest single service offer for the local production company, Belgium maintained its position as the second cheapest country, after the Netherlands. Similar to Belgium, the absolute costs in France and the Netherlands remained broadly static, while costs in both Germany and the UK fell more substantially. In Germany, the services driving this change were fixed and mobile voice, while in the UK it was fixed broadband and fixed voice.

For the average of the three cheapest providers, the relative position of Belgium fell from second cheapest in 2014 to third cheapest in 2015. Costs for Belgium rose only slightly overall for this business type, by 2%, but falls of over 10% in Germany and the UK, resulted in the change in position for Belgium.

5.8 Local service company

The two graphs below show the evolution of prices for cheapest single service and the average of the three cheapest providers based on single services, for the local service company

Figure 42: Price evolution, local service company



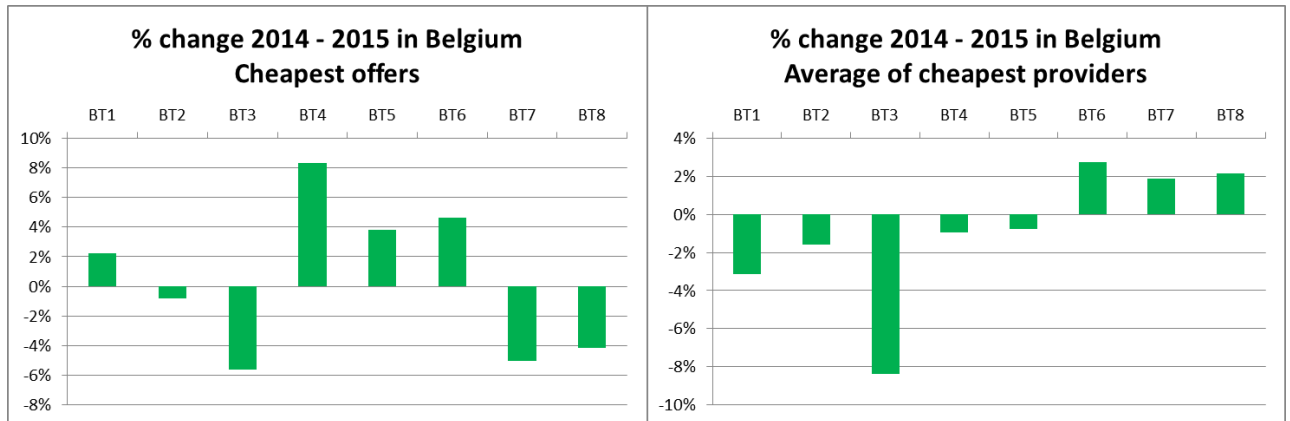
For the cheapest single service offer, the absolute costs for Belgium fell by 4% from 2014 to 2015. In spite of this its ranking position changed from 3 to 4, as a result of steeper cost falls in other study countries. The steepest fall was in the UK, where costs fell by 18%. Most of this decrease was in fixed voice, while fixed broadband costs also saw a relatively large decrease. Costs in Germany and the Netherlands also saw relatively large falls of 11% and 16% respectively; in Germany it was the fixed and mobile voice services that fell, while in the Netherlands it was mobile voice only.

For the average of the three cheapest providers, as with the cheapest overall offer, the ranking of Netherlands fell from 3 to 4, due to larger changes in other countries. The Netherlands showed the most dramatic fall, and this was driven by decreases across the range of providers considered in this study.

5.9 Evolution in telecommunication costs for Belgian businesses since 2014

This section summarizes the overall change in telecoms service prices for Belgium, across the eight business types, taking into account the cheapest overall offer and the cheapest overall offers across the average of the three cheapest providers.

Figure 43: Change in Belgian prices by business type since 2014



* For Business Types 5-8, the analysis is based on single service offers only

The changes seen across the eight business types have been a mix of increases and decreases, and have, for most business types, been relatively modest, and within the bounds of what might typically be expected, i.e. up to 5% in either direction. It is important to consider that an overall change for a business will be the compound result of changes to individual services, which may be changing in the same way - for example all increasing, or all decreasing - or increases in some services may be countered by decreases in others.

The changes seen for business types 3 and 4, while larger than for other business, are driven by changes in packages and call charges for some mobile tariffs, and although these are generally larger, this can be very typical for mobile services, where pricing is highly competitive and constantly changing.

6 Pure bundle pricing

Bundles are becoming increasingly prevalent, and may offer benefits both on price (depending on the usage profile) and non-price-related aspects, such as single or consolidated billing, and a single point of contact for account management.

The table below outlines the key differences between pure bundles and multiplay, considered respectively here and in the analysis in section 4.

	Multiplay	Pure bundle
Takes business requirements into account (tariff may include additional usage based charges)	Yes	Yes
Multiple suppliers possible	Yes	No
Different combinations of bundled services and/or single services, may make up the bundle	Yes	No

Because of this, the results need to be handled with some caution. In spite of this, the analysis does provide a useful assessment of how the costs of pure bundles compare across the study countries.

Only single user businesses are considered in the analysis, i.e. business types 1-4.

Additionally, while there are a number of different bundle types, only those bundles where there are data points for at least three of the study countries, including Belgium, are considered. Only two bundles are relevant for consideration in this section:

- fixed broadband and fixed voice
- fixed broadband, fixed voice and mobile voice

6.1 Fixed broadband and fixed voice pure bundles

The figures below show the cost for the cheapest pure bundle only for fixed broadband and fixed voice, for business types 1 and 2, and 3 and 4.

Figure 44: Cheapest pure bundle price: fixed broadband and fixed voice, business types 1 and 2

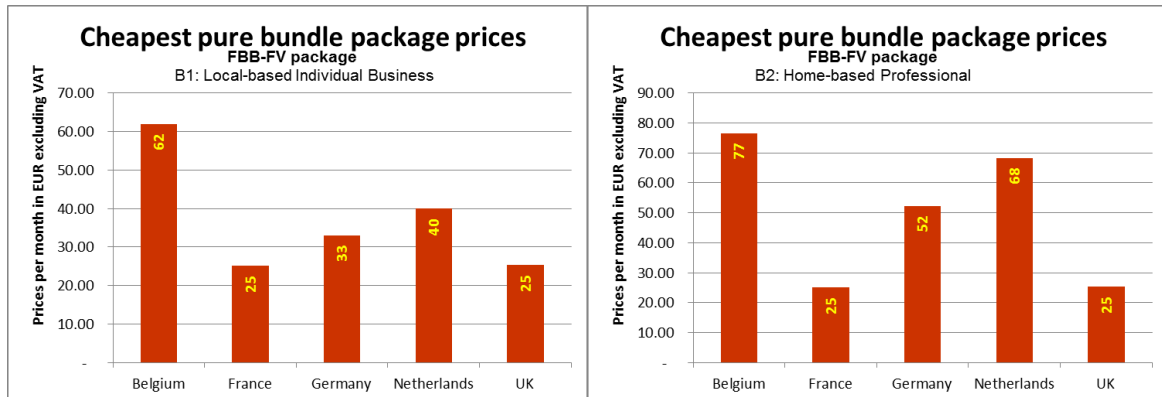
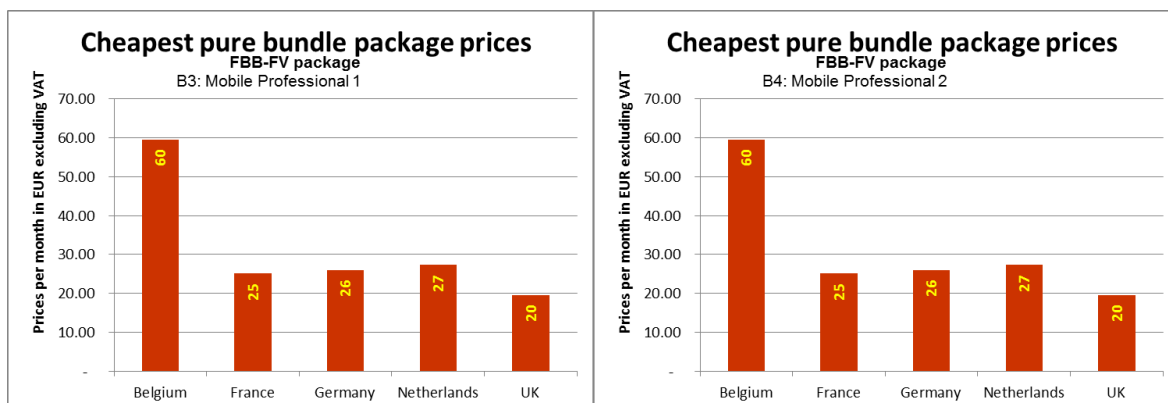


Figure 45: Cheapest pure bundle price: fixed broadband and fixed voice, business types 3 and 4



Across all four business types, Belgium consistently has the highest cost for fixed broadband and fixed voice bundles. For business types 1 and 2, there is much greater variation in cost across the study countries (although Belgium is still the most expensive), while for business types 3 and 4, the costs are much more closely aligned, again, with the exception of Belgium.

It is worth noting that, for this particular bundle combination, the results for business types 3 and 4 are identical. This is because we are looking at FBB and FV, and for these two businesses, there is no FV usage. In this case, they will still pay the cost of the bundle, which is fixed but won't attract any FV usage charges. Additionally, there are no usage charges with FBB

6.2 Fixed broadband, fixed voice and mobile voice pure bundles

The figures below show the cost for the cheapest multiplay package only for fixed broadband, fixed voice and mobile voice, for business types 1 and 2, and 3 and 4.

Note: there is no result shown for Germany, as none of the German providers analysed have a suitable triple play offer that includes fixed broadband, fixed voice and mobile voice.

Figure 46: Cheapest pure bundle price: fixed broadband, fixed voice and mobile voice, business types 1 and 2

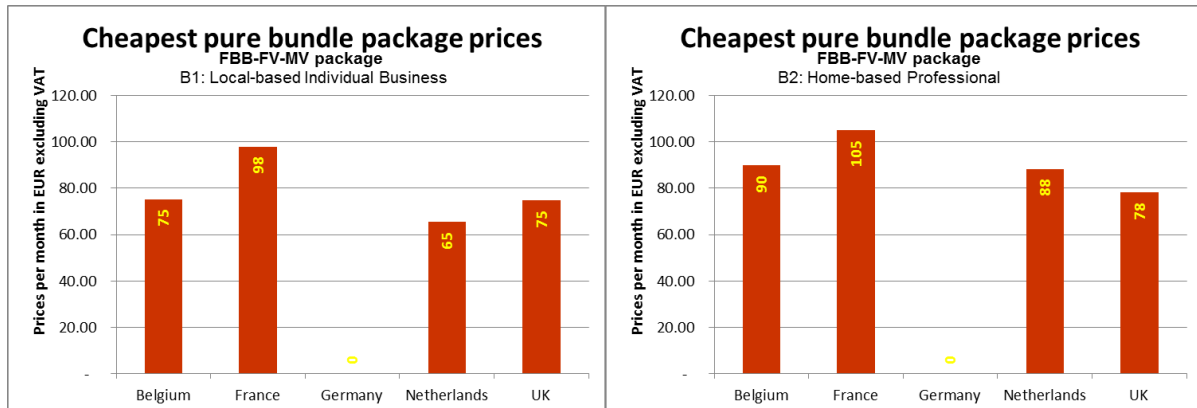
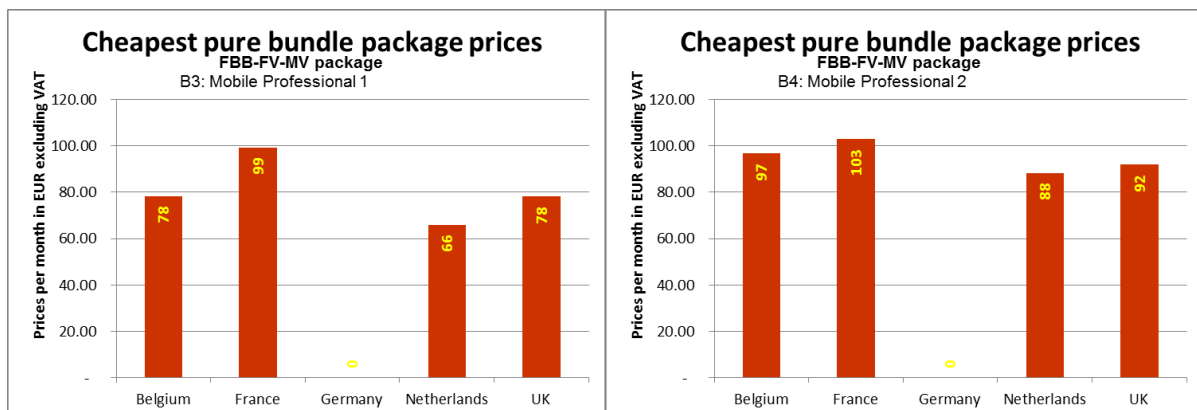


Figure 47: Cheapest pure bundle price: fixed broadband, fixed voice and mobile voice, business types 3 and 4



When mobile voice is included into the bundle, Belgian providers are much more in line with providers in other countries, across all business types. This suggests that triple play offers including mobile voice are much more geared towards the market than the fixed broadband / fixed voice bundles.

For businesses with heavier mobile usage, i.e. mobile professional 2, the bundle cost for Belgium is comparatively more expensive relative to the other countries.

7 Non-price related elements

7.1 Introduction

This section provides an overview of a selected number of non-price related elements across the study countries. The overview is not intended to be an in-depth, exhaustive comparison across provider, but rather an indication of a few key measurable elements offered across the study countries.

The elements considered in this section cannot be taken into account in the price benchmark for a number of reasons:

- Many of the elements do not attract a cost, and as such cannot be quantified.
- Any assumptions on the value of the elements would be highly subjective, and each element will have a different level of importance to different business users.
- Information may not be fully complete across providers and countries, or may not be fully consistent.
- For most of the elements, the summary is based on a full range of offerings from a provider, and does not represent a single offering.

7.2 Summary of non-price-related elements

The table below summarizes selected non-price-related elements, by provider and by country. The information shown is based on both residential and business services, as these were considered in the price benchmarking. With the exception of best fix times, which are quoted for business services specifically.

The information presented in this section is based on data collected in February/March 2015, and may have since changed.

Figure 48: Summary of non-price-related elements, by provider and country

	Speed low (FBB) ¹	Speed high (FBB) ¹	Best fix times (hrs) (FBB)	Usage caps (FBB) ²	Cloud included (FBB)	Security included (FBB)	Roaming included (MV) ³	WiFi hotspots/homespots ⁴
Belgium								
Proximus	50	50	6	Partly	Partly	Optional	No	1.000.000
Telenet	30	200	Not stated	Partly	No	Partly	No	1.250.000
Numericable	15	200	24	Partly	No	Yes	No	No
Mobistar	16	16	Not stated	No	No	Yes	Partly	No*
Base							No	No*
Voo	35	120	Not stated	Partly	No	No	No	1.200.000
EDPNet	4	100	8	No	No	Yes		No
United Telecom	70	70	Not stated	No	No	No	No	No
Belcenter	1	50	4	No	No	Optional		No
Colt	1	40	Not stated	Not stated	Not stated	Not stated		No
France								
Orange	15	500	24	No	Partly	No	Partly	4.000.000
SFR	6	200	Not stated	No	Partly	Partly	Partly	4.000.000
Bouygues	6	200	4	No	Partly	Partly	Partly	Yes
Free	15	15	Not stated	No	No	Yes	Partly (SMS)	4.000.000
Numericable	15	100	Not stated	No	No	No		Yes
Germany								
Telekom/T-Mobile	0,25	200	24	No	Partly	Partly	No	Yes
United Internet (1&1)	6	100	Not stated	Partly	Yes	No	No	No
Unity Media	25	200	Not stated	No	No	Partly	No	No
Vodafone	1	100	Not stated	Partly	No	No	Partly	750.000
O2	8	100	8	Partly	Yes	Optional	Partly	3.000
E-Plus (Base)							No	No*
Kabel Deutschland	10	200	Not stated	No	Partly	Optional	Partly	750.000
Netherlands								
KPN	10	100	Not stated	No	No	Partly	No	Yes
Ziggo	30	1000	16	No	No	Partly	No	2.000.000
UPC	50	200	Not stated	No	No	Yes	No	No
Vodafone	20	500	Not stated	No	No	No	Partly	No*
T-Mobile							Partly	No*
UK								
BT	17	76	24	Partly	Partly	Partly	No	5.000.000
TalkTalk	17	76	Not stated	No	No	Yes	No	No
EE	17	76	Not stated	No	No	Yes	Partly	5.000.000
O2							No	Yes
Vodafone							No	5.000.000
3 UK							Yes	No*
Virgin Media	50	152	24	No	Partly	Yes	No	22000
Sky	17	76	Not stated	Partly	No	Yes		Yes

Note: Where elements are stated as being partly available, this indicates that they are included in some but not all tariffs.

¹Refers to advertised download speed

²Unlimited fixed broadband usage may still be subject to fair use policies and/or data allowance restrictions

³Where providers 'partly' include roaming, this means that some plans include roaming within the overall offer, rather than as an add-on. This may cover voice, data and/or SMS. Other restrictions may also apply, for example, roaming to Europe only.

⁴The number of hotspots/homespots stated is national only.

*For mobile-only operators, it may not be relevant/viable to offer an extended WiFi service.

Key points

Almost all providers offer very high speed services, that fully meet the needs of the businesses defined for this study. Providers in France, Germany and the Netherlands offer the highest speeds of service, with 1GB/s services offered in the Netherlands.

While it can be useful to compare the speed of service across different providers and different countries, it is important to note that advertised higher speed services are not always available to each customer in a certain country. In Belgium, for example, NGA (Next Generation Access) broadband is widely available across the country, however and that is not always the case in other countries.⁴

Information on service fix times is often not available or clearly stated, which can be an issue for business users. As many single user businesses will make use of often cheaper residential services, they may be faced with more limited information on how long a service will take to fix if there is a fault, and such fix times may be longer. This is the trade-off that a single user business will have to consider, in return for cheaper services.

Usage caps are quite widely used, although no provider includes them across their whole portfolio. And often, capped services have generous allowances that will typically cover the needs of a business. The exception here is light user services, which only include small allowances and are targeted at a very specific kind of usage. Capped services are more prevalent in Belgium and Germany.

The inclusion of cloud services varies from provider to provider, and there is no consistent approach within a country. For some providers it is an optional add-on, while for others, it is included as standard as part of one or more offer.

Security is often included as part of fixed broadband offers within the overall cost, however a number of providers will include security software (such as Norton or McAfee) for an additional monthly fee (usually a few euros per PC, for example). Security software encompasses anti-virus and anti-spyware software, and offers PC protection when accessing the internet.

The inclusion of roaming within an offer similarly varies from provider to provider. Roaming here covers voice, data and/or SMS. In general most offers do not include any roaming, however, for some providers, high-end plans, aimed at high and business users, will include an element of roaming, typically within Europe. Many providers still require users to add on roaming packages, or will levy usage-based roaming costs. Notably, Three in the UK will allow all contract customers to roam within its footprint, using their contract allowances.

⁴ Additional information on coverage is available from the regulatory bodies in individual countries.

Access to hotspots and homespots is increasingly prevalent, with many of the larger and more dominant providers offering access to hotspot services such as FON or The Cloud, either free of charge or for a fixed fee.

An additional factor which may be important to consider, which is not shown in the table, is that of contract duration, and this will vary across the study countries. Often to achieve the cheapest offer, the business user will need to sign up to a contract that runs for several years, and such a contract may or may not have flexibility built in, for example to upgrade or to exit the contract at short notice. In Belgium, many contracts for business users can be terminated with immediate effect.

8 Conclusion

The telecommunications costs faced by Belgian businesses are broadly mid-range compared to the other study countries, although the relative costs and rankings vary by business type. The position of Belgium for business types 4, 6 and 7 is less favorable when we consider the cheapest overall offer based on the average of the three cheapest providers compared to the cheapest overall offer.

The summary rankings for both calculation types are show in the two tables below.

Figure 49: Rankings summary across all business types: cheapest overall offer.

	BT1	BT2	BT3	BT4	BT5	BT6	BT7	BT8
Belgium	3	3	3	4	1	4	2	4
France	1	2	2	2	4	3	3	2
Germany	4	4	5	5	5	5	5	5
Netherlands	5	5	4	3	3	1	1	1
UK	2	1	1	1	2	2	4	3

Figure 50: Rankings summary across all business types: cheapest overall offer, average of three cheapest providers.

	BT1	BT2	BT3	BT4	BT5	BT6	BT7	BT8
Belgium	3	3	3	5	1	5	3	4
France	1	1	2	1	5	3	4	3
Germany	5	4	4	3	4	4	5	5
Netherlands	4	5	5	4	3	1	1	1
UK	2	2	1	2	2	2	2	2

Belgian businesses with generally low to moderate reliance on communications, as is the case with the local-based individual business and the home-based professional (business types 1 and 2) will generally rank mid-range across the study countries. For these two business types, multiplay often features as a more attractive proposition compared to single service procurement in a number of the study countries, more so than in Belgium; in some countries, notably France and the UK.

Belgian businesses with a heavier reliance on and higher use of mobile services are generally among the more expensive of the study countries, partly due to higher mobile costs in Belgium, most notably for higher usage, but also as a result of some very competitive mobile tariffs in other countries, which are continually being driven down by strong competition. This is evidenced in the rankings and relative cost positions of the mobile professional 2 (business type 4) in particular for Belgium; this business type has a much heavier dependence on mobile. For the mobile professional 1 (business type 3), although it is predominantly mobile, its mobile usage is much lower than the mobile professional 2, and at this level, mobile costs are much more on mid-range compared to the other study countries.

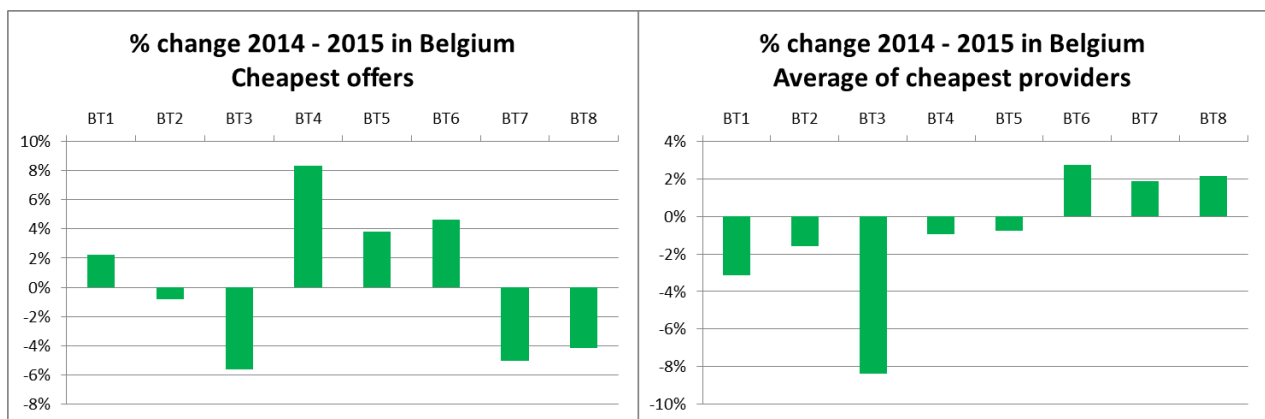
Similarly, businesses with a strong focus on international calling will generally not fare as well in Belgium as a result of this type of call being more costly. This is the case with the local trading company and the local service company (business types 6 and 8).

By contrast, Belgian businesses with a high proportion of local and national fixed voice traffic will enjoy more competitive tariffs, and consequently lower overall costs compared to some of the other study countries, and this can be seen in the rankings and absolute results for the retail outlet and the local production company (business types 5 and 7).

In terms of the other study countries, France and the UK are often, although not exclusively, among the cheapest for businesses, while the Netherlands and Germany often rank as the most expensive.

The two graphs below show the price evolution for the eight Belgian business types since 2014.

Figure 51: Change in prices for Belgian businesses since 2014



** For Business Types 5-8, the analysis is based on single service offers only*

The changes seen across the eight business types have been a mix of increases and decreases, and have, for most business types, been relatively modest, and within the bounds of what might typically be expected, i.e. up to 5% in either direction. It is important to consider that an overall change for a business will be the compound result of changes to individual services, which may be changing in the same way - for example all increasing, or all decreasing - or increases in some services may be countered by decreases in others.

The changes seen for business types 3 and 4, while larger than for other business, are driven by changes in packages and call charges for some mobile tariffs, and although these are generally larger, this can be very typical for mobile services, where pricing is highly competitive and constantly changing.

In terms of changes to rankings, based on the cheapest overall offers, Belgium has maintained its position across 4 of the 8 business types, namely the home-based professional (business type 2), the mobile professional 1 (business type 3), the retail outlet

(business type 5) and the local production company (business type 7). For the remaining business types, the Belgium has moved down in rank by one place.

When we consider the change in ranking since 2014 for the average of the three cheapest providers, these remain unchanged for two of the eight businesses; namely the mobile professional 1 (business type 3) and the retail outlet (business type 5). For three of the eight businesses - the local-based individual business (business type 1), the home-based professional (business type 2) and the mobile professional 2 (business type 4), the ranking improved by one place, while the local trading company (business type 6), local production company (business type 7) and local service company (business type 8) all fell by one place from their 2014 position. It is important to note that changes to country rankings are not solely driven by changes to pricing in Belgium, but are also influenced by changes/market dynamics in the neighbouring countries

While it is difficult to draw any firm conclusions from the non-price related data, it is important to view the findings alongside the benchmarking results. Many single user businesses will subscribe to residential services, which are often cheaper, but may have limitations, for example, lower speeds, and longer or unspecified fix times, and this may be a trade-off that they need to consider.

End of report

Appendix A: Methodology

A Methodology

A1 Overview

The study uses a basket methodology to compare the telecommunications charges paid by eight types of business entities, which are constructed to represent different combinations of services and usage levels. These eight businesses can be split into two broad groups, depending on how many active service users there are.

- Business types 1 to 4 consider single user businesses (“SoHos”), comprising the Local-based Individual Business, the Home-based Professional and two types of Mobile Professionals.
- Business types 5 to 8 consider businesses with multiple users, ranging from 5 to 50 users (“SMEs”), including the Retail Outlet, the Local Trading Company, the Local Production Company and the Local Service Company.

The analysis considers costs for each business type when services are purchased singly to make up the communications requirements of the business, as well as costs when multiplay offerings are used (with single services where a multiplay offering does not cover the full business need). A multiplay offering is defined as a set of two or more communications services that are sold together (as a bundled offer) from a provider, typically at a lower cost than if the services were bought individually from the same provider.

As multiplay offers are not relevant, for multi-user businesses, multiplay offers are not included in the calculation or results for SMEs (business types 5-8).

A2 The Business concept

An important part of the study methodology is the concept of “businesses”⁵, covering all telecommunications service requirements of all users and the costs associated to it. For each business, baskets for individual services have been determined to establish how each service is used within that business.

The following telecommunications services (“services”) are covered within the study:

- Fixed voice FV (PSTN, VoIP)
- Mobile voice MV (including SMS and handset data usage)

⁵ The concept was originally developed for “households”, analysing the services used by a home, including television services.

- Fixed broadband FBB (over DSL, Cable, Fibre)
- Mobile broadband MBB (based on laptop/tablet/dongle modem usage)

As far as telecommunications product offers are concerned, the benchmarking methodology looks separately at both the above mentioned single services, and any bundles/combinations consisting of two to four different services. With bundled services, in order to complete the picture, a multiplay or bundled offer that does not fulfil all the requirements of a business is expanded with the cheapest possible single services in the market, from any provider.

The table below describes in broad terms the telecommunications requirements for each type of business that has been defined for the purposes of this study, reflecting the typical Belgian context.

Figure 52: Communications service requirements for identified businesses

	FBB	MBB	FV nat	FV intn	MV	MV mess	MV data	Users
1 Local based individual business	Low		Low loc		Low	Low	Low	1
2 Home-based Professional	Medium	Medium	Medium nat	Medium	Low	Low	Medium	1
3 Mobile Professional 1	Low	High			Medium	Low	Medium	1
4 Mobile Professional 2	Low	High			High	Medium	High	1
5 Retail Outlet	Medium	Medium	Medium loc	Low	Medium	Low	Low	5
6 Local Trading Company	Medium	Medium	High Nat	High	Low	Low	Medium	10
7 Local Production Company	Medium	Low	High loc	Low	Medium	Medium	High	10
8 Local Service Company	Medium x 3	Low	High loc	High	Medium	Medium	High	50

Low, Medium and High suggests usage levels per User.

For Fixed Voice: Loc means predominantly local usage, Nat means predominantly national (long distance) usage.

Number of Mobile Broadband users will be half of the total number of users.

x3 is indication of the number of lines/connections that will be required.

2% of Mobile Voice (MV) traffic is allocated to international calls.

Each business employs one or more people who are telecommunications users. Please note that the number of employees is not (necessarily) equal to the number of users, so that for example Business 7, a “Local Production Company”, may have 50 employees, but only 10 are active telecommunications users.

The average Belgian usage profile is identified as “medium” usage. Profiles for lower and higher usage are defined in relation to this medium profile, with usage levels that are typically 1/3 (for “low”) and 3 times (for “high”) of the medium.

A3 Profiles by service

The business definitions are described individually, in Section 4 of this report. The tables below consider an alternate view to this, For each of the four services, a summary of how each business profile uses the service is provided. All usage is specified per month.

Business types 1 to 4 refer to a SoHo (Single Office/Home Office) business, while business types 5 to 8 refer to an SME (Small and Medium Enterprise).

Figure 53: Fixed voice requirements by business type

	Fixed voice	Users	Profile	Total calls	Local %	National %	F2M %		Intn %			Dur F2F	Dur F2M	Dur Intn
1	Local based individual business	1	FV Single Low Local / No intn	40	50%	25%	25%		0%			3.0	3.0	3.0
2	Home-based Professional	1	FV Single Medium National / Medi	120	23%	45%	23%		9%			4.0	4.0	4.0
3	Mobile Professional 1													
4	Mobile Professional 2													
5	Retail Outlet	5	FV Medium Local / Low intn	90	49%	23%	23%		5%			2.0	2.0	2.0
6	Local Trading Company	10	FV High National / High intn	180	22%	49%	16%		13%			4.0	4.0	4.0
7	Local Production Company	10	FV High Local / Low intn	180	54%	25%	16%		5%			4.0	4.0	4.0
8	Local Service Company	50	FV High Local / High intn	180	49%	22%	16%		13%			4.0	4.0	4.0

Figure 54: Mobile voice requirements by business type

	Mobile voice	Users	Profile	Total calls	Fixed %	On-net %	Off-net %	Voicemail	Intn %	SMS	Data GB	Dur M2F	Dur M2M	Dur Intn
1	Local based individual business	1	MV Low (per user)	40	17%	40%	39%	2%	2%	25	0.1	2.1	2.1	2.1
2	Home-based Professional	1	MV Low (per user)	40	17%	40%	39%	2%	2%	25	0.4	2.1	2.1	2.1
3	Mobile Professional 1	1	MV Medium (per user)	100	17%	40%	39%	2%	2%	25	0.4	2.3	2.3	2.3
4	Mobile Professional 2	1	MV High (per user)	250	17%	40%	39%	2%	2%	60	1	2.5	2.5	2.5
5	Retail Outlet	5	MV Medium (5 users)	80	17%	40%	39%	2%	2%	25	0.1	2.1	2.1	2.1
6	Local Trading Company	10	MV Low (10 users)	30	23%	37%	36%	2%	2%	25	0.4	1.8	1.8	1.8
7	Local Production Company	10	MV Low (10 users)	30	23%	37%	36%	2%	2%	25	1	1.8	1.8	1.8
8	Local Service Company	50	MV Medium (50 users)	80	17%	40%	39%	2%	2%	60	1	2.3	2.3	2.3

Figure 55: Fixed broadband requirements by business type

	Fixed Broadband	Lines	Profile	Minimum speed Mb/s	Data GB	Hours
1	Local based individual business	1	FBB Low (per line)	10	20	80
2	Home-based Professional	1	FBB Medium (per line)	15	50	240
3	Mobile Professional 1	1	FBB Low (per line)	10	20	80
4	Mobile Professional 2	1	FBB Low (per line)	10	20	80
5	Retail Outlet	1	FBB Medium (per line)	30	50	240
6	Local Trading Company	1	FBB Medium (per line)	30	50	240
7	Local Production Company	1	FBB Medium (per line)	30	50	240
8	Local Service Company	3	FBB Medium (per line)	30	50	240

Figure 56: Mobile broadband requirements by business type

	Mobile Broadband	Users	Profile	Minimum speed Mb/s	Data GB	Hours	Days used
1	Local based individual business						
2	Home-based Professional	1	MBB Medium (per user)	3	0.8	20	20
3	Mobile Professional 1	1	MBB High (per user)	6	2	20	20
4	Mobile Professional 2	1	MBB High (per user)	6	2	20	20
5	Retail Outlet	3	MBB Medium (per user)	3	0.8	20	20
6	Local Trading Company	5	MBB Medium (per user)	3	0.8	20	20
7	Local Production Company	5	MBB Low (per user)	1	0.2	5	10
8	Local Service Company	25	MBB Low (per user)	1	0.2	5	10

A4 The Belgian baskets

The main objective of the study is to assess prices in Belgium in relationship to prices in other countries.

For this kind of analysis it is more relevant to use typical Belgian usage profiles and refer any comparisons to those. Using international profiles (e.g. OECD baskets) will not show the results for Belgium in a way that is easily recognizable or sufficiently relevant for the Belgian market. With the Belgian profiles (baskets) the results for Belgium are more in line with what Belgian businesses experience and actually reflect what a Belgian company would pay if it would operate in any of the study countries.

The caveat to this is that the results for other countries based on the Belgian profiles will not be correct as seen by the consumers in those countries, but that is not the objective here. Applying the Belgian profiles to for example the UK tariffs will give results as if a Belgian business moved to the UK and used the services in the same way as in Belgium. Thus the cost experienced will be comparable to that in Belgium, but not necessarily optimal for the UK market.

It is never possible to have a completely neutral comparison, as usage profiles and prices work together in any market. However, providing this is borne in mind when reviewing the results, this is the best way to show the price levels in other countries as seen from one particular country.

Please note that results from a national basket will change from study to study, i.e. the results from this BIPT/IBPT study using Belgian baskets will not be comparable with the results from e.g. an Ofcom study using UK baskets, even though the basic methodology is the same. This is because the typical usage patterns tend to vary by market.

The Belgian baskets are developed based on statistics provided by BIPT/IBPT and Belgian providers. Not all baskets are actually used in the eight businesses, but they are shown here for completeness in the tables below. There is also additional information on call distribution etc. with the basket definitions.

As already mentioned in earlier in this appendix, SoHo (Single Office/Home Office) businesses are covered by business types 1 to 4, while refer to a, while SMEs (Small and Medium Enterprise) are covered by business types 5 to 8.

There are three sets of fixed voice baskets for low, medium and high usage, each based on the main focus of voice calls. All data shown is per user.

Figure 57: Belgian Fixed voice baskets

Type of basket	Voice calls SoHo Total calls/month	Voice calls SME Total calls/month
Low usage	40	30
Medium usage	120	90
High usage	240	180

There are three sets of mobile voice baskets based on low, medium and high usage of voice and message/data. All data shown is per user.

Figure 58: Belgian Mobile voice baskets

Type of basket	Voice calls SoHo Total calls/month	Voice calls SME Total calls/month	SMS/ month	Data (GB)/ month
Low voice, low SMS/data	40	30	25	0.1
Medium voice, low SMS/data	100	80	25	0.1
High voice, low SMS/data	250	160	25	0.1
Low voice, medium SMS/data	40	30	60	0.4
Medium voice, medium SMS/data	100	80	60	0.4
High voice, medium SMS/data	250	160	60	0.4
Low voice, high SMS/data	40	30	120	1.0
Medium voice, high SMS/data	100	80	120	1.0
High voice, high SMS/data	250	160	120	1.0

There are three basic baskets for fixed broadband, mainly varied by speed requirements.

Figure 59: Belgian Fixed broadband baskets

Type of basket	Data usage GB/month	Hours used/ month	Minimum speed (Mb/s)
Low usage	20	80	10
Medium usage	50	240	15
High usage	150	240	30

There are three basic baskets for mobile broadband, mainly varied by data usage volume and the number of hours and days the service is used per month. All data shown is per user.

Figure 60: Belgian Mobile broadband baskets

Type of basket	Data usage GB/month	Hours used/ month	Days used/ month
Low usage	0.2	5	10
Medium usage	0.8	20	20
High usage	2	20	20

A5 Provider selection

Providers have been chosen based largely on market share information, where this is available. The basic “rule” is that the providers covered will between them have at least 80% market share in a given service market. Providers with the highest market shares are considered first until the 80% market share threshold is fulfilled. As there is little published data specifically on market shares for the business market, and as residential services are expected to be purchased by several of the business types, total market shares have been used, for all services and countries. The market shares are based on subscriber numbers. In the case of mobile broadband it is often difficult to establish accurate market shares, and, where this is the case, alternative information may have been used.

As some of the market share information used in this study is confidential, market share numbers are not included in this report.

As Belgium is the primary study country, tariff plans published by a number of niche business providers have been collected. The providers in question are listed below.

- EDPNet
- 3 Stars Net
- United Telecom
- Belcenter
- Colt

Please note that the tariff plans of the above niche players are not necessarily included in the results.

A summary of the providers for which tariff plan information has been collected for each service is shown in the figure below. With the exception of fixed voice, where it is assumed that a dedicated business line and therefore business tariff plans will be required, both business and residential service prices have been considered, where these are available and published.

Figure 61: Provider and service overview

	Fixed voice		Mobile voice		Fixed broadband		Mobile broadband	
	Business	Residential	Business	Residential	Business	Residential	Business	Residential
Belgium								
Proximus	✓	✓	✓	✓	✓	✓	✓	✓
Telenet	✓	✓	✓	✓	✓	✓	✓	✓
Numericable	✓	✓			✓	✓		
Mobistar	✓		✓	✓	✓		✓	✓
Base	✓	✓	✓	✓			✓	✓
EDPNet	✓	✓			✓	✓		
3 Stars Net	✓	✓						
United Telecom	✓	✓	✓	✓	✓	✓		
Belcenter					✓			
Voo		✓		✓		✓		
Colt	✓							
France								
Orange	✓	✓	✓	✓	✓	✓	✓	✓
SFR	✓	✓	✓	✓	✓	✓	✓	✓
Bouygues	✓	✓	✓	✓	✓	✓	✓	✓
Free	✓	✓		✓		✓		
Numericable	✓	✓		✓		✓		
Germany								
Telekom/T-Mobile	✓	✓	✓	✓	✓	✓	✓	✓
United Internet (1&1)	✓	✓		✓	✓	✓		
Unity Media	✓	✓			✓	✓		
Vodafone	✓	✓	✓	✓	✓	✓	✓	✓
O2	✓	✓	✓	✓	✓	✓	✓	✓
E-Plus (Base)		✓	✓	✓			✓	✓
Kabel Deutschland	✓	✓			✓	✓		
Netherlands								
KPN	✓	✓	✓	✓	✓	✓	✓	✓
Ziggo	✓	✓	✓	✓	✓	✓		
UPC	✓	✓			✓	✓		
Vodafone		✓	✓	✓		✓	✓	✓
T-Mobile			✓	✓			✓	✓
UK								
BT	✓	✓	✓		✓	✓	✓	
TalkTalk	✓	✓			✓	✓		
EE	✓	✓	✓	✓	✓	✓	✓	✓
O2			✓	✓			✓	✓
Vodafone			✓	✓			✓	✓
3 UK			✓	✓			✓	✓
Virgin Media	✓			✓	✓	✓		✓
Sky		✓				✓		

Note: Although residential fixed voice service pricing is generally not included in the analysis, some residential pricing may be included because it forms part of a bundle (e.g. residential broadband)

NB. Cells shaded in grey indicate where no information has been gathered, either because it falls outside of the agreed list of providers, because there is no published data available or because the service is not offered by the provider.

Please note that not all providers will appear in all results, as the services they provide may or may not fit with the business requirements. In general the cheapest results, or an average of a selection of results, will be presented.

A6 Data issues

This section contains clarification around a number of issues relating to the data collected and included within the system.

A6.1 Inclusion of residential tariffs

For businesses where there is only one user, residential services may also be considered relevant. The residential services that are considered for such business types include fixed broadband, mobile voice and mobile broadband. Residential voice services, offered as a standalone services are not considered valid for businesses, as a typical business will only be offered a dedicated business line/number. The caveat to this is where a business purchases a broadband line which is bundled with fixed voice. Where this is the case, it is assumed that the business will not purchase additional fixed voice services, but would use the voice service included within the bundle.

For businesses with more than one user, the use of residential fixed broadband services is not considered valid, and for these business types, only fixed business services are taken into account. Residential mobile services are still considered, however, as it is assumed that mobile can be purchased on an individual basis.

The applicability of residential services by service type is addressed in more detail below.

Fixed Broadband: Although there is a clear delineation between residential and business services, there is a strong indication that residential broadband is extensively used by the business community; hence residential services have been included in the system, for consideration.

Mobile Voice: There is an increasing blur between residential and business mobile voice services, with many individuals using one phone and one tariff for both work and personal use, and businesses increasingly allowing employees to use their own phone and tariff within the workplace (BYOD - Bring Your Own Device) - this is particularly true for small and medium sized businesses. For this reason, it is important to include residential pricing alongside business offers. It is assumed that pre-paid offers are not relevant for business use, and are not included.

Mobile Broadband: Similar to mobile voice, there is often little to differentiate between consumer and business services, at the small and medium-sized business level. Furthermore, many providers do not specify whether tariffs are aimed at business or residential users, and hence all published offers for mobile broadband for the specified providers have been included. Both pre- and post-paid offers have been collected for mobile broadband, as it is often consumed in a different way to mobile voice (which is assumed to be post-paid only).

Fixed Voice: For fixed voice, business- only pricing has been considered, as a business will typically require a dedicated line for business use. Residential pricing may still be included for some providers, however, where it is part of a bundle with a fixed broadband service.

A6.2 SIM-only pricing vs subsidized offers

Although the requirement is to include SIM-only offers, this may severely limit the analysis, and cause some providers to fall out of the analysis altogether. To ensure that all relevant providers are considered, prices for plans which include a handset subsidy have also been collected. In principle this should not adversely affect any output, as such plans will only feature when there is no (usually cheaper) SIM alternative available. A separate cost for the handset has not been included for any tariff.

A6.3 Discounts/promotions

Information on promotions and discounts has been collected for completeness, but is not included in the results, in line with what was agreed for the 2014 study.

A6.4 Hardware

Some hardware costs are included in the benchmark, e.g. modems or routers for fixed broadband. Information on such hardware related costs (rental fee and/or purchasing costs) are included separately where they are not included in the monthly subscription. Handsets for fixed and mobile voice are not included.

A6.5 Installation fees

Information on installation fees has been collected, but is not necessarily included in the results.

A6.6 Inclusion of bundles with television

As television is not included in the business profiles, any bundles that include television have generally been disregarded. However, for certain providers, most notably cable providers, where it is not possible to buy any telecoms service unless it is accompanied by television, some tariffs are included which do include this. Where this is the case, the most basic television service has been selected, with no add-ons of channel packages, in order to ensure that these providers are included.

A6.7 International calls

In order to ensure that the benchmarking analysis is not over-complicated, international calls are assumed to be to fixed networks. Furthermore, the international destinations for calls are assumed to be the same for calls from both fixed and mobile. Roaming is not included, as it is unlikely to produce a significantly different result for each country.

The international call destinations are listed in the table below, and traffic is assumed to be distributed in varying proportions over these countries. As some of the traffic distribution data has been provided confidentially, the actual proportions used for the study are not published in this report.

Figure 62: International call destinations

From/To -->	Belgium	France	Netherlands	Germany	Italy	Morocco	Spain	UK	USA	Japan
Belgium										
France										
Germany										
Netherlands										
United Kingdom										

A6.8 Regional offers

Some providers, typically (but not exclusively) cable providers may provide regional offers only, based on their primary coverage area. In this study, abstraction is made of such regional availability in the sense that all tariff plans are considered in a certain country, even if these are not available in the entire country. In other words, the location of the business customer is not taken into account in order to filter out tariff plans that are not available at that location. Inclusion of such constraints would introduce unnecessary complexity into the model.

A6.9 Differences in provider peak/off peak definitions

No corrections are made to address differences in peak hour ranges as to fine tune to this degree is very complex, and not provide any enhanced insights.

A6.10 Optional tariff plan features

Broadband tariff plans that optionally offer increased download speeds and/or higher data transfer volumes as an option are captured as two separate tariff plans, i.e. the original standard plan as well as the enhanced version including the option.

A6.11 Depreciation and contract term

The overall depreciation period of any one off costs is defined in each basket, and is normally set to 5 years for fixed voice, 3 years for fixed broadband and mobile voice and 1 year for mobile broadband. This is according to the OECD basket definitions.

Information on contract term periods have been collected for each service. In the analysis, the contract term filter is set to “any”, as the longest possible contract term is preferred in the data. This will normally give the lowest price.

A6.12 Line rental issues

For fixed broadband and fixed voice there can be an issue with double counting of the line rental in bundled services. Hence it is common to exclude the line rental for the fixed broadband elements of a bundle, and rather include it in the bundle price.

Appendix B: Additional Results

B: Additional results

This section shows the detailed results, by the various calculation types, for each business types, as well as detailed rankings.

The first graphic shows results for the cheapest offer, average of the cheapest 3 providers and average of the 3 largest providers, with results shown separately for single service and multiplay offers, where relevant (Business types 1-4; business types 5-8 show results for single service offers only).

The second graphic shows the country rankings for each of the calculation types mentioned above, and also includes the ranking for the cheapest overall offer.

The final graphic shows single service results broken down into individual communications service type. Again, results are shown for the 3 calculation types; for cheapest offer, average of the cheapest 3 providers and average of the 3 largest providers.

B.1.1: Local-based individual business

Figure 63: Results for single service and multiplay offers, by calculation type: Local-based individual business

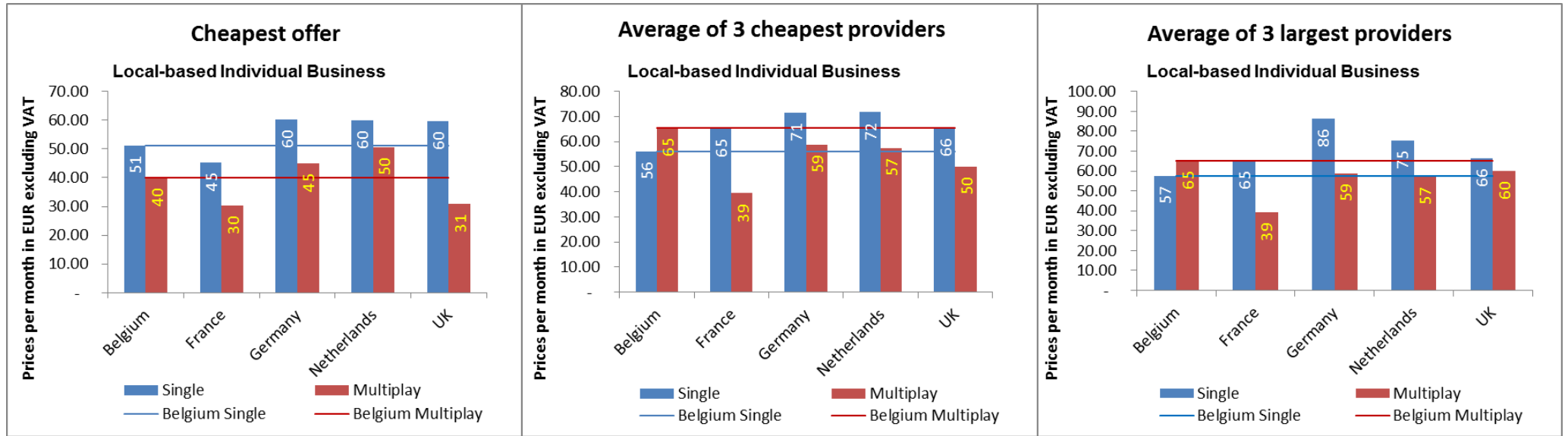
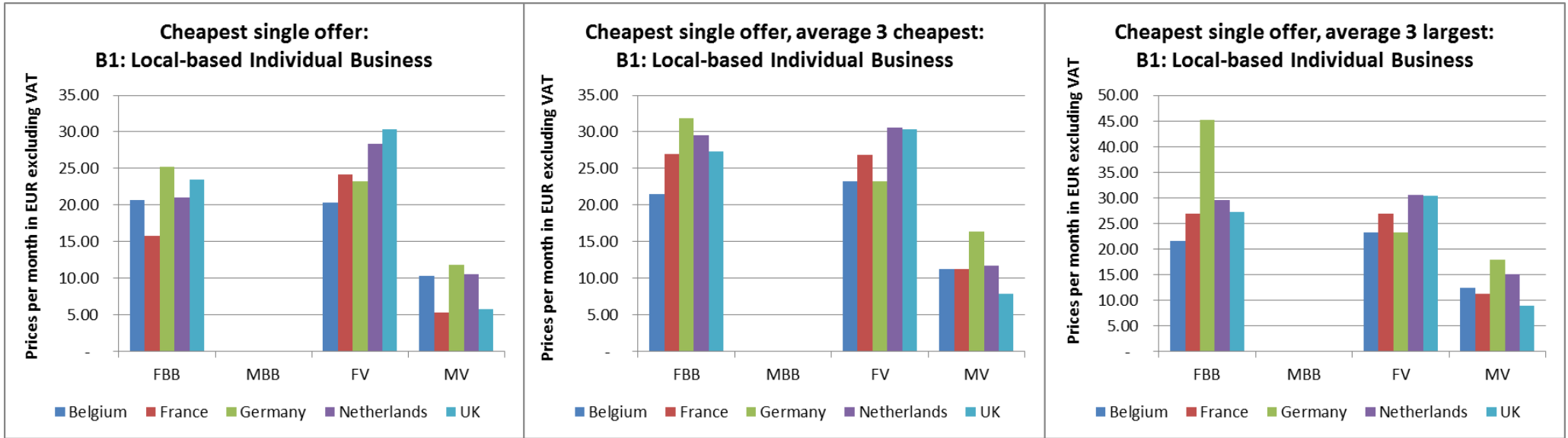


Figure 64: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Local-based individual business

	Cheapest			Average of 3 cheapest			Average of 3 largest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	2	3	3	1	5	3	1	5	2
France	1	1	1	2	1	1	2	1	1
Germany	5	4	4	4	4	5	5	3	4
Netherlands	4	5	5	5	3	4	4	2	3
UK	3	2	2	3	2	2	3	4	5

Figure 65: Cheapest single offers, broken down by service, by calculation type: Local-based individual business



B.1.2: Home-based professional

Figure 66: Results for single service and multiplay offers, by calculation type: Home-based professional

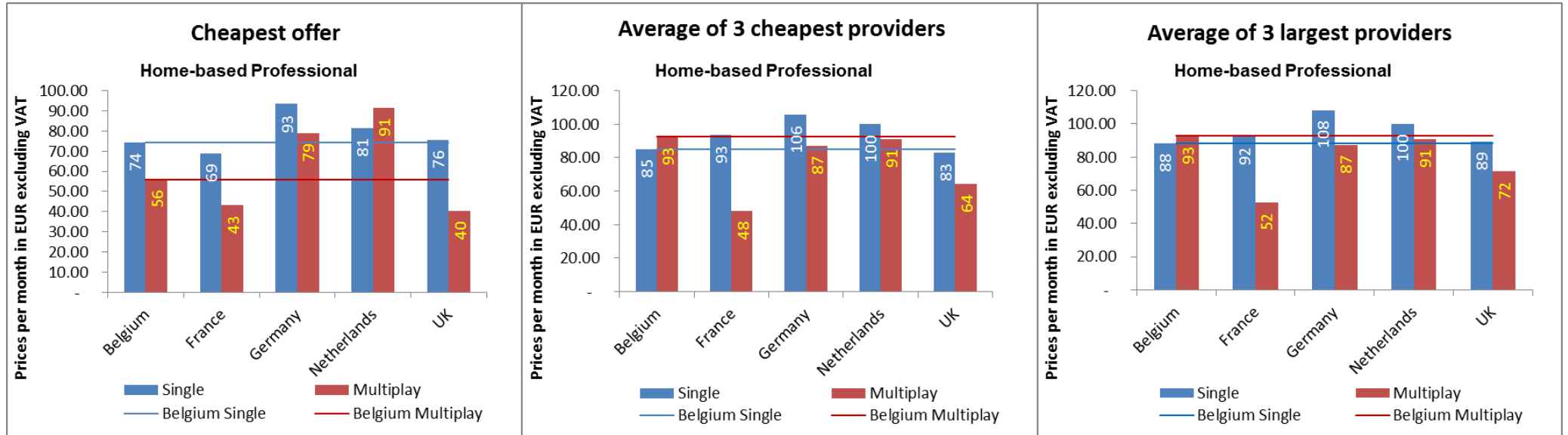
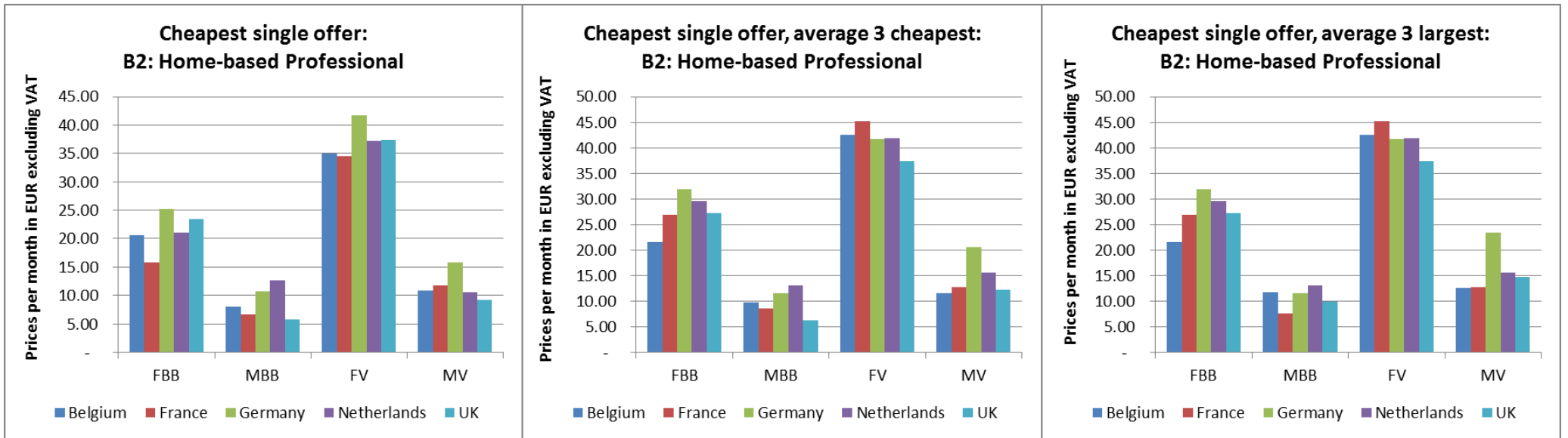


Figure 67: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Home-based professional

	Cheapest			Average of 3 cheapest			Average of 3 largest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	2	3	3	2	5	3	1	5	4
France	1	2	2	3	1	1	3	1	1
Germany	5	4	4	5	3	4	5	3	3
Netherlands	4	5	5	4	4	5	4	4	5
UK	3	1	1	1	2	2	2	2	2

Figure 68: Cheapest single offers, broken down by service, by calculation type: Home-based professional



B.1.3: Mobile professional 1

Figure 69: Results for single service and multiplay offers, by calculation type: Mobile professional 1

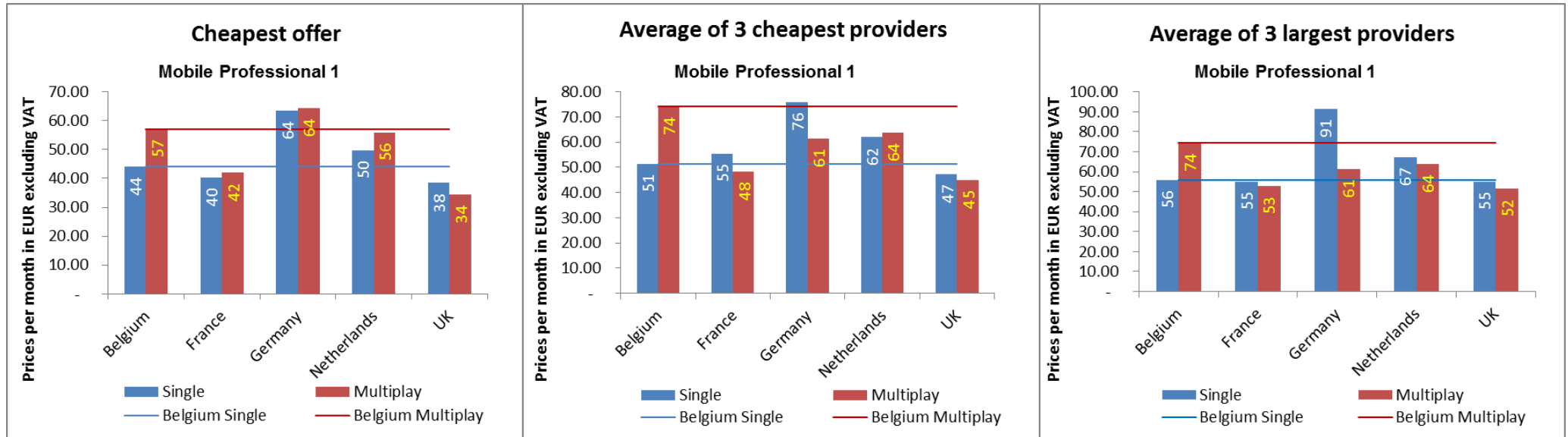
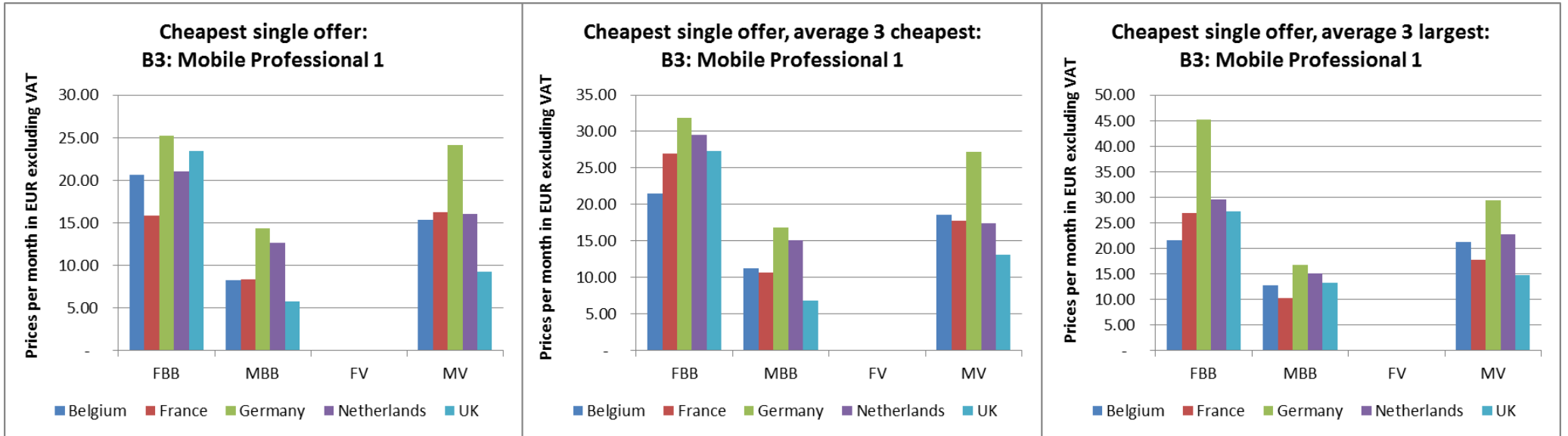


Figure 70: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Mobile professional 1

	Cheapest			Average of 3 cheapest			Average of 3 largest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	3	4	3	2	5	3	3	5	3
France	2	2	2	3	2	2	1	2	2
Germany	5	5	5	5	3	4	5	3	4
Netherlands	4	3	4	4	4	5	4	4	5
UK	1	1	1	1	1	1	2	1	1

Figure 71: Cheapest single offers, broken down by service, by calculation type: Mobile professional 1



B.1.4: Mobile professional 2

Figure 72: Results for single service and multiplay offers, by calculation type: Mobile professional 2

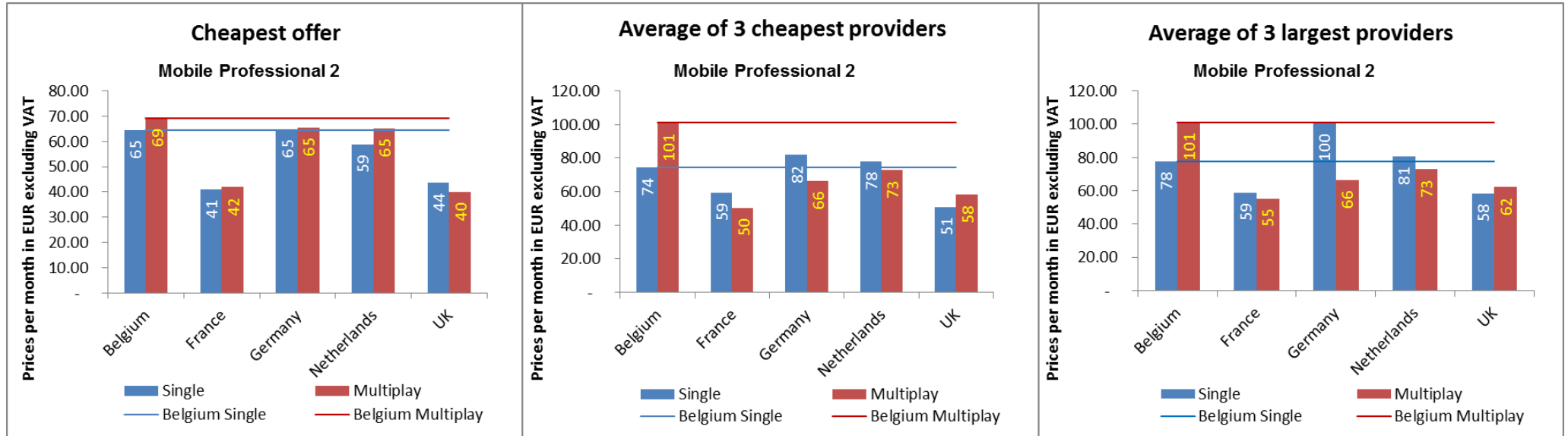
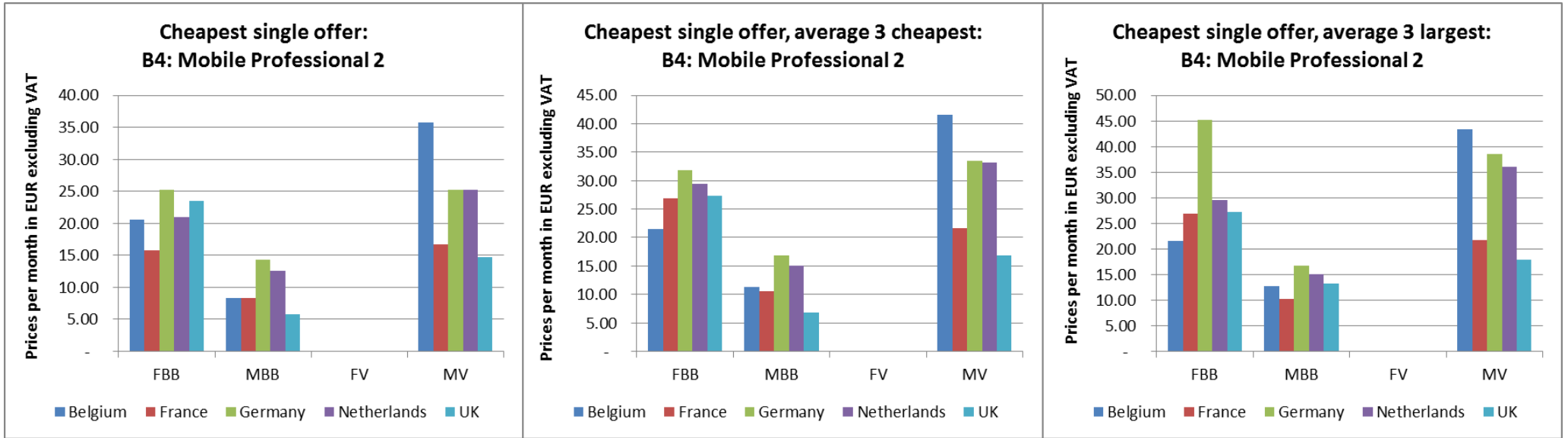


Figure 73: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Mobile professional 2

	Cheapest			Average of 3 cheapest			Average of 3 largest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	4	5	4	3	5	5	3	5	5
France	1	2	2	2	1	1	2	1	1
Germany	5	4	5	5	3	3	5	3	3
Netherlands	3	3	3	4	4	4	4	4	4
UK	2	1	1	1	2	2	1	2	2

Figure 74: Cheapest single offers, broken down by service, by calculation type: Mobile professional 2



B.1.5: Retail outlet

Figure 75: Results for single service offers, by calculation type: Retail outlet

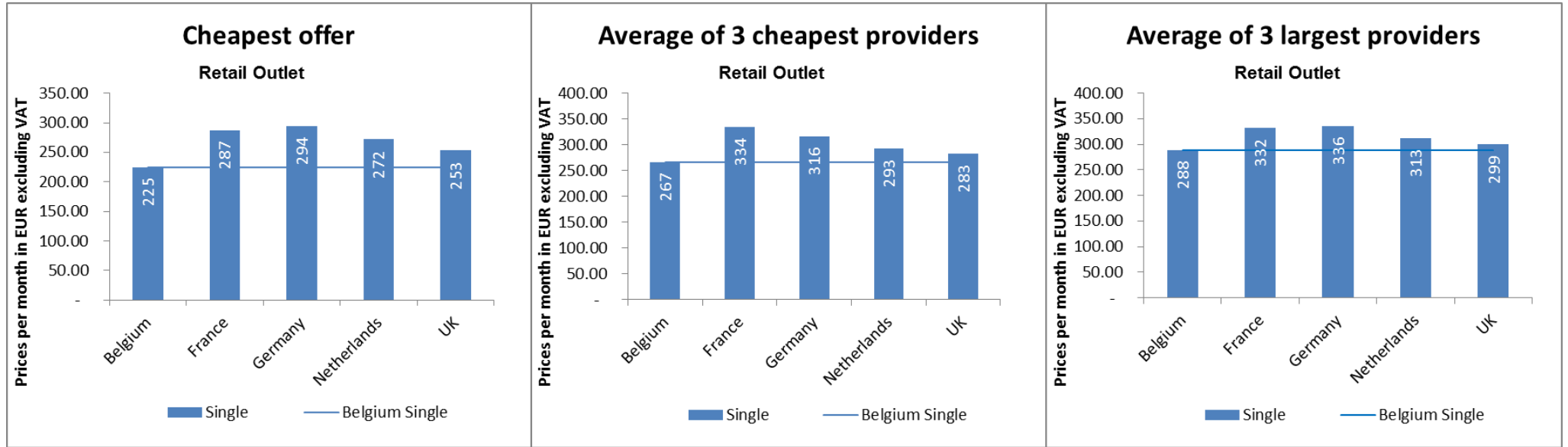
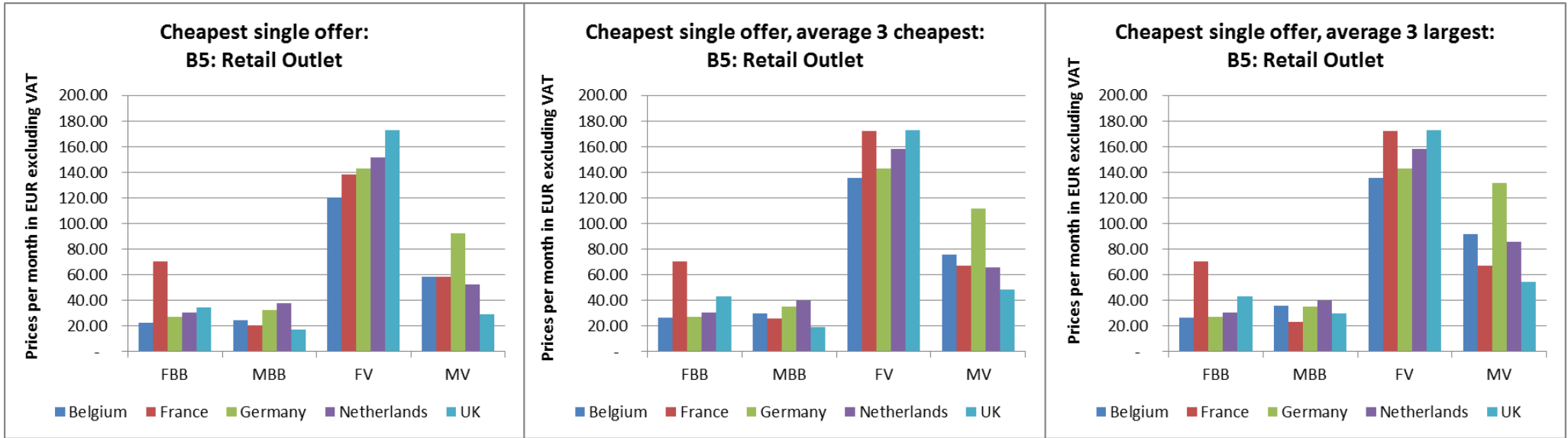


Figure 76: Country rankings for single service offers, by calculation type: Retail outlet

	Cheapest	Average of 3 cheapest	Average of 3 largest
Belgium	1	1	1
France	4	5	4
Germany	5	4	5
Netherlands	3	3	3
UK	2	2	2

Figure 77: Cheapest single offers, broken down by service, by calculation type: Retail outlet



B.1.6: Local trading company

Figure 78: Results for single service offers, by calculation type: Local trading company

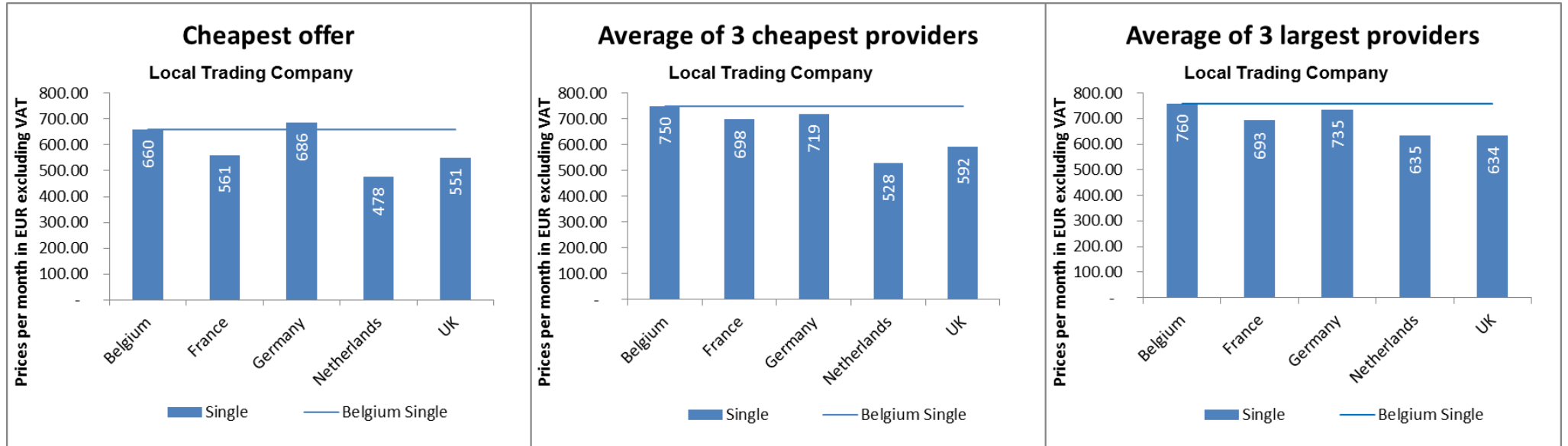
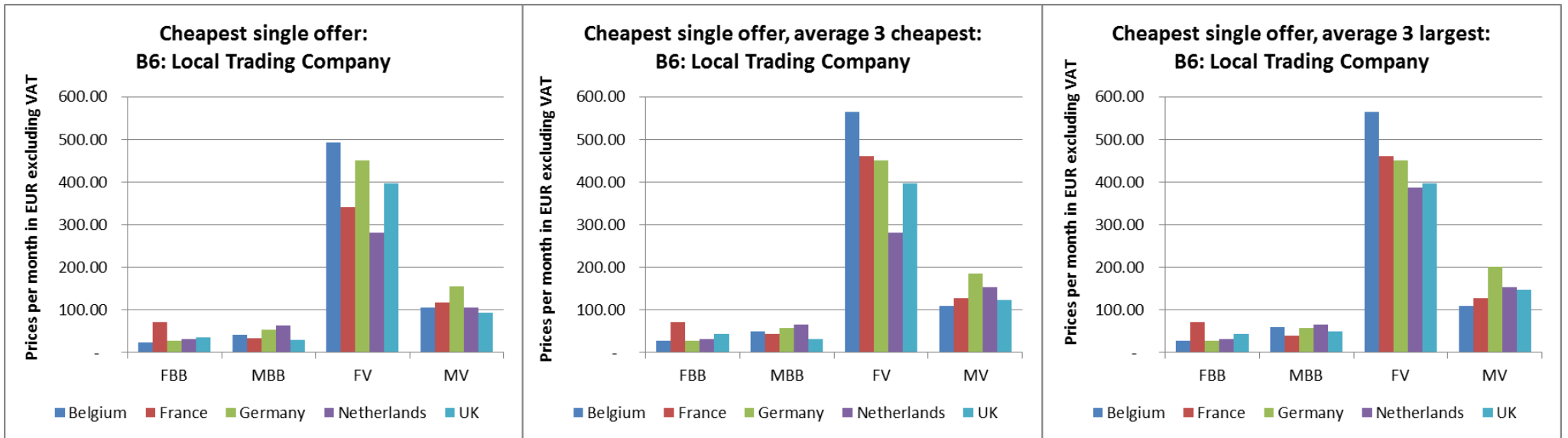


Figure 79: Country rankings for single service offers, by calculation type: Local trading company

	Cheapest	Average of 3 cheapest	Average of 3 largest
Belgium	4	5	5
France	3	3	3
Germany	5	4	4
Netherlands	1	1	2
UK	2	2	1

Figure 80: Cheapest single offers, broken down by service, by calculation type: Local trading company



B.1.7: Local production company

Figure 81: Results for single service offers, by calculation type: Local production company

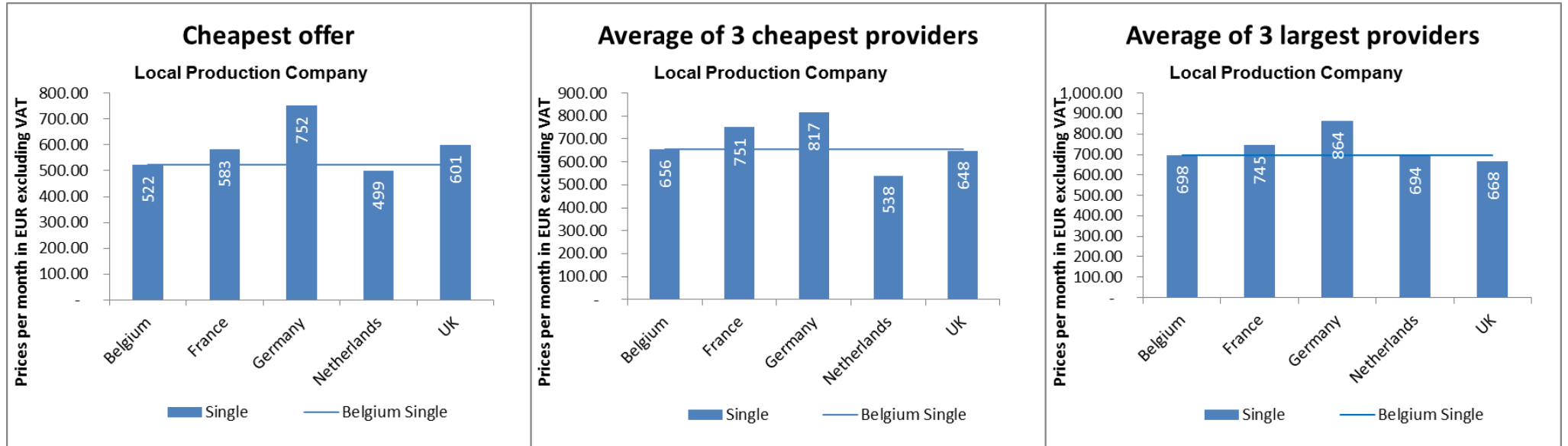
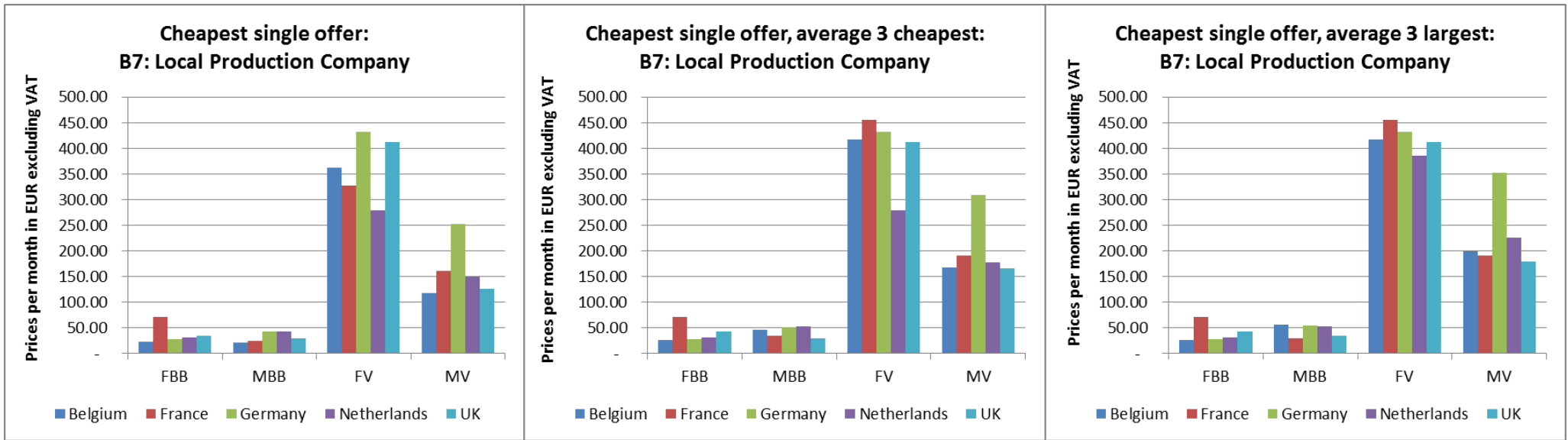


Figure 82: Country rankings for single service offers, by calculation type: Local production company

	Cheapest	Average of 3 cheapest	Average of 3 largest
Belgium	2	3	3
France	3	4	4
Germany	5	5	5
Netherlands	1	1	2
UK	4	2	1

Figure 83: Cheapest single offers, broken down by service, by calculation type: Local production company



B.1.8: Local service company

Figure 84: Results for single service offers, by calculation type: Local service company

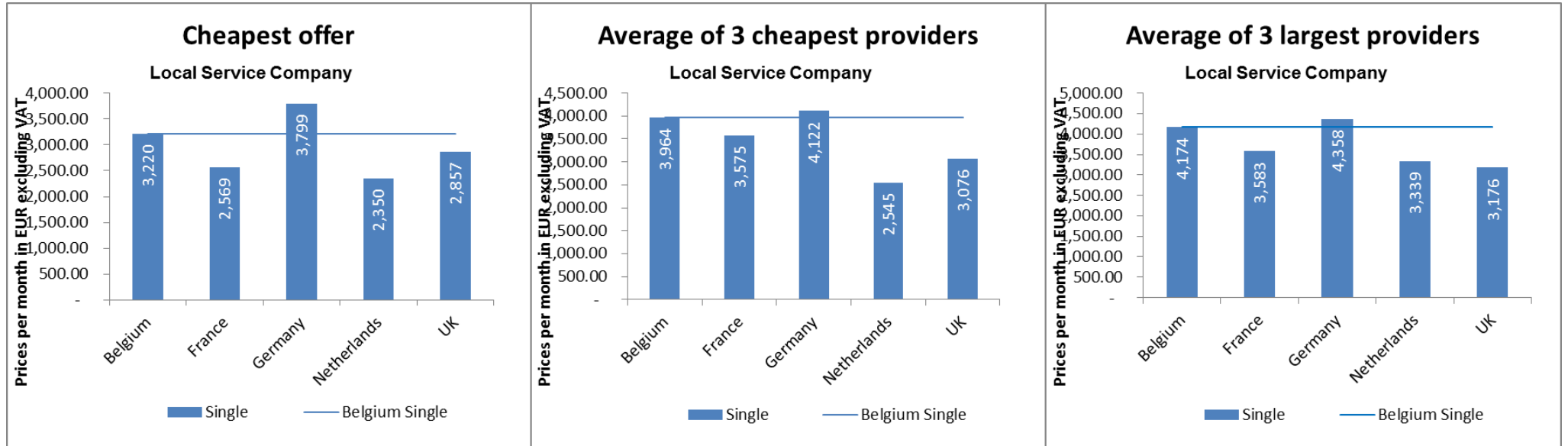
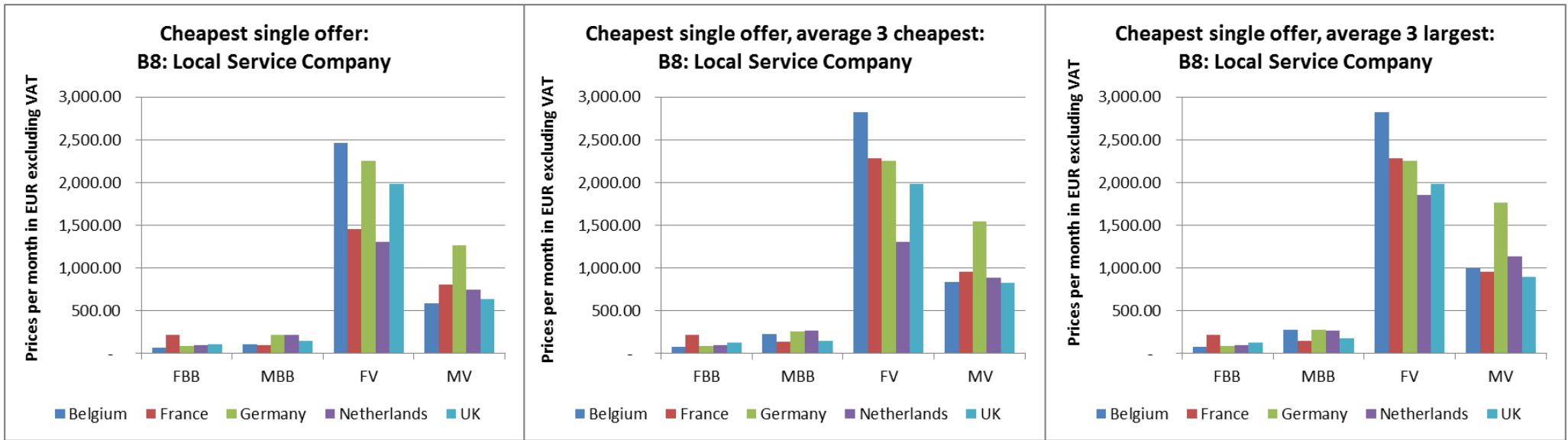


Figure 85: Country rankings for single service offers, by calculation type: Local service company

	Cheapest	Average of 3 cheapest	Average of 3 largest
Belgium	4	4	4
France	2	3	3
Germany	5	5	5
Netherlands	1	1	2
UK	3	2	1

Figure 86: Cheapest single offers, broken down by service, by calculation type: Local service company



END OF APPENDICES