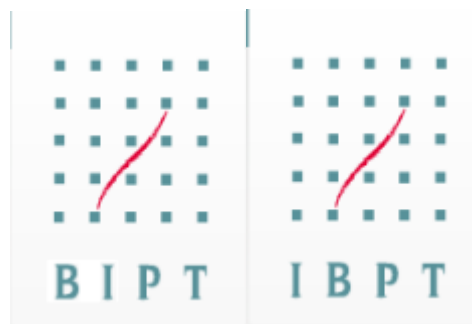


Comparative study into telecommunications business pricing in Belgium, France, Germany, The Netherlands and the United Kingdom in 2017



Study and report produced by

STRATEGYANALYTICS
TELIGEN TARIFF & BENCHMARKING

Strategy Analytics
Teligen Tariff & Benchmarking Service

Josie Sephton, jsephton@strategyanalytics.com

Halvor Sannaes, hsannaes@strategyanalytics.com

Strategy Analytics Ltd.
Bank House
171 Midsummer Boulevard
Milton Keynes MK9 1EB
United Kingdom

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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

Concept of the study

This tariff benchmarking study compares the prices of telecommunications services in Belgium with those of its neighbouring countries, namely France, Germany, the Netherlands and the United Kingdom. In that context prices are compared for the following business services and - where relevant for business use - also residential services: fixed and mobile telephony, as well as fixed and mobile Internet.

The study's target group is limited to self-employed persons and small and or medium enterprises. Only publicly available tariffs and listed on the operators' websites are included. Tailored offers, which are usually presented to larger business clients, are therefore not taken into account. The results are based on information collected in February / March 2017.

For the purpose of this study a number of usage profiles typical of Belgian business telecommunications usages have been developed based on information provided by Belgian operators. The analysis uses a basket methodology¹ to compare the telecommunications charges paid by eight types of business entity. The eight business types can be split into two groups, depending on the number of active telecommunications service users. Business types 1 to 4 are single-user businesses, while business types 5 to 8 are companies with 5 to 50 users.

For single-user business types account has been taken of both single service and multiplay² offers. For multi-user business types the results are based exclusively on the costs of single services, as in their case multiplay does not constitute a relevant offer.

General conclusion about the price level in Belgium

The telecommunications costs faced by Belgian businesses range from cheap to expensive compared to the neighbouring countries, depending on the type of business and whether we only consider the offer of the cheapest provider or the average of the three cheapest providers. Local-based Individual Businesses (business type 1) and Retail Outlets (business type 5), characterised by a low use of telecommunications services,

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 Multiplay comprises a bundle of two or more communications services to which additional single services may be added in cases where the bundle does not cover the full business need. A multiplay result may comprise offers from different operators, e.g. a double play fixed broadband and fixed telephony offer from operator X, a single mobile voice service provided by operator Y and a single mobile broadband service provided by operator Z.

face relatively high costs in Belgium. Companies making intensive use of mobile services are more mid-range in terms of cost. As the use of fixed telephony increases, so does the competitive position of Belgium. That fact is reflected in the results for multi-user businesses, with the exception of the Retail Outlet (business type 5).

For single-user businesses (business types 1 to 4), Belgian operators generally offer competitive prices for single services. However, for these business types, multiplay is never the cheapest option in Belgium, unlike the neighbouring countries, where a combination that includes multiplay often features as the cheapest purchase option. This study also pictures the cost of two “pure bundle” types, i.e. a double play fixed Internet and fixed telephony offer and a triple play offer (fixed Internet, fixed telephony and mobile telephony). Just like last year, Belgium comes out here as the most expensive in the country ranking.

Changes since 2016 - total telecommunications costs

Across the eight business types a mix of increases and decreases has been observed³. Since 2016, for the “average of the 3 cheapest operators” result type, the total communications costs have only risen for Local-based Individual Businesses (business type 1) and Retail Outlets (business type 5). For the latter business type total costs have increased considerably, whereas the other multi-user business types (making more intensive use of fixed telephony) benefited from a significant cost reduction.

When considering only the cheapest operators the changes are generally less pronounced. The variation in cost between the cheapest and the average of the three cheapest operators reflects the extent to which in terms of cost the tariff plans are spread across the various providers. The larger the difference between the cheapest and the average of the three cheapest providers, the greater the interest for business users to compare offers, so as to save costs.

Changes since 2016 - country ranking

Regarding the “average of the 3 cheapest operators” result type Belgium’s position in the country ranking has improved compared to last year for six out of the eight business types. As to the other business types the ranking has remained unchanged for some and has deteriorated for others.

³ The changes to mobile handset data and mobile broadband use from 2016 to 2017 have also been applied retrospectively to the 2016 baskets, so that the year on year comparison is considering identical baskets. Additionally, for the UK results, which rely on conversion from pounds to euros, the conversion rate used in the 2017 study has also been applied retrospectively to the 2016 results.

The rankings for Belgium have improved for:

- Home-based Professionals (business type 2), which takes third place this year, instead of fourth in the previous edition.
- businesses marked by an intensive use of mobile communications, i.e. Mobile Professional type 1 (business type 3) and Mobile Professional type 2 (business type 4), which were in fourth and fifth place respectively in 2016, whereas they are mid-range in 2017.
- multi-user businesses: Local Trading Company (business type 6), Local Production Company (business type 7) and Local Service Company (business type 8). Belgium comes out cheapest in 2017, whereas these business types were second, fourth and fourth respectively in the 2016 country ranking.

The rankings for Belgium are unchanged for:

- the Local-based Individual Business (business type 1), with Belgium still coming out as the most expensive. For this business type, costs are fairly competitive for stand-alone services, but 3 of the 4 neighbouring countries have a more favourable environment for multiplay.

The rankings for Belgium have deteriorated for:

- Retail Outlets (business type 5), for which the ranking for Belgium fell from second cheapest position to second most expensive.

When only considering the cheapest operators, the Belgian rankings have improved for five out of eight business types (Mobile Professional type 1, Mobile Professional type 2, Retail Outlet, Local Production Company and Local Service Company). The rankings have remained unchanged for Home-based Professionals and Local Trading Companies, whereas the position of Local-based Individual Businesses has deteriorated.

Changes since 2016 - analysis per telecommunications service

The key changes that have driven the evolution since last year are described below on a service by service basis.

- For business types where fixed telephony use is high, the result for Belgium has improved significantly, as a result of revisions to fixed voice pricing by one of the main operators. In the second half of 2016, the operator in question introduced optional “all-you-can-eat” packages that also encompassed international calls. For those businesses where fixed voice use is heavy, this resulted in a sharp reduction in the cost of that product and hence the total cost. By contrast, pricing and costs for light to moderate use of fixed telephony are broadly stable.

The position of the Netherlands has decreased substantially because one of the main operators no longer promotes any business “all-you-can-eat” fixed telephony options

on its website. The result for this operator is now based on “pay-as-you-use” pricing, which results in considerably higher costs - especially for high usage - compared to last year. Even if those options were still available to business customers, they cannot be taken into account since they are not published.

- Fixed broadband pricing has not changed very much in general. There have been some small increases in Belgium, but this is also true in other countries (especially the UK). The exception to this is France, where the introduction of a very low priced (residential) broadband bundle from one provider resulted in a fairly large reduction in the cost for France for several of the single-user businesses.

When considering the multi-user business types, for which only business tariff plans have been considered, Belgium (still) ranks as second but last. Business broadband tariff plans are most expensive in France.

- Total mobile voice costs (including costs for data traffic on smartphones) have decreased in Belgium. This is mainly as a result of higher data allowances. These changes have generally been introduced with no (significant) price increases, resulting in an effective cost reduction as the user’s needs can be fulfilled by a cheaper mobile voice bundle compared to the year before.

Compared to 2016, the mobile offering is now more in line with the current (increased) data usage and this is the main cause of the better position of Belgium for this product. This has an impact on the results across all business types, but it is most visible on the position of Belgium for business type 3 and especially business type 4.

- Mobile broadband pricing (tablet and dongle usage) has seen some fairly substantial reductions in Belgium, and while mobile Internet only makes up a relatively small proportion of the total cost for most businesses, these decreases have helped to pull down the total cost.

Qualitative elements

In terms of the non-price related data, changes since 2016 have been fairly minimal. The elements that have seen the greatest change are advertised download speeds for fixed Internet: a number of operators have removed products with lower speeds from their offer and increased the maximum speed of existing products. Qualitative elements, such as the availability and performance of the fixed and mobile networks, are not analysed within the framework of this study. In connection with “speed offered through fixed networks” it is important to note that services with advertised higher speeds are not always available to each customer in every country. In Belgium, NGA (Next Generation Access) broadband is widely spread compared to other countries.

The findings in the context of this study are purely based on price related elements and do not take account of any quality differences between the study countries. In any case, as users will not attach equal importance to non-price related elements it is difficult to quantify them and include them in a meaningful sense in the benchmark.

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 in 2014, the study was repeated in 2015 and 2016, and most recently in 2017, to allow both the assessment of current pricing but also to consider how prices have evolved over time. For each update of the study, the same set of countries has been considered. Similar to previous years, 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 are 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”. 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 identified businesses

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

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.

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, 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

3.1.1 Changes since 2016

While there have been no changes to the basic structure of the business types since 2016, there has been a revision (increase) of the levels of mobile broadband used by the different businesses, based on feedback from the Belgian operators, as the 2016 data levels were considered too low in 2017. The increase in mobile broadband 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. In order to ensure the time series consistency between 2016 and 2017, these changes have been applied retrospectively to the 2016 baskets and system. The retrospective application of this increase means that it is not possible to directly compare the results for 2016 presented in this report with those presented last year.

The changes to mobile broadband are shown below.

Mobile Broadband	2016/Month	2017/Month
Low	0.3 GB	0.4 GB
Medium	1.6 GB	1.8 GB
High	4 GB	4.7 GB

Mobile Voice handset data	2016/Month	2017/Month
Low	0.2 GB	0.2 GB
Medium	0.8 GB	1 GB
High	2.5 GB	3 GB

The increase in mobile broadband and mobile handset data has had some impact on costs, as a result of the typical data allowances seen with these tariffs. E.g. for the high usage mobile broadband, previously set at 4GB, this would typically have been fulfilled by either a 4GB tariff or a tariff with a lower allowance e.g. 2GB) plus 1GB add-on packages. Based on how most tariffs are structured, the increase to 4.7GB would require either an additional 1GB add-on, or an incremental overage charge.

This will increase costs in all countries, however, the greatest impact will be in those countries where mobile broadband and/or mobile handset data is more expensive, or allowances are smaller.

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 are 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 at 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 2017, with data taken from company websites. The system contains over 3,100 individual service tariffs and tariff combinations and over 3,600 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. Tariff plans for mobile voice may include a range of different add-on packages for SMS and/or data, with automatic selection of the most relevant package based on the basket usage information.

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: $\pounds 1 = \text{€}1.17$ has been used, and has been taken from the Oanda web service on 17 March 2017.⁴

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.

⁴ Since the last study, the Euro GBP conversion rate has shifted (from 1.27 to 1.17). While this doesn't impact the time series shown in this report (as the exchange rate for 2017 has also been applied to 2016), if the 2017 report is compared with the 2016 report, the exchange rate shift will make the UK results appear as if they have decreased by around 7% (in addition to any changes to actual costs).

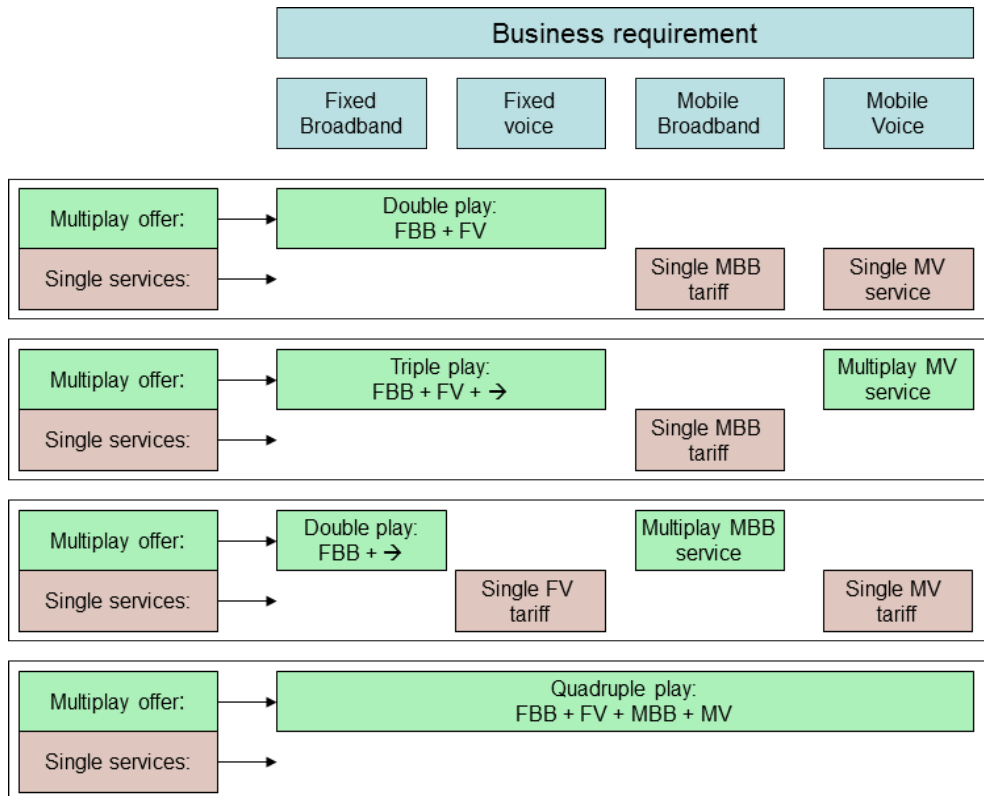
3.7 Study basis and limitations

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 an 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).⁵

⁵ The different services are described in Section 2



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).

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 fixed 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.

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

- The cheapest overall offer 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 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, as listed below, can be found in the appendix to this report. Results are shown for each business type, where relevant.

- Cheapest single service offer
- Cheapest multiplay offer
- Weighted average of 3 cheapest providers, cheapest single service offer
- Weighted average of 3 cheapest providers, cheapest multiplay offer
- Weighted average of 3 largest providers, cheapest single service offer
- Weighted average of 3 largest providers, cheapest multiplay offer

4.1 Local based individual business

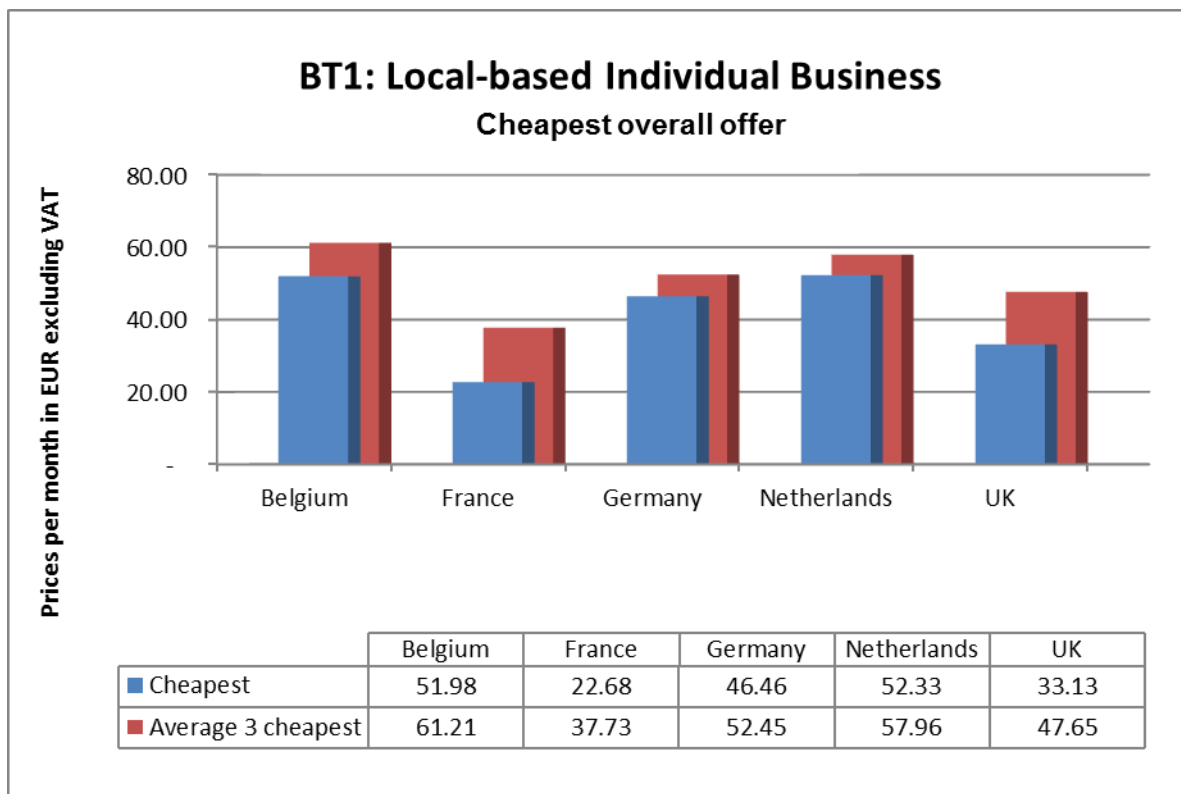
This business describes a business individual primarily working from one location, e.g. a butcher shop or a barber. Such a business is not communications-intensive. It will have a low requirement for fixed broadband, to support general search enquiries and possibly a small web presence. Similarly both 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	50	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	0.2	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 2: 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 3: 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	51.98	68.02	51.98	61.21	71.08	61.21
France	57.56	22.68	22.68	68.66	37.73	37.73
Germany	64.60	46.46	46.46	66.03	52.45	52.45
Netherlands	52.33	52.84	52.33	76.06	57.96	57.96
UK	54.73	33.13	33.13	67.26	47.65	47.65

When we look only at the offer of the cheapest operator, the cost of services bought singly are actually the cheapest in terms of cost for a Local-based Individual Business based in Belgium, compared with the other study countries. When multiplay is brought into the mix, however, Belgium falls in the ranking, and multiplay offers for this business are the most expensive. With the exception of Belgium and The Netherlands, all countries make fairly substantial savings from multiplay. For this usage profile, businesses in France in particular are able to make substantial savings with multiplay - almost €35, equivalent to a saving of 60% over singly purchased services. By contrast, multiplay services in Belgium are the more expensive option, with multiplay costing €16 more than if services are bought individually. Although single service is the cheapest way to buy services in The Netherlands, there is virtually no difference in cost between the two purchase options.

When the weighted average of the three cheapest providers is taken into account (cheapest overall offer), Belgium is the most expensive of the study countries, however, it is relatively close in cost to The Netherlands, which is second most expensive. When businesses purchase services singly, Belgium is once again the cheapest of the study countries; however the position is reversed when multiplay offers are considered. The result for multiplay for the average of the 3 cheapest providers in Belgium is €10 more expensive than if services are purchased singly. For this calculation type, Belgium is the only country where single service purchase is the cheapest option.

The variation between cheapest and average of three cheapest, ranges from just under €6 for The Netherlands and Germany, to just over €15 for France. The cheapest offer in France is an especially low cost bundle that is much cheaper than other bundled offers, and that also keeps the value for the average of the three cheapest low. With the exception of Belgium, multiplay is a good option. As in previous year, multiplay offers in Belgium for lower use are less competitively priced, and single service options, for both calculation types, are the cheapest way for this business to fulfil its communications needs.

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 offer of the cheapest provider 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. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 4: Country rankings by calculation type, Local-based Individual Business

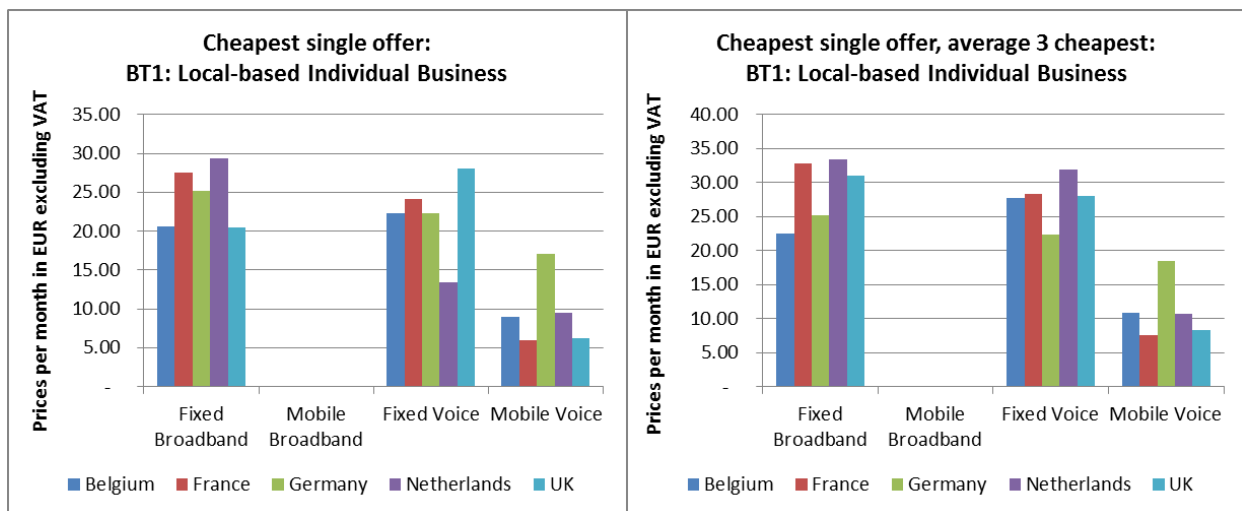
	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	1	5	4	1	5	5
France	4	1	1	4	1	1
Germany	5	3	3	2	3	3
Netherlands	2	4	5	5	4	4
UK	3	2	2	3	2	2

The cheapest overall offer is the most useful ranking to consider from a client perspective, 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 fourth overall for the cheapest offer, and fifth (most expensive) for the average of the three cheapest offers. The cheapest country overall is France.

4.1.3 Cheapest single offers, broken down by service

The graphs below show the results for the Localbased individual business for both the offer of the cheapest provider 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 5: 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 generally favourable for these two services at this usage level, when a range of the cheapest providers is considered, resulting in positive result for Belgium (based on single services). In particular, Belgium has the lowest cost for broadband, based on the average of the 3 cheapest, and is less than €1 more expensive than the UK for broadband, for the overall cheapest single offer.

4.2 Home-based Professional

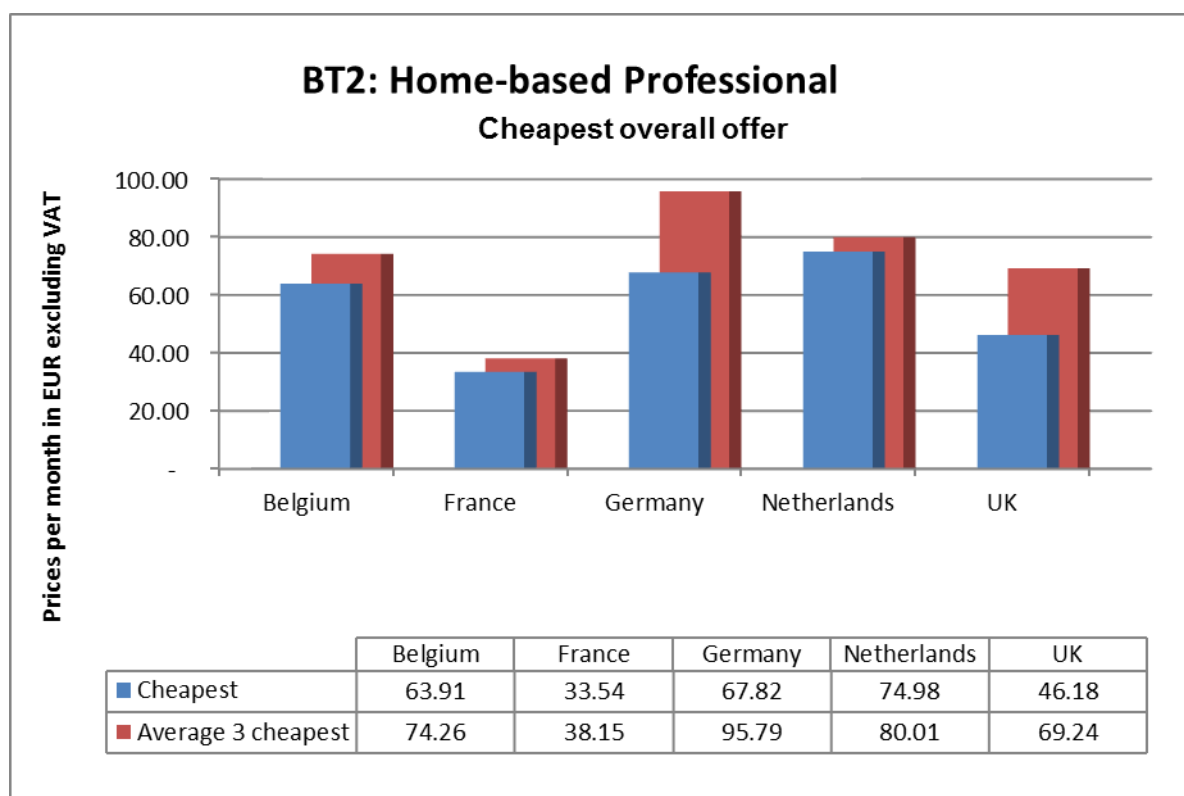
This business describes a business individual primarily working from home, e.g. a home based consultant. The Home-based Professional will be much more communications-intensive than the local based individual business, with a significant proportion of time spent in outbound/inbound communications activities. 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	100	GB/month	Minimum speed	15	Mb/s
Mobile broadband	Medium	1.8	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	1	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 6: 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 7: Detailed results by calculation type, Home-based Professional

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	63.91	76.01	63.91	74.26	86.33	74.26
France	78.85	33.54	33.54	98.87	38.15	38.15
Germany	98.26	67.82	67.82	102.92	95.79	95.79
Netherlands	83.08	74.98	74.98	121.64	80.01	80.01
UK	79.61	46.18	46.18	95.49	69.24	69.24

For the Home-based Professional, based on the cheapest offer, France has the most competitively priced environment, and by quite a considerable way. The UK, which is second cheapest, is over €12 more expensive, while the remaining countries are between €30 and €42. For this user, multiplay generally delivers significant cost savings - up to 60% depending on the country, with the exception of Belgium, where the multiplay calculation is 19% more expensive than the single service one. As is the case with the Local-based individual business, the low cost in France is again driven by the especially cheap broadband bundle.

When we consider the average of the 3 cheapest providers, the benefits of multiplay are still evident. 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, with the cheapest having an especially low price, and next two cheapest having a broadly similar price. 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 offer of the cheapest provider 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. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 8: Country rankings by calculation type, Home-based Professional

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

Belgium ranks third for both the cheapest overall offer of the cheapest providers and the average of the three cheapest providers.

The rankings for Belgium for this business type are considerably better when single services only are considered, both for the cheapest provider and average of the three cheapest providers. Belgium is the cheapest of the study countries for both these calculation types.

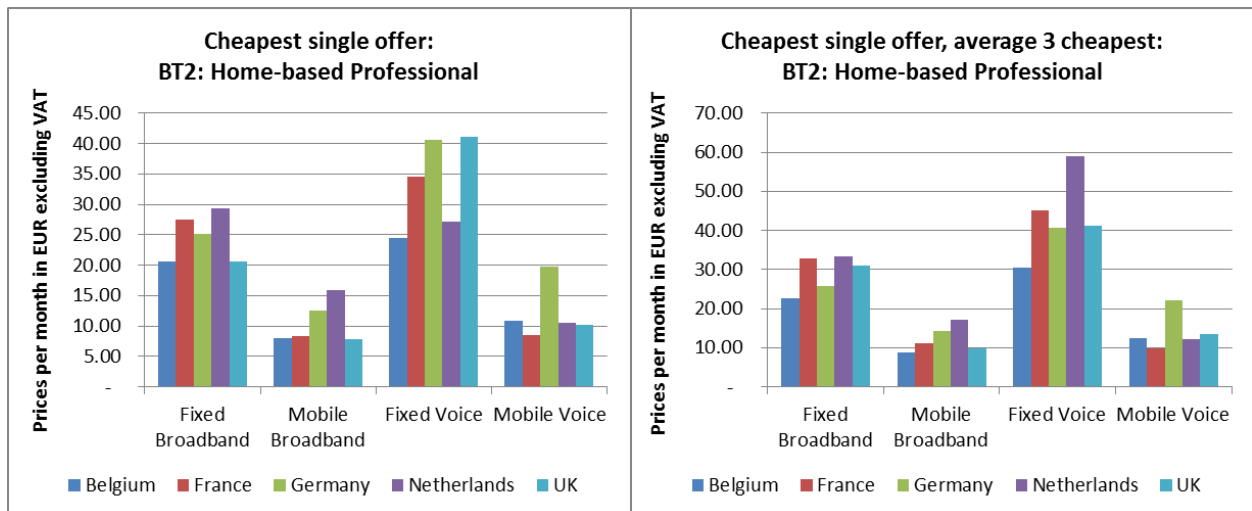
When multiplay offers are considered, however, Belgium falls into third position. The multiplay offers in Belgium that underpin the multiplay results are made up of quad play offers (covering fixed and mobile broadband, and fixed and mobile voice), as well as double play offers, covering fixed broadband and fixed voice, that are generally quite expensive.

France is the cheapest overall, for both calculation types. For the overall cheapest, The Netherlands is the most expensive, while for the average of the 3 cheapest, it is Germany.

4.2.3 Cheapest single offers, broken down by service

The graphs below show the results for the Home-based Professional for both the offer of the cheapest provider 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 9: Cheapest single offers, broken down by service, Home-based Professional



For the Home-based Professional, the costs for fixed voice are the most dominant. 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, fixed voice costs for Belgium are the cheapest of the study countries, while for the other services, prices in Belgium are either second cheapest or within €1 of second cheapest. The low costs across all services results in Belgium being the cheapest overall for single services (cheapest single offer).

When we consider the average of the three cheapest providers, Belgium is cheapest for two of the four services - fixed broadband and fixed voice - and within a few euros of the cheapest, for the mobile services, resulting in Belgium being overall cheapest based on the total cost.

4.3 Mobile Professional 1

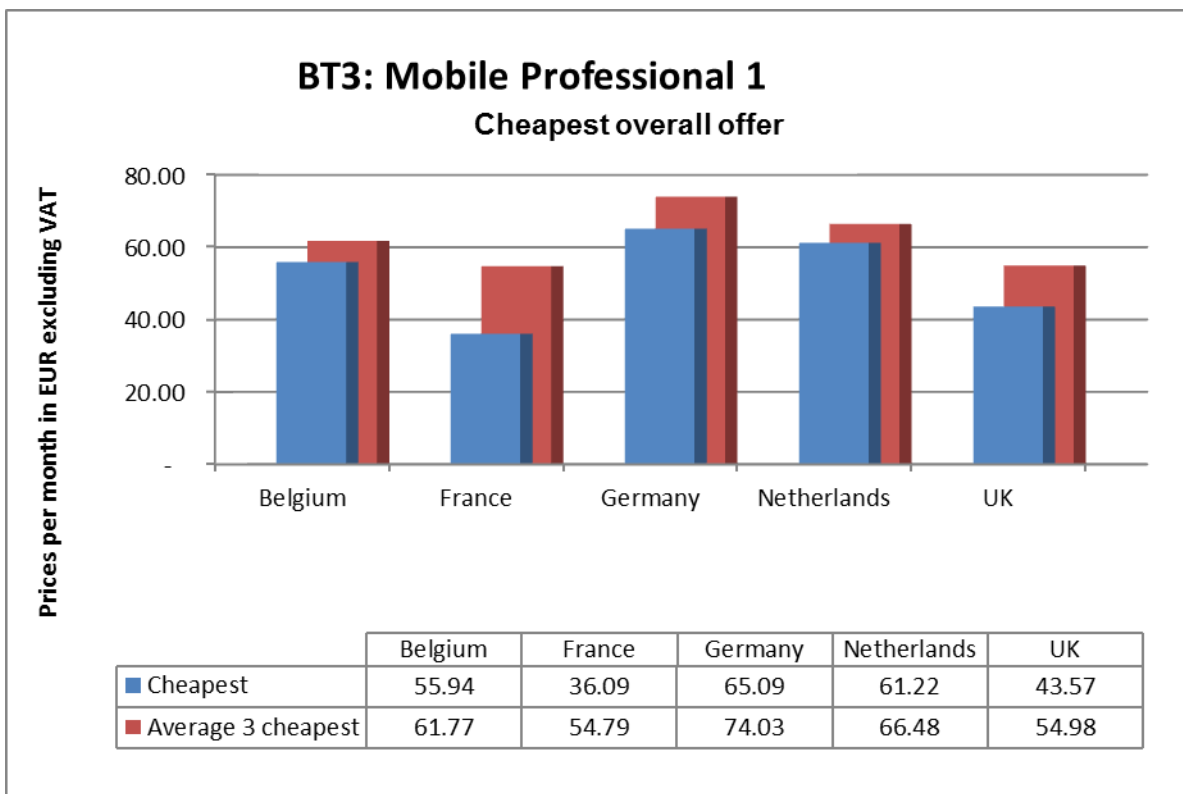
This business describes a business individual primarily working while on the move, e.g. a plumber or contractor. The communications requirements for this business are much more focused towards mobile services, to reflect the need for ‘on-the-move’ communications. Mobile usage is relatively modest, as 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	50	GB/month	Minimum speed	10	Mb/s
Mobile broadband	High	4.7	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	1	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 10: 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 11: Detailed results by calculation type, Mobile Professional 1

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	55.94	90.66	55.94	61.77	93.70	61.77
France	51.04	36.09	36.09	62.15	54.79	54.79
Germany	69.29	65.09	65.09	74.03	76.09	74.03
Netherlands	61.22	61.22	61.22	73.18	66.48	66.48
UK	43.57	45.86	43.57	56.43	54.98	54.98

For Mobile Professional 1, multiplay does offer some cost benefits over single service purchase, depending on the country and calculation type. There are a handful of exceptions to this, notably for the UK, cheapest overall offer, and Germany, average of three cheapest, although the difference in cost between single service and multiplay for these two examples is a few euros only. For Belgium, multiplay is the more expensive option, irrespective of calculation type, and by some considerable way.

On the face of it, these results seem counter-intuitive, as multiplay bundles have not typically been optimized for mobile use, but rather, focused on fixed services, typically fixed broadband and fixed voice (and, for consumers, television services). There is a continuing shift occurring, however, with mobile increasingly being added to bundles, to provide customers with a more complete set of services.

For the Mobile Professional 1, based on the cheapest overall offer of the cheapest providers, Belgium is just under €20 per month more expensive than the cheapest country, France, and around €9 cheaper than the most expensive, Germany.

Taking into account the average of the three cheapest providers, the gap between Belgium and the cheapest country, again France, is much smaller, at just under €7, while it is just over €12 cheaper than the most expensive country, Germany.

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 offer of the cheapest provider 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. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 12: Country rankings by calculation type, Mobile Professional 1

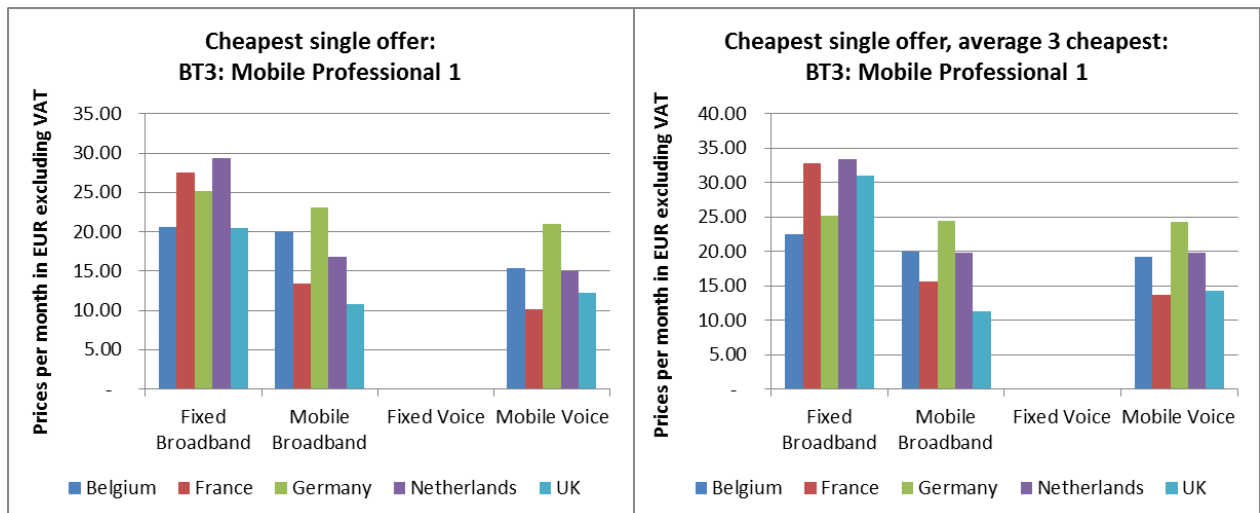
	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	3	5	3	2	5	3
France	2	1	1	3	1	1
Germany	5	4	5	5	4	5
Netherlands	4	3	4	4	3	4
UK	1	2	2	1	2	2

While multiplay offers do not offer any cost advantage in Belgium, the single service costs for this business are competitive (particularly compared to last year), resulting in an average overall position for Belgium for both calculation types. France offers the cheapest market for this business type, while Germany is the most expensive.

4.3.3 Cheapest single offers, broken down by service

The graphs below show the results for the Mobile Professional 1 for both the offer of the cheapest provider 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 13: Cheapest single offers, broken down by service, Mobile Professional 1



Although this business is predominantly mobile, fixed broadband comprises a relatively large proportion of the cost - between around a third and a half depending on the country and calculation type. Mobile voice accounts for between 20-33%, and mobile broadband between 20-36%.

For the cheapest single offer, fixed broadband costs for Belgium are within a few euro cents of the cheapest country, the UK. Mobile broadband costs in Belgium are almost twice as high as costs for such service in the cheapest country, the UK, while for mobile voice, Belgium is just over €5 more expensive than France, the cheapest.

For the average of the three cheapest providers, Belgium is the cheapest country as far as fixed broadband is concerned. Costs for the remaining countries are considerably more expensive (Germany, the second cheapest is just under €3 more expensive). The gap between Belgium and the cheapest country, the UK, for mobile broadband is just under €9, while for mobile voice, the difference between Belgium and cheapest country, France, is just over €5.

4.4 Mobile Professional 2

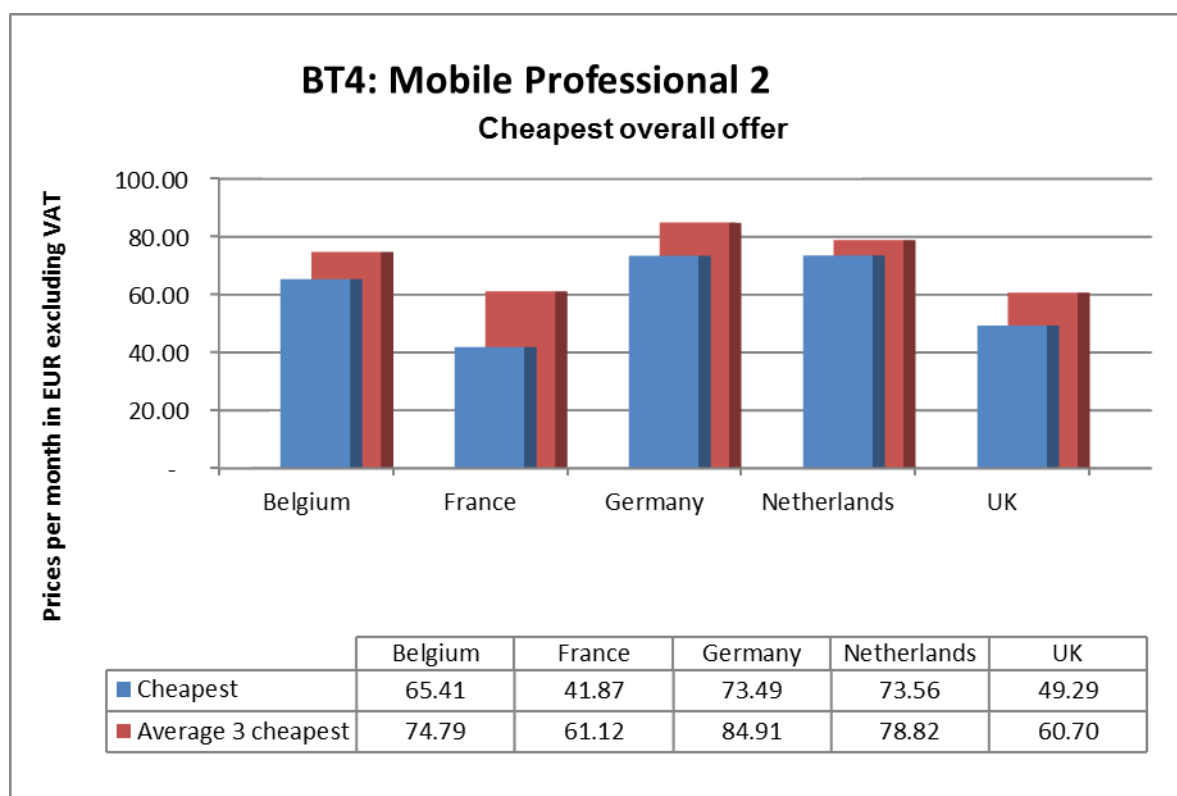
This business describes a business individual primarily working while on the move, e.g. a sales person. Communications requirements for this business are highly mobile and relatively intensive, with the sales person needing to communicate with customers and the main office on a frequent basis. Mobile 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	50	GB/month	Minimum speed	10	Mb/s
Mobile broadband	High	4.7	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	3	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 14: 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 15: Detailed results by calculation type, Mobile Professional 2

	Cheapest			Average of 3 cheapest		
	Single	Multiplay	Cheapest overall offer	Single	Multiplay	Cheapest overall offer
Belgium	65.41	98.12	65.41	74.79	102.10	74.79
France	56.82	41.87	41.87	66.02	61.12	61.12
Germany	77.69	73.49	73.49	85.81	84.91	84.91
Netherlands	73.56	73.56	73.56	90.22	78.82	78.82
UK	49.29	51.57	49.29	63.45	60.70	60.70

For the cheapest service, There is an even split in terms of single services or multiplay being the cheapest (in The Netherlands, there is no difference in cost). Where single services are the cheapest, the savings range from very small (e.g. €2 for the UK) to €33 (for Belgium). The multiplay offers from Belgian providers are generally too highly specified to be a cost effective option for this mobile user.

The cheapest offer for France is again based on an especially low cost multiplay offer, and here, multiplay is 26% cheaper than single services.

For the average of the 3 cheapest, apart from in Belgium, multiplay offers feature as the cheapest purchase option, and delivers savings of up to 13%. In Germany, the cost for multiplay, although cheaper, is virtually identical to single service purchase. In Belgium, single service purchase is over €27 (27%) cheaper than multiplay.

In contrast to previous years, where the cost of mobile has driven costs up for this business type, the overall cost for Belgium, while not the cheapest, is not the most expensive. Rather, Belgium is now much more mid-range in terms of costs faced by the Mobile Professional 2, as a result of reductions in mobile pricing. For the cheapest offer, it is over €23 more expensive than the cheapest country, France, for comparable services, while for the average of the 3 cheapest, it is just over €14 more expensive than the cheapest, the UK.

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 offer of the cheapest provider 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. Single and multiplay results are considered, as well as the cheapest overall offer.

Figure 16: Country rankings by calculation type, Mobile Professional 2

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

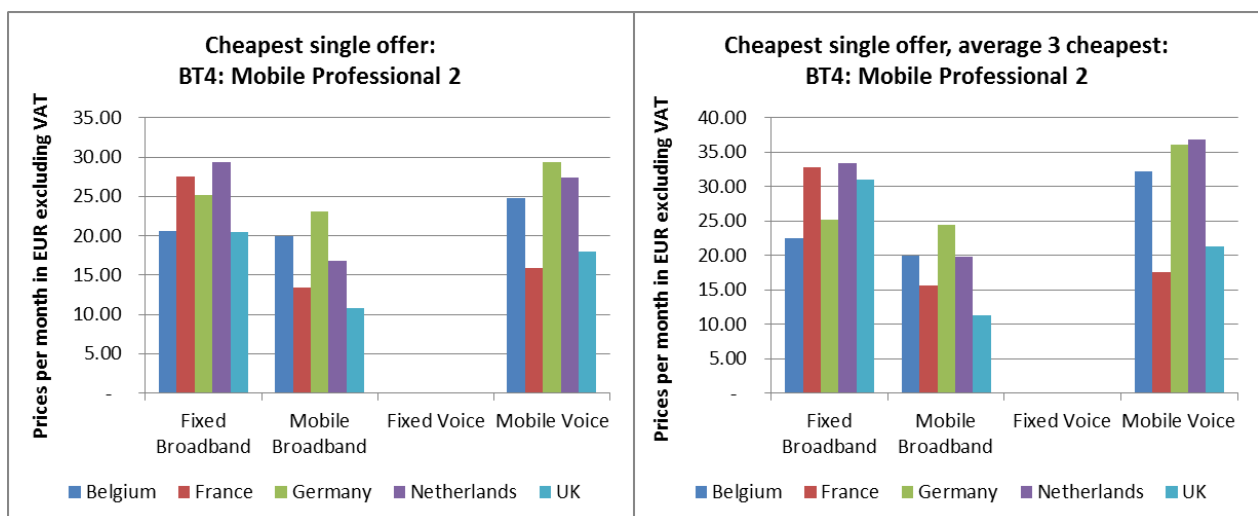
Although Belgium ranks as most expensive for costs based on multiplay offers (due to highly specified bundles significantly over-meeting the determined needs for this business), when single services only are considered, the ranking is considerably better, with Belgium ranking 3rd (both calculation types). Based on the overall cheapest offer, Belgium ranks 3rd as well for both calculation types.

When considering the cheapest operator only, France has the cheapest overall offer., followed by the UK in 2nd position. For the average of the 3 cheapest, the positions of France and the UK are reversed. Both of these countries have highly competitive markets for mobile services, which have put downward pressure on prices over the past several years. The Netherlands is the most expensive for the cheapest provider, while Germany is the most expensive for the average of 3 cheapest.

4.4.3 Cheapest single offers, broken down by service

The graphs below show the results for the Mobile Professional 2 for both the offer of the cheapest provider 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 17: Cheapest single offers, broken down by service, Mobile Professional 2



For this business type, with more intensive mobile use, the cost of mobile services are generally more dominant, with mobile voice accounting for between 28% and 42% of the overall cost. Although Belgium is considerably more expensive than the very cheap markets of France and the UK, it is cheaper than both Germany and The Netherlands for mobile voice. Mobile broadband costs are slightly less competitive, although Belgium is still not the most expensive country for this service. Fixed broadband is second cheapest in Belgium when considering the cheapest operator only (and within a few euro cents of the cheapest for fixed broadband, the UK). For the average of the three cheapest, Belgium enjoys the lowest fixed broadband cost.

Mobile Professional 2 business types in France and the UK enjoy relatively lower mobile voice and mobile broadband costs, and even though fixed broadband is not the cheapest service in these markets, the high proportion of mobile means that overall, these are the cheapest countries. Users in Germany and The Netherlands face comparatively higher costs across mobile services in particular.

4.5 Retail Outlet

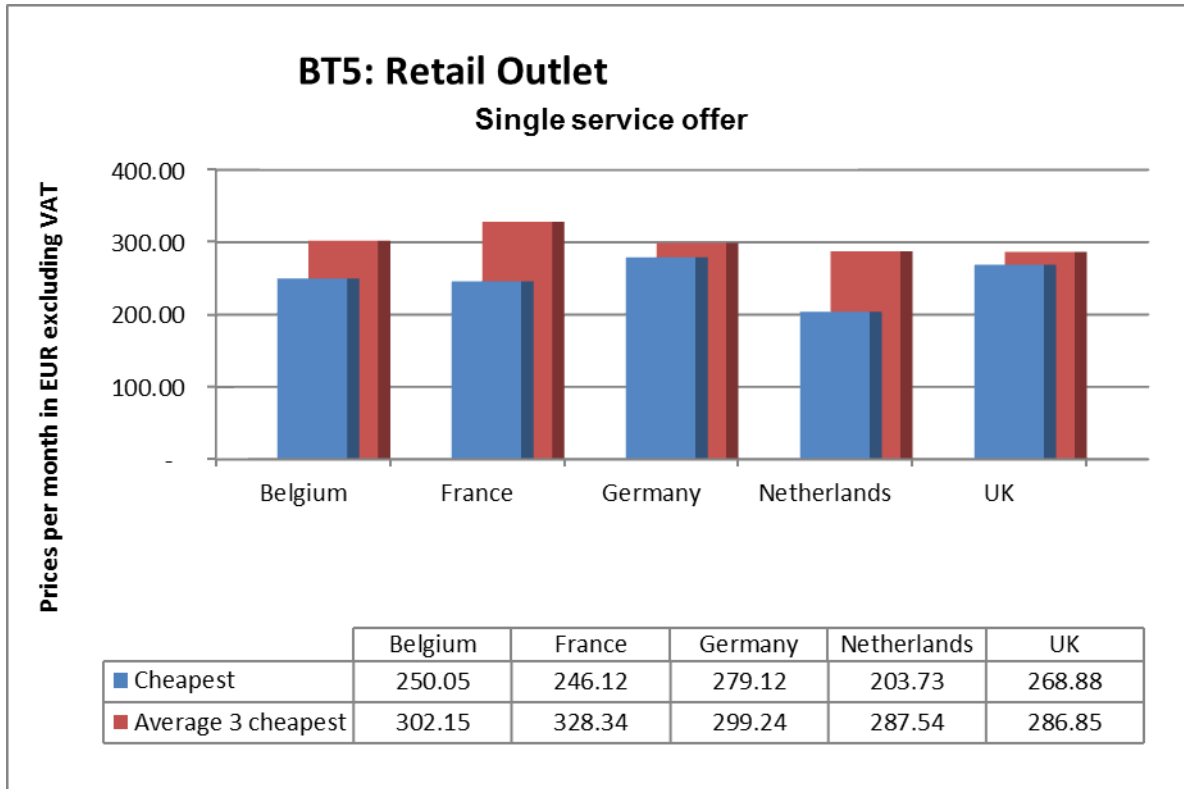
This business describes a retail business location with 5 users, each with communications needs covered by both fixed and mobile services. Note that this business (as well as the following three business types) can have more employees than the number of communication users. Voice call usage pattern focusses 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	100	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Medium	1.8	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	0.2	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 18: 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 19: Detailed results by calculation type, Retail Outlet

	Cheapest	Average of 3 cheapest
Belgium	250.05	302.15
France	246.12	328.34
Germany	279.12	299.24
Netherlands	203.73	287.54
UK	268.88	286.85

For the cheapest offer, the retail business in Belgium is less than €4 more expensive than France (second cheapest) and around 23% (or €46) more than The Netherlands (which is notably much cheaper than the other countries, as a result of a particularly low cost VoIP service for fixed voice), and is 10% cheaper than the most expensive country, Germany (or some €29).

For the average of 3 cheapest, Belgium is the second most expensive country. The UK is the cheapest, followed by The Netherlands which is almost identical in cost to the UK. Although Belgium ranks 4th, it is less than €3 more expensive than Germany (3rd). In a reversal to the typical results for the single user businesses, France is the most expensive country for this calculation type.

The range of prices between the cheapest and the average of the three cheapest is the greatest for France and The Netherlands, indicating that prices are less aligned than in the other countries. The UK has the smallest differential, indicating more closely aligned prices.

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 offer of the cheapest provider 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 20: Country rankings by calculation type, Retail Outlet

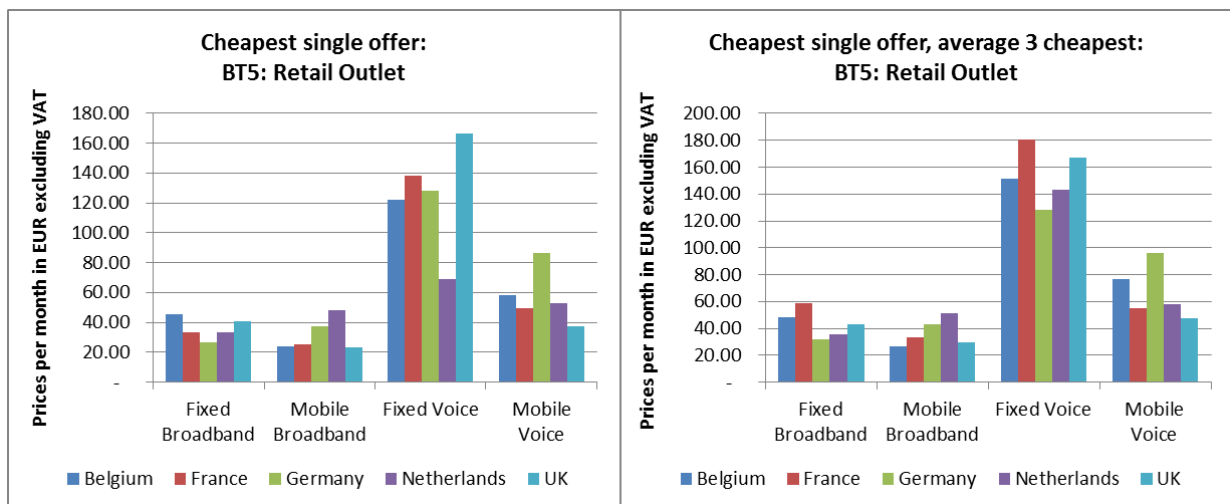
	Cheapest	Average of 3 cheapest
Belgium	3	4
France	2	5
Germany	5	3
Netherlands	1	2
UK	4	1

Belgium ranks in 3rd position for the overall cheapest offer, and 4th for the average of the 3 cheapest calculations. Although these rankings appear quite weak, there are clusters of countries, in terms of cost. The low cost VoIP service in The Netherlands cost has a large impact on results, especially for the overall cheapest.

4.5.3 Cheapest single offers, broken down by service

The graphs below show the results for the Retail Outlet for both the offer of the cheapest provider 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 21: Cheapest single offers, broken down by service, Retail Outlet



Fixed voice costs make up most of the overall communications costs for this business, accounting for up to 62% 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.

For fixed voice, which is the predominant cost for this business, Belgium is the second cheapest after The Netherlands, for the cheapest single offer, and ranks third after Germany and The Netherlands for the average 3 cheapest calculation. Mobile broadband costs, which make up to 24% of the total cost, are competitively priced in Belgium, which is less than €1 more expensive than the UK, which is the cheapest country for the cheapest single offer calculation. For the average of the 3 cheapest, Belgium has the lowest mobile broadband cost. Mobile voice is more mid-range to high, comparatively in terms of cost, as is fixed (business) broadband. The net result of this individual service results is a mid-range to low ranking for Belgium.

A point of note is the pricing of fixed broadband in France. France benefits from particularly competitive residential fixed broadband pricing, which is permitted for use by business types 1-4. For multi-user businesses, however, business grade fixed broadband services are required, and these typically have been very expensive in France. In 2017, although most services available are still relatively expensive, there is low cost broadband service for business users from one provider. The impact of this can be seen in the graphs above, and is a trend which continues across the remaining multi user businesses.

4.6 Local Trading Company

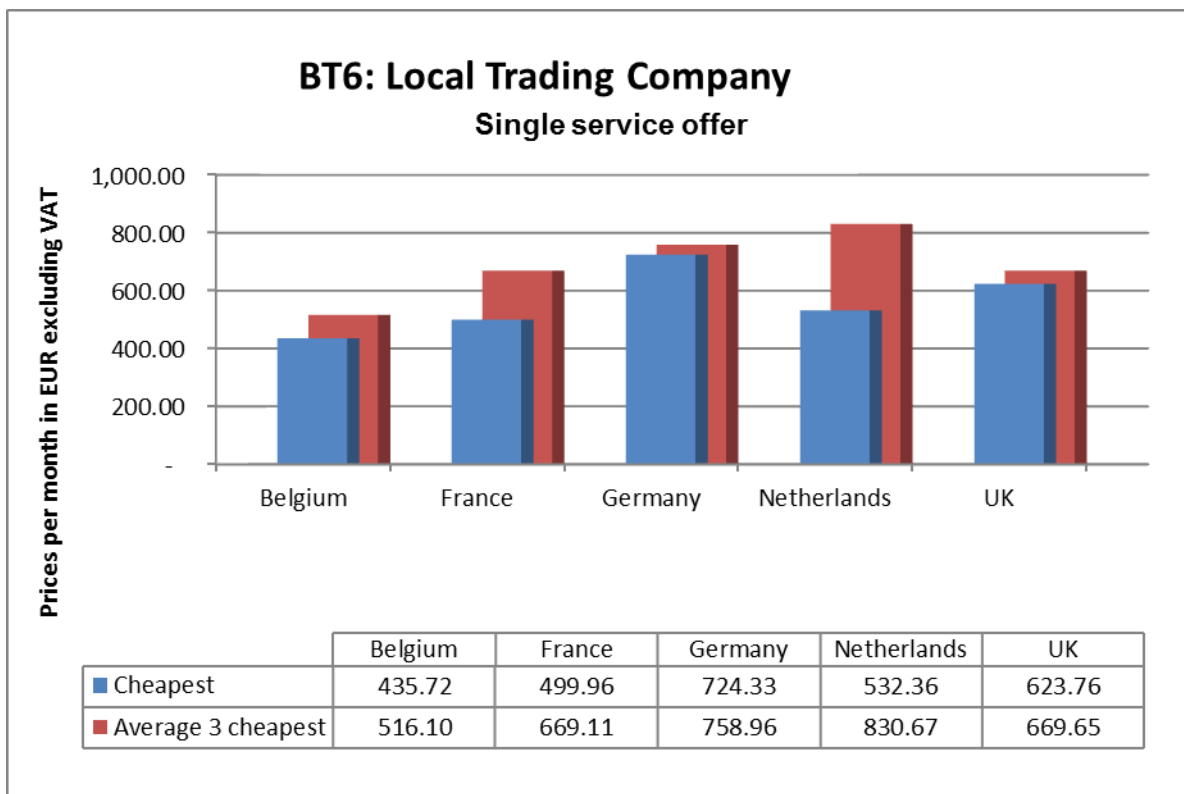
This business describes a trading company with 10 users, doing business from a fixed location, with significant national and international contacts. For this business, fixed broadband usage is relatively high, to support email communication, web searching and information exchange, and maintaining a web 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	100	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Medium	1.8	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	1	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 22: 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 23: Detailed results by calculation type, Local Trading Company

	Cheapest	Average of 3 cheapest
Belgium	435.72	516.10
France	499.96	669.11
Germany	724.33	758.96
Netherlands	532.36	830.67
UK	623.76	669.65

For both the cheapest provider and the average of the three cheapest providers, Belgium has the lowest costs across the 5 study countries, and, for both calculations, by some considerable way. France is the next cheapest, for both calculation types, and is between 15%-18% more expensive than Belgium.

The key driver behind the favourable result for Belgium in 2017 is the competitive costs for fixed voice. In previous years, fixed voice costs for Belgium have been comparatively high for multi user business with high usage, due to the limited availability of low cost options. The introduction of a range of competitively priced usage packages from one provider has significantly reduced the costs for fixed voice for Belgium.

For this business type, the difference between the cheapest and the average of the 3 cheapest calculations in Belgium is €80. While this isn't the smallest variance across the study countries (Germany has the smallest variance, followed by the UK), it has a much smaller variance than both France and The Netherlands.

Netherlands presents a particularly remarkable set of results, in that the variance between the cheapest and average of 3 cheapest is especially large - almost €300. The overall cost when considering the cheapest provider only is relatively low, as was the case last year, due to a very competitive VoIP service for business customers. For the average of the 3 cheapest, changes in pricing from one provider have driven up overall costs. Previously, the provider had a range of call packages, but these are no longer published at the operator's website, and the only pricing available is standard 'pay as you use', which is very costly for higher usage. The provider in question is also promoting use of mobile as a replacement for fixed in the workplace, and this is something that might increasingly be seen in the future.

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 offer of the cheapest provider 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 24: Country rankings by calculation type, Local Trading Company

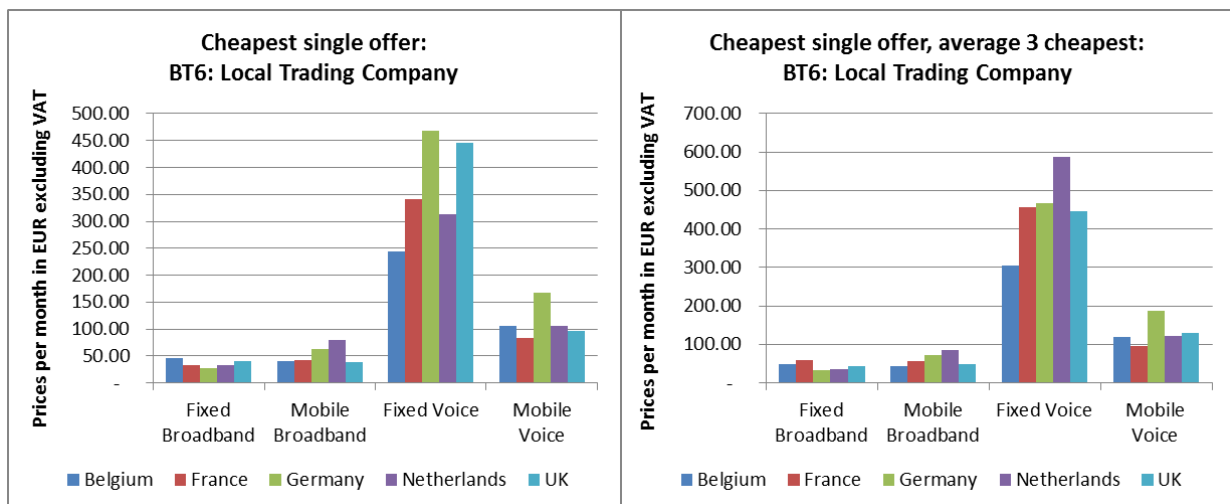
	Cheapest	Average of 3 cheapest
Belgium	1	1
France	2	2
Germany	5	4
Netherlands	3	5
UK	4	3

As already noted, Belgium ranks in first position for both the offer of the cheapest provider and the average of the three cheapest. As a consequence of the above mentioned commercial policy change by a main provider, The Netherlands now ranks 5th as far as the result type average of the three cheapest is concerned, while in 2016 The Netherlands was the cheapest country for this business type.

4.6.3 Cheapest single offers, broken down by service

The graphs below show the results for the Local Trading Company for both the offer of the cheapest provider 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 25: 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, and accounts for up to two thirds of the total cost. Unlike the Retail Outlet, there is a greater focus on international calling, alongside high national calling, to support the needs of the business. The availability of low cost voice offerings in Belgium, addressing both national and international calls results in Belgium having the cheapest fixed voice offer, based on both the cheapest provider offer and the cheapest single, average of 3 cheapest. This, coupled with its generally competitive positioning on mobile voice and mobile broadband, results in an overall low cost. The impact of the increased pricing for fixed voice services in The Netherlands by one provider is very evident on the graph showing the average of the 3 cheapest.

4.7 Local Production Company

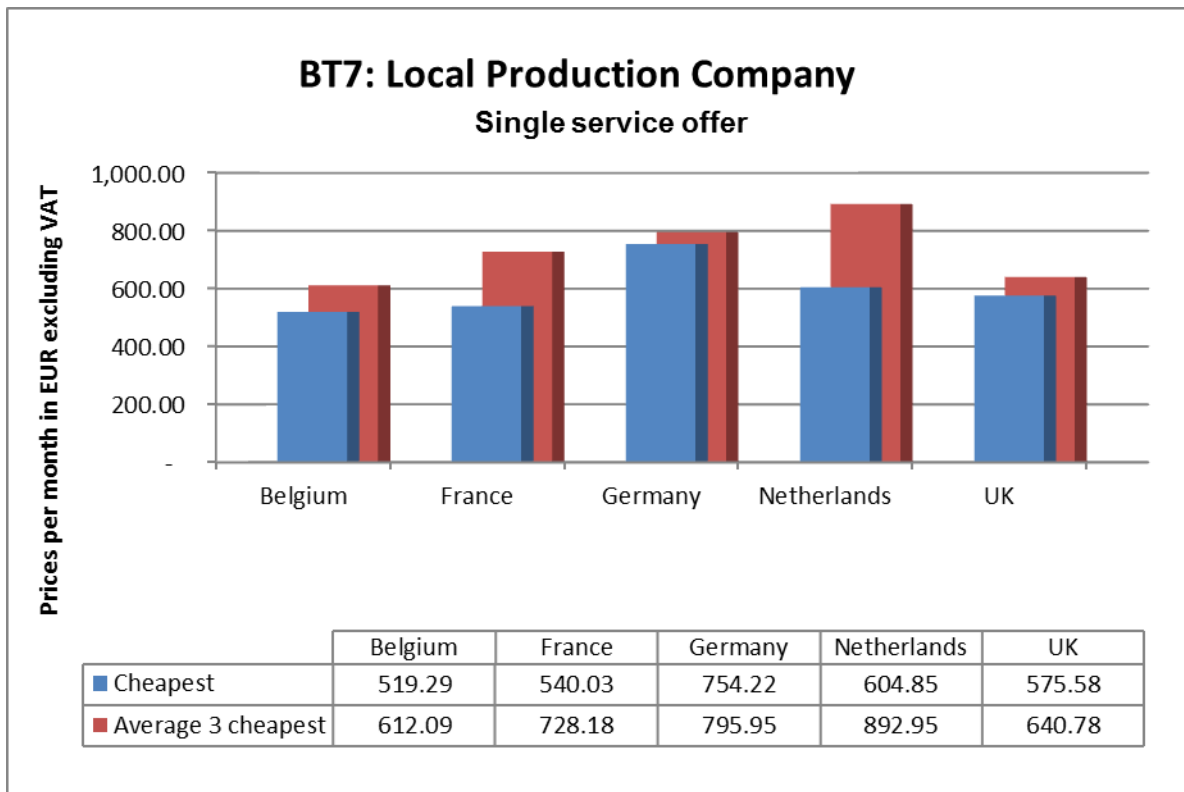
This business describes a production company with 10 users, mainly local connection needs. The nature of the business means there is a high use of fixed voice for local-based communications, as well as fairly extensive use of fixed broadband, which supports email communication, web searching and ordering, 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	100	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Low	0.4	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	3	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 26: 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 27: Detailed results by calculation type, Local Production Company

	Cheapest	Average of 3 cheapest
Belgium	519.29	612.09
France	540.03	728.18
Germany	754.22	795.95
Netherlands	604.85	892.95
UK	575.58	640.78

When considering the offers of the both cheapest provider(s) and the average of the 3 cheapest providers, the costs for a Local Production Company in Belgium compare well to the other study countries. For both these calculation types, Belgium has the cheapest costs for this business type. Businesses in Belgium aligned with this usage profile will pay €20 less than the same business in France (second cheapest), based on the cheapest overall offer, and €116 less based on the average of the 3 cheapest (again, compared to France as second cheapest).

Germany is the most expensive country, based on the offer of the cheapest provider, and here, businesses will pay almost €234 more than businesses in Belgium. For the average of the 3 cheapest, The Netherlands is the most expensive, where business will pay €280 more than in 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 offer of the cheapest provider 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 28: Country rankings by calculation type, Local Production Company

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

Belgium ranks cheapest overall, for both the offer of the cheapest provider and the average of the three cheapest providers. Germany is the most expensive for the offer of the cheapest provider, while The Netherlands is the most expensive for the average of the three cheapest. The reasons for this are similar to those for the Local Trading Company, as fixed voice features as a large part of the overall cost

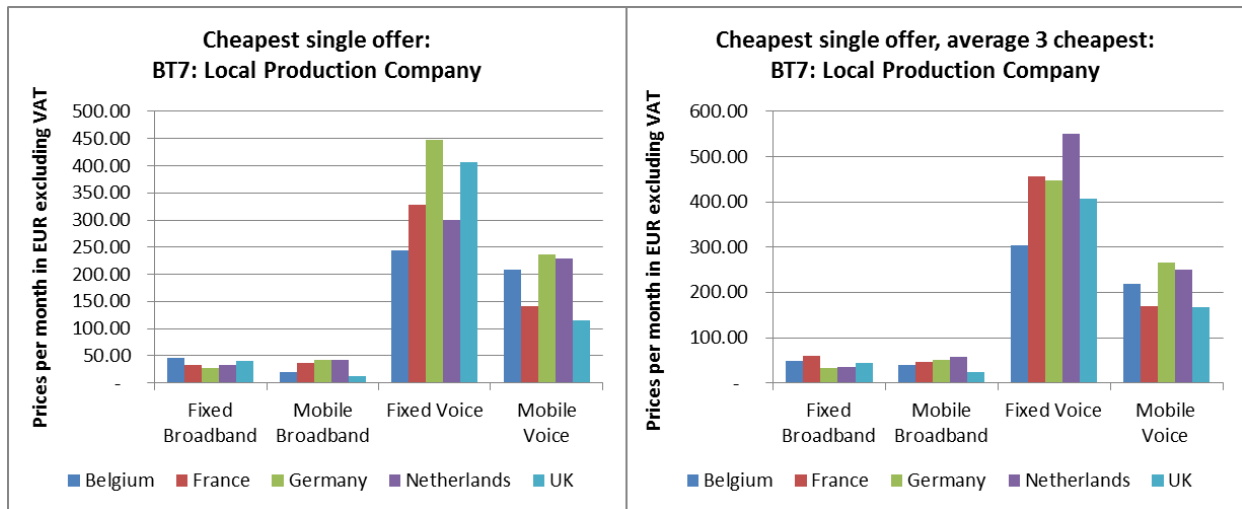
When comparing the cheapest to the average of the 3 cheapest, Germany has the smallest variation in cost (€42), followed by the UK at €65. The Netherlands has the greatest (€288). The cost variation for Belgium is €93.

For Belgium, much of this variation was due to the spread in prices for fixed voice across providers (the average of the 3 cheapest providers is 24% higher than the overall cheapest). The variation in costs for mobile broadband is actually much greater than that of fixed voice, in percentage terms (95%), however, as mobile broadband makes up a much smaller proportion of the total cost (5-7%) - it has a much smaller effect.

4.7.3 Cheapest single offers, broken down by service

The graphs below show the results for the Local Production Company for both the offer of the cheapest provider 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 29: 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 around 90% of the costs overall. As with other multi-user businesses, fixed voice accounts for most of the cost. For both the offer of the cheapest and average of the three cheapest, Belgium has the lowest fixed voice costs. Mobile voice costs for both calculation types are mid-range compared to the other countries.

4.8 Local Service Company

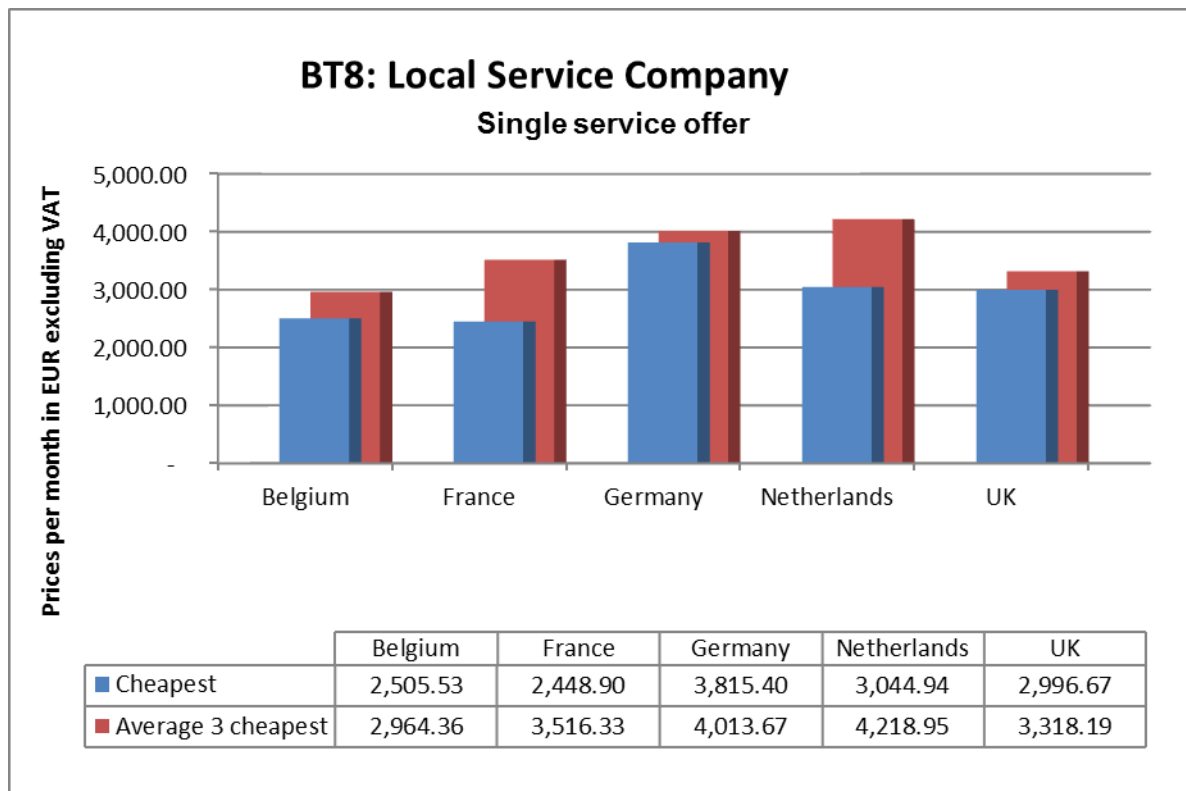
This business describes a Local Service Company with 50 users who are both on the move and in the office, with mainly local connection needs. For this business, both fixed and mobile communications are important, due to the mix of employee types. The high number of users in the company means that several 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	100	GB/month	Minimum speed	30	Mb/s
Mobile broadband	Low	0.4	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	3	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 30: 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 31: Detailed results by calculation type, Local Service Company

	Cheapest	Average of 3 cheapest
Belgium	2,505.53	2,964.36
France	2,448.90	3,516.33
Germany	3,815.40	4,013.67
Netherlands	3,044.94	4,218.95
UK	2,996.67	3,318.19

A Local Service Company in Belgium will pay around €57 per month (or 2%) more than a similar business in France (the cheapest country), based on the cheapest available offer in each of the countries, and will pay around €1310 per month (or 34%) less than a business in Germany (the most expensive).

Looking at the average of the three cheapest calculations, Belgium is the overall cheapest. Here, businesses will pay €354 (or 11%) less than the next cheapest, the UK.

When comparing the cheapest to the average of the 3 cheapest, Germany has the small variation in cost (€198), followed by the UK at €322. The Netherlands has the greatest variance (€1,174). The cost variation for Belgium is €459.

For Belgium, as with the Local Production Company, much of this variation was due to the spread in prices for fixed voice across providers (the average of the 3 cheapest providers is 24% higher than the overall cheapest). The variation in costs for mobile broadband is actually much greater than that of fixed voice, in percentage terms (95%), however, as mobile broadband makes up a much smaller proportion of the total cost (4-7%) it has a much smaller effect.

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 offer of the cheapest provider 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 32: Country rankings by calculation type, Local Service Company

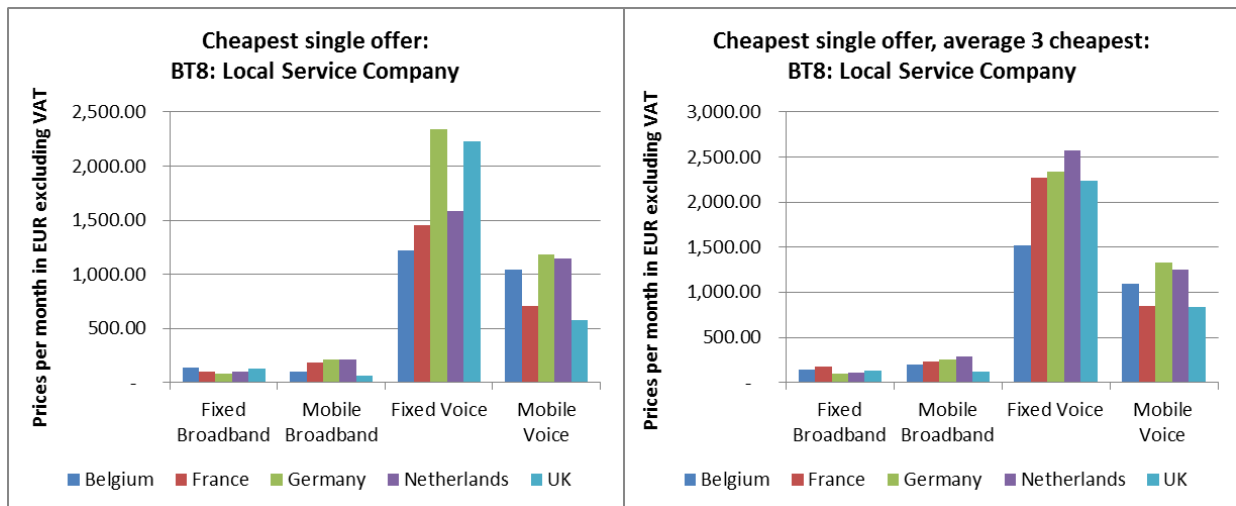
	Cheapest	Average of 3 cheapest
Belgium	2	1
France	1	3
Germany	5	4
Netherlands	4	5
UK	3	2

Belgium ranks as second cheapest, based on the offer of the cheapest providers. For the average of the 3 cheapest, Belgium offers the lowest costs among the study countries. Germany is the most expensive for the overall cheapest, and The Netherlands for the average of the 3 cheapest.

4.8.3 Cheapest single offers, broken down by service

The graphs below show the results for the Local Service Company for both the offer of the cheapest provider 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 33: 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 67% of the total cost for this business, depending on country and calculation type, while mobile voice accounts for up to 42% of the overall cost.

Fixed voice costs are notably competitive for both the cheapest offer and the average of the 3 cheapest, even though international fixed voice usage is high. This is as a result of the availability of a low cost international voice options across the Belgian providers, which result in especially competitive pricing for this business type. Costs for other services in Belgium are mid-range for this business type.

5 Evolution of telecommunications costs since 2016

This section examines how the telecommunications costs by each business type have changed in each of the study countries since 2016, 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 2017 study has also been applied retrospectively to the 2016 results⁶.

Additionally, the changes to mobile handset data and mobile broadband use, described in section 3.1.1, have also been applied retrospectively to the 2016 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 the total telecommunication costs from 2016 to 2017.

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, for the offers from the cheapest provider, while the second graph considers the cheapest overall offer, based on the weighted average of the three cheapest providers for either single service or multiplay.

For business types 5-8, the offers from the cheapest provider 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 2016 to 2017. 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. Furthermore, the ranking does not indicate differences in absolute cost, and this is particularly important to bear in mind. A small difference between the cheapest and most expensive country, suggests that the countries are broadly equivalent in terms of absolute cost, however this fact would be masked by the rankings.

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

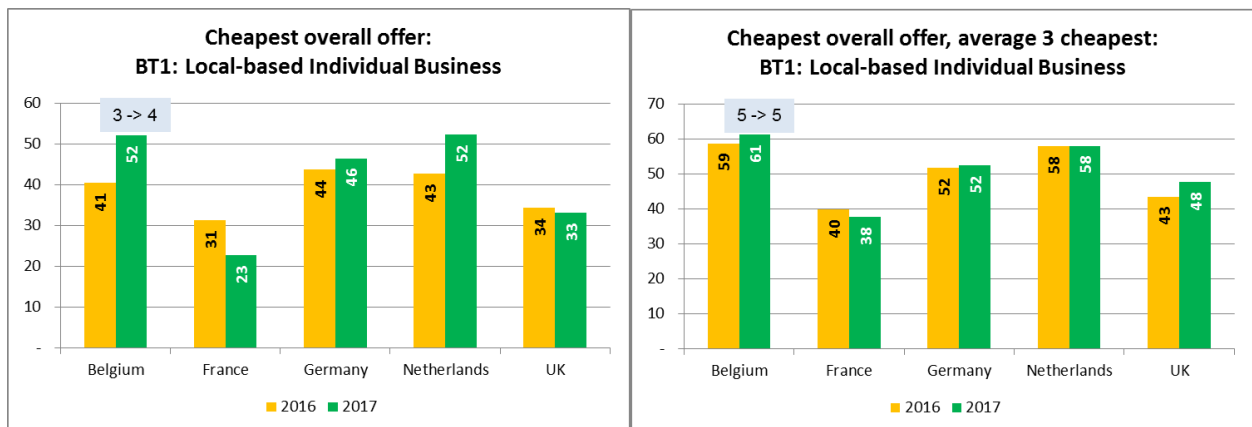
⁶ Since the last study, the Euro GBP conversion rate has shifted (from 1.27 to 1.17). While this doesn't impact the time series shown in this report (as the exchange rate for 2017 has also been applied to 2016), if the 2017 report is compared with the 2016 report, the exchange rate shift will make the UK results appear as if they have decreased by around 7% (in addition to any changes to actual costs).

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 the total communication costs for the cheapest overall offer from the cheapest provider and the cheapest overall offer based on the average of three cheapest providers for the Local-based Individual Business.

Figure 34: Price evolution, Local-based Individual Business



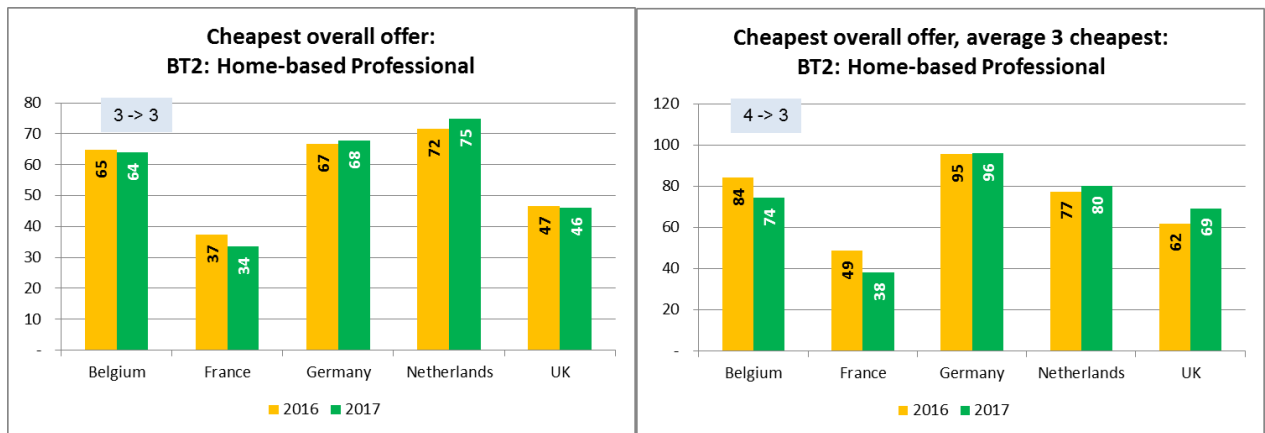
For the cheapest overall offer from the cheapest provider, the costs for the local based business have risen since 2016 in Belgium. Costs in Germany and The Netherlands also went up (although only very slightly for Germany), while in France and the UK, costs fell, with the largest reduction being seen in France. The rise in costs in Belgium is largely as a result of a previously cheap fixed and mobile voice bundle no longer being offered, and consequently, the cheapest offer for Belgium is now based on single services. In fact, the cost for the cheapest overall single service offers in Belgium have fallen slightly. In The Netherlands, a previously available (cheaper) broadband offer is no longer available, and this has pushed costs up. In France, the large decrease is as a result of a very low cost bundled offer coming onto the (already very competitive bundled) market.

For the average of the three cheapest in Belgium, costs have risen slightly. In 2016, the average of the 3 cheapest calculation was based on single services, as is the case this year, and as such, these costs have only changed slightly, in line with normal movements around pricing. Similarly in other countries, price changes were relatively modest. The UK saw the largest increase, mainly as a result of increases to fixed broadband rentals, which have been steadily rising.

5.2 Home-based Professional

The two graphs below show the evolution of the total communication costs for the cheapest overall offer from the cheapest provider and the cheapest overall offer based on the average of three cheapest providers for the Home-based Professional.

Figure 35: Price evolution, Home-based Professional



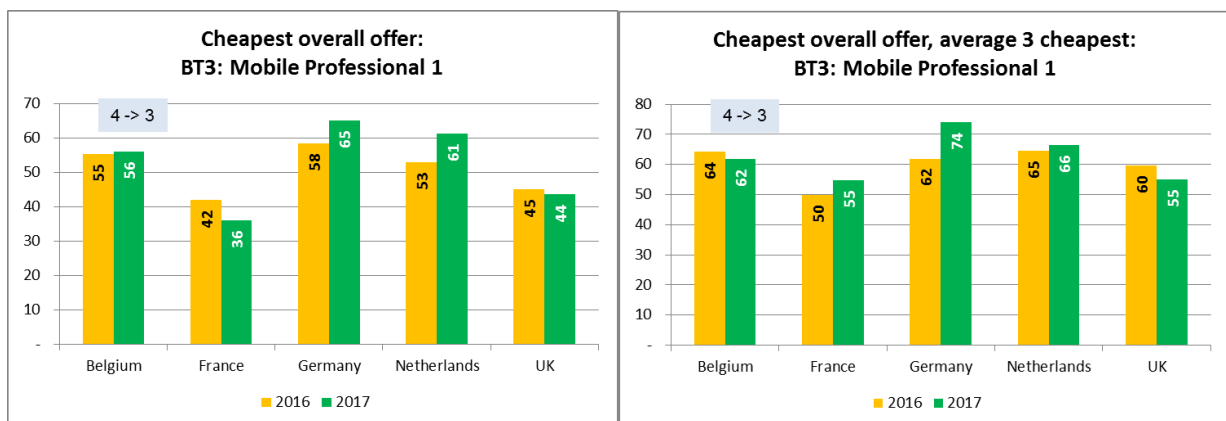
For the cheapest overall offer from the cheapest provider, Belgium retained its average position, and costs for the Home-based Professional in Belgium have remained almost static since 2016. Changes in other countries have been equally modest, with a mix of increases and decreases.

For the average of the three cheapest providers, cheapest overall offer, the ranking of Belgium rose from 4 to 3. This change was mainly driven by a reduction in costs in Belgium, coupled with a small rise in costs in The Netherlands.

5.3 Mobile Professional 1

The two graphs below show the evolution of the total communication costs for the cheapest overall offer from the cheapest provider and the cheapest overall offer based on the average of three cheapest providers for the Mobile Professional 1.

Figure 36: Price evolution, Mobile Professional 1



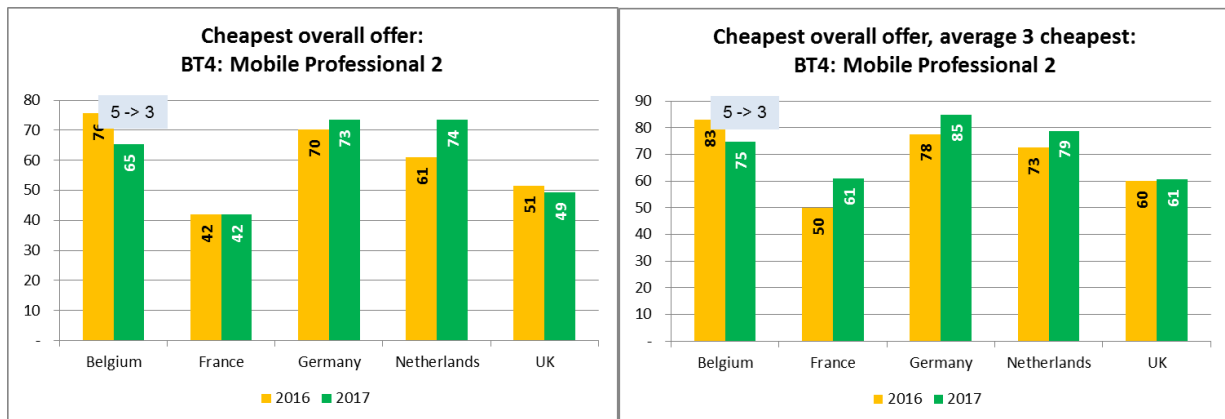
For the cheapest overall offer from the cheapest provider, the ranking for the Mobile Professional 1 has risen from 4 to 3. The costs for Belgium have risen only slightly, while costs in Germany and The Netherlands have seen greater increases as a result of changes to bundles and corresponding pricing, driving the change in ranking for Belgium.

For the average of the three cheapest providers, price changes were relatively small, with the biggest change being seen in Germany, where prices rose, as a result of changes to bundles and general increases.

5.4 Mobile Professional 2

The two graphs below show the evolution of the total communication costs for the cheapest overall offer from the cheapest provider and the cheapest overall offer based on the average of three cheapest providers for the Mobile Professional 2.

Figure 37: Price evolution, Mobile Professional 2



For the cheapest overall offer from the cheapest provider(s), the relative position of Belgium has improved since last year; having moved from being the most expensive to mid-range (3rd) overall. This has been in part driven by a fall in costs in Belgium, coupled with an increase in both Germany and The Netherlands. Costs in France remained broadly unchanged, while the UK experienced a small decrease. The cost reduction in Belgium centered around cheaper mobile voice and mobile broadband pricing. The cost increases in both Germany and The Netherlands were similar to those seen for Mobile Professional 1, namely changes to bundles and corresponding pricing.

The ranking for Belgium for the average of the 3 cheapest has improved similarly. Again, this is driven by a fall in costs in Belgium, coupled with increases in Germany and The Netherlands in particular. In Belgium, the reductions were to mobile voice and mobile broadband pricing. Notably, for this calculation type, Belgium was the only country that saw an overall decrease in costs for this business type. For all the other study countries, costs rose (albeit for the UK market only very slightly).

5.5 Retail Outlet

The two graphs below show the evolution of prices for cheapest single service from the cheapest provider and the average of the three cheapest providers based on single services, for the Retail Outlet

Figure 38: Price evolution, Retail Outlet



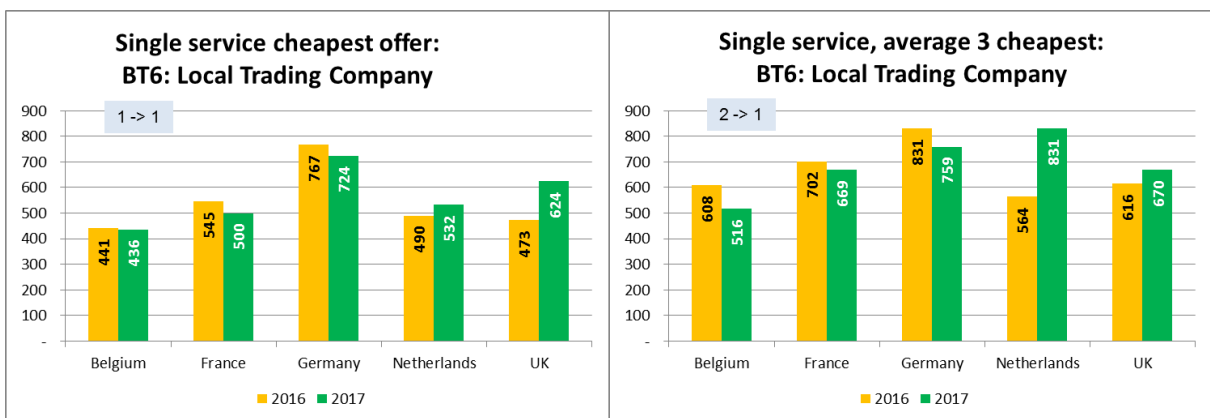
For the cheapest offer from the cheapest providers, the ranking for Belgium has risen from 4th to 3rd. This change was mainly as a result of an increase in costs in the UK, which saw increases to all services apart from mobile broadband. With the exception of Germany, the costs for this business increased across all the study countries. In Belgium, all service costs were broadly static, apart from fixed broadband, which increased in cost, as well as service speed.

For the average of the three cheapest providers, Belgium's ranking has changed from second cheapest to second most expensive. Mobile broadband and mobile voice costs fell in Belgium, but fixed broadband and fixed voice cost rose, with the net effect being an overall increase in Belgium. As with the overall cheapest offer from the cheapest providers, costs for this business type rose across all study countries apart from Germany. The fall in Germany was driven by reductions in all four communications services.

5.6 Local Trading Company

The two graphs below show the evolution of prices for cheapest single service from the cheapest provider and the average of the three cheapest providers based on single services, for the Local Trading Company

Figure 39: Price evolution, Local Trading Company



For the cheapest offer from the cheapest providers, Belgium has maintained its ranking position as the cheapest country. Costs across all services are broadly unchanged since last year. In both France and Germany, costs fell, while in The Netherlands and the UK, they rose. The change in the UK costs, which saw the biggest increase, were driven by increases in fixed broadband and fixed voice services. Mobile voice costs fell, but not enough to offset the increase in the fixed services.

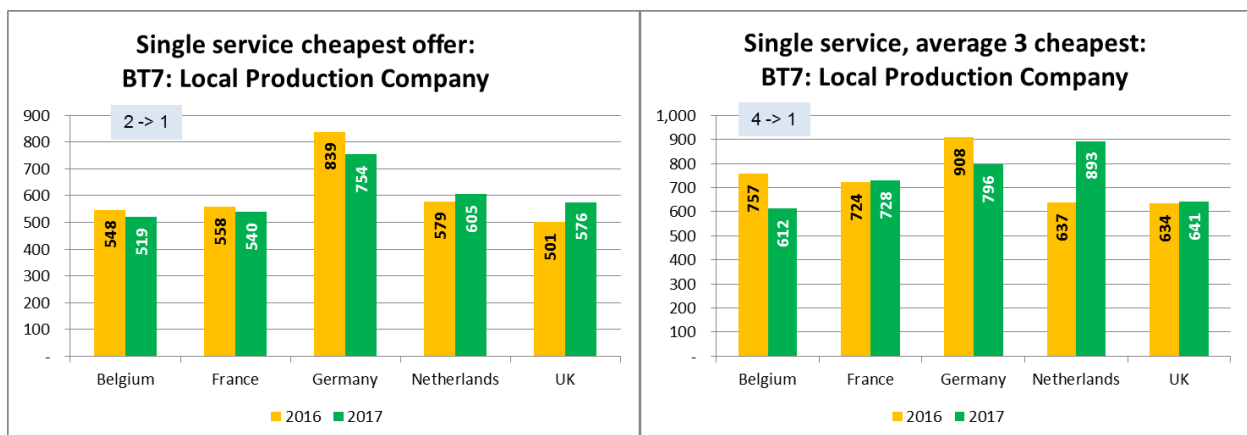
For the average of the three cheapest providers, Belgium moved from second cheapest to cheapest. This change in ranking is partly due to decreases in costs in Belgium but also to a large increase in costs for The Netherlands. In Belgium fixed broadband costs increased slightly and mobile voice remained broadly unchanged. Mobile broadband costs saw a quite significant reduction, however (with allowances being extended since last year). Fixed voice services saw the greatest change, as a result of a number of call packages being introduced for businesses from a Belgian provider, allowing for significant cost savings over the previous offers.

In the case of The Netherlands, fixed broadband and mobile broadband costs were broadly static. Mobile costs fell, although the reduction was not enough to offset the large increase in fixed voice costs, due to the removal of business call package options by one of the providers. As fixed voice is heavily used by this business type, costs rose steeply for The Netherlands.

5.7 Local Production Company

The two graphs below show the evolution of prices for cheapest single service from the cheapest provider and the average of the three cheapest providers based on single services, for the Local Production Company.

Figure 40: Price evolution, Local Production Company



For the cheapest offer from the cheapest providers for the Local Production Company, Belgium went from second cheapest to overall cheapest. Fixed broadband costs rose slightly while mobile voice costs fell, resulting in an overall modest reduction. The increase in costs in the UK in particular, however, resulted in the change in ranking for Belgium. Similar to the Local Trading Company, the UK saw increases in fixed broadband and fixed voice services. Mobile voice costs fell, but not enough to offset the increase in the fixed services.

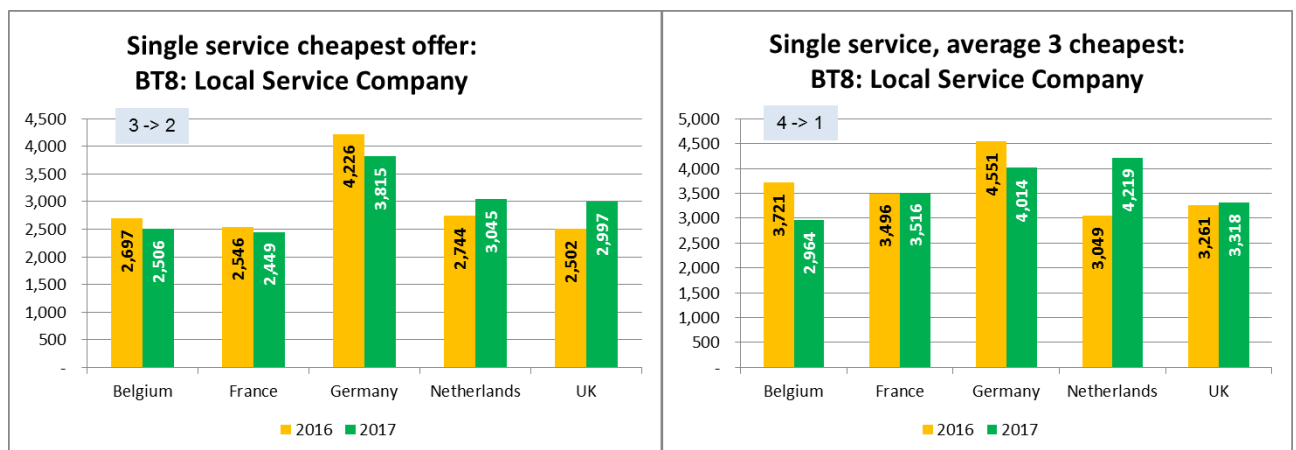
For the average of the three cheapest providers, the relative position of Belgium fell from second most expensive in 2016 to cheapest in 2017. This change was driven by a reduction in costs for both mobile voice and fixed voice. For mobile voice, this is more as a result of increases in data caps in packages or allowances within the tariffs. These changes have been introduced with no or limited price increases to the tariffs themselves, resulting in an effective decrease as the user need can be fulfilled by a cheaper package than last year. Fixed voice cost reductions again are driven by the introduction of call packages from one provider, resulting in much lower costs. The other main driver is the increase in fixed voice costs in The Netherlands, due to the removal of call packages from one operator.

Germany saw a reduction on costs across all services, while in France and the UK, costs were broadly static.

5.8 Local Service Company

The two graphs below show the evolution of prices for cheapest single service from the cheapest provider and the average of the three cheapest providers based on single services, for the Local Service Company

Figure 41: Price evolution, Local Service Company



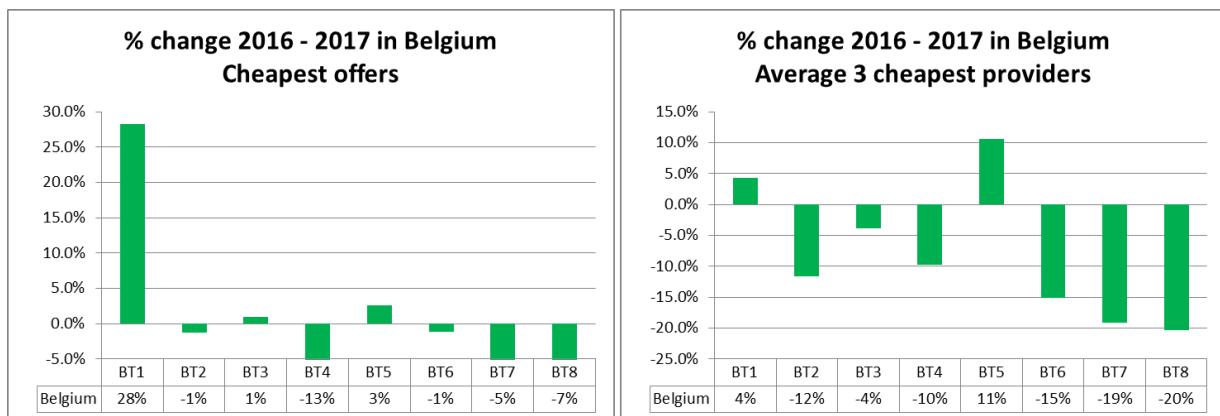
For the cheapest offer from the cheapest providers, Belgium went from third to second cheapest. Absolute costs for Belgium fell slightly, driven by falls in fixed and mobile voice prices, and countered somewhat by increases in fixed broadband pricing. The biggest changes were in The Netherlands and the UK. In The Netherlands, costs for all services apart from mobile voice went up, while in the UK fixed broadband and fixed voice costs increased, while mobile voice prices fell.

For the average of the three cheapest providers, Belgium moved from second most expensive to cheapest. This change in ranking is partly due to decreases in costs in Belgium but also to a large increase in costs for The Netherlands. In Belgium fixed and mobile broadband costs increased, while fixed and mobile voice costs fell, with the overall net effect being a reduction in costs. The change to published voice prices in The Netherlands resulted in an increase in the costs for The Netherlands. The increase in fixed voice costs was partly countered by a reduction in the cost of mobile broadband and mobile voice costs. In Germany, costs fell across the four communications services. Overall costs in France and the UK were broadly static.

5.9 Summary of change in total telecommunication costs for Belgian businesses since 2016

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

Figure 42: Change in Belgian telecommunications costs by business type since 2016



* For Business Types 5-8, the changes are based on single service offers only

The changes seen across the eight business types have been a mix of increases and decreases. For the cheapest overall offers from the cheapest provider, the changes were generally quite modest, with the exception of BT1, where costs increased by 28%, and BT4, where costs fell by 13%. For this calculation type, BT1 is the only business type where the ranking for Belgium worsened.

For the average of the 3 cheapest providers, the changes were much more pronounced, with the exception of BT1. The only two businesses that saw costs increase since 2016 were the two lower use businesses, BT1 and BT5. The most important changes were the businesses which have a heavier use of fixed voice, as these benefited from the introduction of call packages from one of the Belgian providers that reduced costs. Businesses with heavier mobile data use also saw costs reduce, as a result of a revision of mobile offers, and particularly users being offered more for the same or lower cost.

6 Pure bundle pricing

This analysis is different from the multiplay analysis in section 4 of the report, in that it only considers the cost of pure bundles, without any additional single services added, but including usage charges.

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 in the pure bundle pricing considered here and 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
Results may include single services	Yes	No
Different combinations of service 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 the single user business types.

Figure 43: Cheapest pure bundle price: fixed broadband and fixed voice, business types 1 and 2

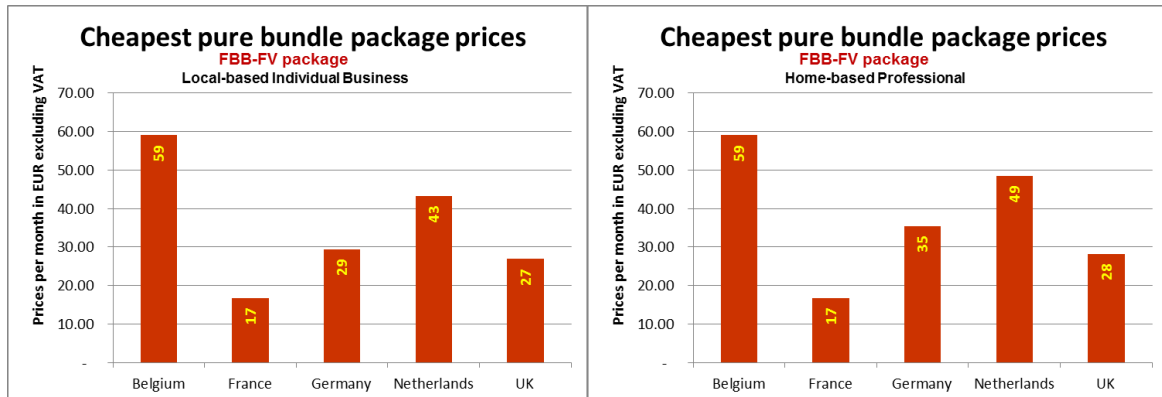
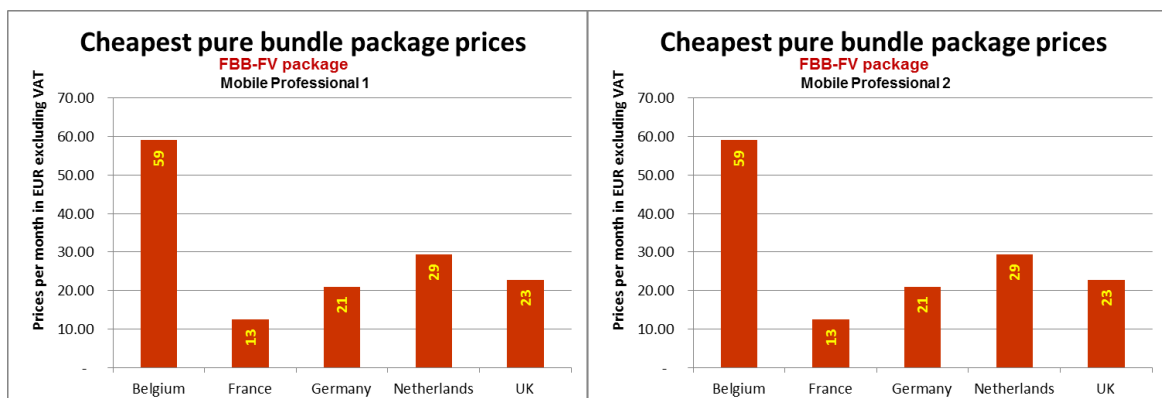


Figure 44: Cheapest pure bundle price: fixed broadband and fixed voice, business types 3 and 4



Across all four business types, Belgium consistently has the highest cost for fixed broadband and fixed voice bundles, and this presents a similar picture to that seen in 2016. 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 fixed broadband and fixed voice, and for these two businesses, there is no fixed voice usage. In this case, they will still pay the cost of the bundle, which is fixed but won't attract any fixed voice usage charges. Additionally, there are no usage charges with fixed broadband.

Changes since 2016

While there have been some shifts in prices since last year, the general picture is broadly similar, in that across the four business types, Belgium continues to be the most expensive for the fixed broadband and fixed voice bundle, while the other countries are much more aligned in terms of cost than in 2016. Notably, the cost for Belgium across the four business types is uniform. In most countries, bundle costs have fallen, with the largest reduction being seen in France. The Netherlands is the only market where bundle costs increased.

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 single user business types.

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

Figure 45: Cheapest pure bundle price: fixed broadband, fixed voice and mobile voice, business types 1 and 2

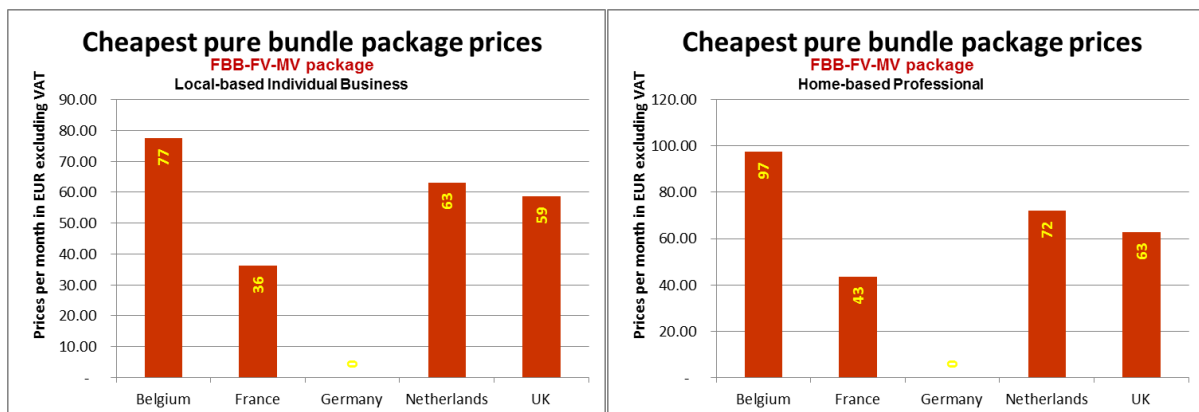
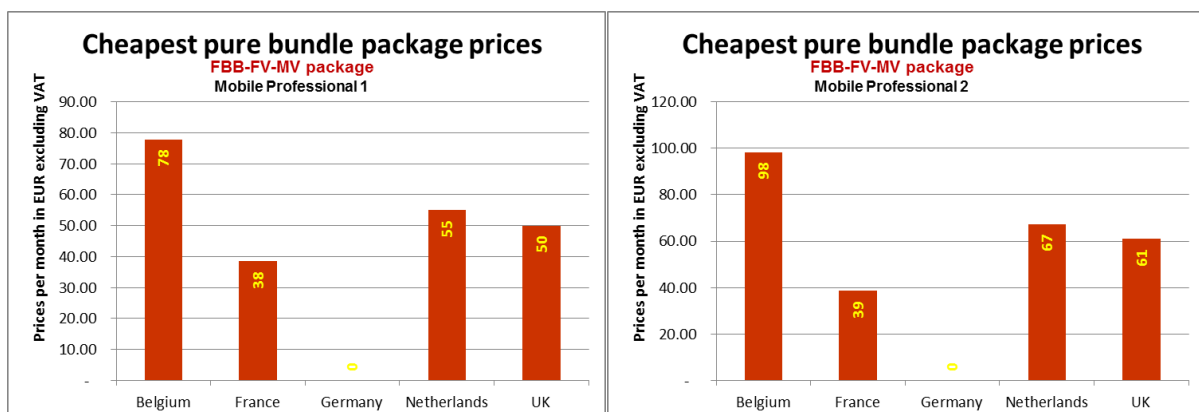


Figure 46: Cheapest pure bundle price: fixed broadband, fixed voice and mobile voice, business types 3 and 4



Belgian providers are again, more expensive than in other countries where this type of offer is available. France is again the cheapest. Triple play offers included mobile voice are becoming increasingly commonplace as fixed providers with mobile operations look to offer a more complete service for end-users.

Changes since 2016

The Netherlands now features in the results for the fixed broadband-fixed voice-mobile voice business bundle (it did not have any offers to match this bundle requirement last year). In terms of cost changes, these have been fairly minimal for this bundle, with the largest changes being seen in the UK, where prices increased.

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 2017, and may have since changed.

Figure 47: 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	100	5	Partly	Yes	Optional	Partly	Yes
Telenet	30	240	8	Partly	No	Optional	No	3,200,000
SFR	50	200	24	Partly	No	Yes	Partly	Not stated
Orange	25	200	Not stated	Partly	No	Yes	Partly	No*
Base							Partly	No*
Voo	76	200	4	Partly	No	Yes	No	1,500,000
EDPNet	12	200	8	No	No	Yes		No
United Telecom	70	70	Not stated	No	No	No	Optional	No
Belcenter	1	100	4	No	No	Not stated		No
France								
Orange	15	1000	24	No	Partly	Partly	Partly	4,000,000
SFR	20	1000	8	No	Partly	Partly	Partly	4,000,000
Bouygues	2	1000	4	No	Partly	Partly	Partly	Yes
Free	15	1000	Not stated	No	No	Optional	Partly	4,000,000
Germany								
Telekom/T-Mobile	16	200	24	No	Partly	Partly	Partly	1,500,000
United Internet (1&1)	16	1000	Not stated	Partly	Not stated	No	No	No
Unity Media	10	400	Not stated	No	No	Partly	No	1,000,000
Vodafone	3	400	Not stated	Partly	No	No	Partly	1,000,000
O2	8	100	8	Partly	Yes	Optional	Partly	3,000
Base							Partly	No*
Netherlands								
KPN	20	500	Not stated	No	No	Partly	Partly	Yes
Ziggo	40	500	4	No	No	Yes	Partly	2,000,000
Tele2	20	100	Not stated	No	No	No	Partly	No
Vodafone							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		
EE	17	76	Not stated	No	No	Yes	Partly	5,000,000
O2							Partly	Yes
Vodafone	17	76	Not stated				Partly	5,000,000
3 UK							Partly	No*
Virgin Media	50	300	24	No	Partly	Yes	No	22,000
Sky	17	76	Not stated	Partly	No	Yes		Yes

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.

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

Key points

Fixed Broadband

- Almost all providers offer very high speed services, that fully meet the needs of the businesses defined for this study. Providers in France and Germany offer the highest speeds of service, at 1GB/s services.
- 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.⁷
- 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 continue to be 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 include 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 MacAfee) 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.

⁷ Additional information on coverage is available from the regulatory bodies in individual countries, however, this may provide varying amounts of details, e.g. information by technology type, or by a minimum defined speed for NGA.

Mobile

- The inclusion of roaming within an offer similarly varies from provider to provider. Roaming here covers voice, data and/or SMS. Many providers increasingly have offers in their portfolio that have some element of roaming. These are usually higher end plans, but these are increasingly available for residential and business users alike. Roaming within Europe is more widely offered than other destinations, as might be expected.
- At the time of data collection, providers are still utilizing add on roaming packages, or will levy usage-based roaming costs, however, with the introduction of Roam Like At Home (RLAH) regulation within the European Union from 15th June 2017, there will be a significant proportion of tariffs that include roaming (although some national-use only tariffs will still be offered by some providers). The introduction of RLAH conditions may well stir up the market in terms of offers and pricing.

Hotspots and homespots

- 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.

Changes since 2016

The changes since 2016 have been fairly minimal. The non-price factors that have seen the greatest change since 2016 are advertised download speeds for fixed broadband: There have been some increases in speeds by some providers, including the removal of lower speeds, and increases in the maximum speeds. There has not been a significant change in the number of providers offering 1 Gb/s services, although the number of actual 1 Gb/s tariffs has increased.

Other non-price factors have seen much more limited changes over 2016.

8 Conclusion

The telecommunications costs faced by Belgian businesses range from cheap to expensive compared to the neighbouring countries, depending on the type of business and whether we only consider the offer of the cheapest provider or the average of the three cheapest providers. Local-based Individual Businesses (business type 1) and Retail Outlets (business type 5), characterised by a low use of telecommunications services, face relatively high costs in Belgium.

Companies making intensive use of mobile services are more mid-range in terms of cost. As the use of fixed telephony increases, so does the competitive position of Belgium. That fact is reflected in the results for multi-user businesses, with the exception of the Retail Outlet (business type 5).

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

Figure 48: Rankings summary across all business types: cheapest overall offer.

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

Figure 49: Rankings summary across all business types: cheapest overall offer, average of three cheapest providers.

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

The variation in cost between the cheapest and the average of the three cheapest operators reflects the extent to which in terms of cost the tariff plans are spread across the various providers. The larger the difference between the cheapest and the average of the three cheapest providers, the greater the interest for business users to compare offers, so as to save costs.

For single-user businesses (business types 1 to 4), Belgian operators generally offer competitive prices for single services. However, for these business types, multiplay is never the cheapest option in Belgium, unlike the neighbouring countries, where a combination that includes multiplay often features as the cheapest purchase option. This study also pictures the cost of two “pure bundle” types, i.e. a double play fixed Internet and fixed telephony offer and a triple play offer (fixed Internet, fixed telephony and mobile telephony). Just like last year, Belgium comes out here as the most expensive in the country ranking.

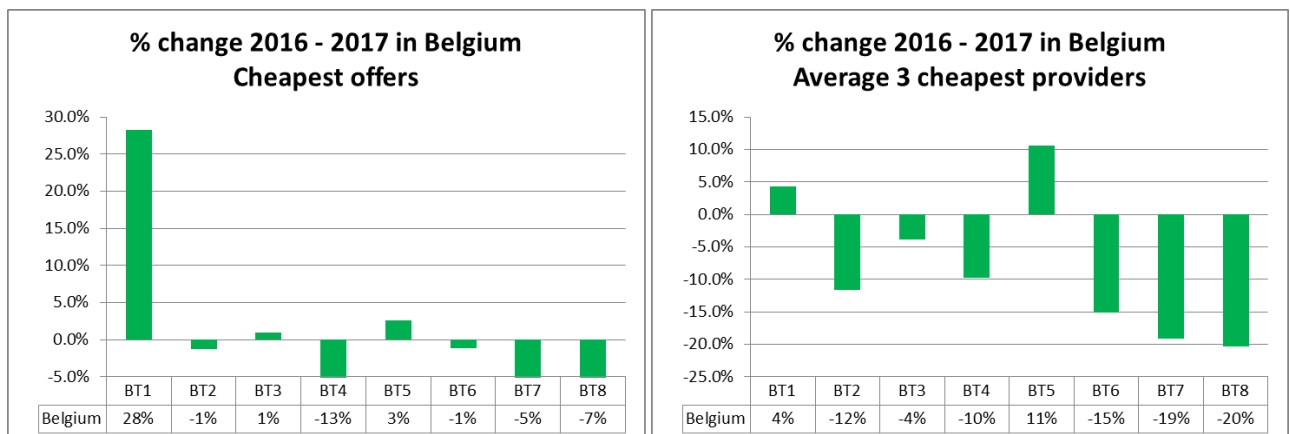
Of course, country rankings do not always present the complete picture and need to be considered alongside the relative costs across the study countries. In some instances, we observe a small difference in total telecommunications costs in terms of absolute amounts, reflecting a small percentage difference. Examples of such clusters⁸ that relate specifically to Belgium include:

- Business type 1: Difference in cost between Belgium (4th) and The Netherlands (5th) is less than €1, for the cheapest overall offer, equivalent to less than 1%
- Business type 7: Belgium ranks cheapest overall for both calculation types. For the cheapest overall offer, however, France (second cheapest) is less than 4% more expensive than Belgium. For the average of the 3 cheapest, the UK (second cheapest) is just under 5% more expensive than Belgium
- Business type 8: For the cheapest overall offer, Belgium ranks as second cheapest, but is only 2.3% more expensive than France, the cheapest country.

Evolution of costs

The two graphs below show the evolution in telecommunications costs for the eight Belgian business types since 2016.

Figure 50: Change in telecommunications cost for Belgian businesses since 2016



** For Business Types 5-8, the changes are based on single service offers only*

⁸ Examples cited are where the cost of Belgium is within 5% of another country

Across the eight business types a mix of increases and decreases has been observed . Since 2016, for the “average of the 3 cheapest operators” result type, the total communications costs have only risen for Local-based Individual Businesses (business type 1) and Retail Outlets (business type 5). For the latter business type total costs have increased considerably, whereas the other multi-user business types (making more intensive use of fixed telephony) benefited from a significant cost reduction.

For the average of the 3 cheapest providers, the changes were much more pronounced. The only two businesses that saw total communications costs increase since 2016 were the two lower use businesses, i.e. the Local-based Individual Business (business type 1) and the Retail Outlet (business type 5). The total costs for this latter business type increased significantly, whereas multi user businesses (with a heavier use of fixed voice) saw a substantial reduction in costs, as a result of the introduction of call packages from one of the Belgian providers. Businesses with heavier mobile data use also saw costs reduce, as a result of a revision of mobile offers, i.e. users being offered more allowance for the same or lower cost.

When we consider the overall cheapest of the cheapest providers:

The rankings for Belgium have improved for:

- The mobile-intensive business types Mobile Professional type 1 (business type 3) and Mobile Professional type 2 (business type 4), as well as the the Retail Outlet (business type 5), and the heavier use multi-user businesses, Local Production Company (business type 7) and the Local Service Company (business type 8).

The ranking for Belgium is unchanged for:

- The Home-based Professional (business type 2) and the Local Trading Company (business type 6).

The ranking for Belgium has deteriorated for:

- The Local-based Individual Business (business type 1), for which the ranking for Belgium fell from mid-range to second most expensive.

When we consider the average of the 3 cheapest:

Regarding the “average of the 3 cheapest operators” result type Belgium’s position in the country ranking has improved compared to last year for six out of the eight business types. As to the other business types the ranking has remained unchanged for some and has deteriorated for others.

The rankings for Belgium have improved for:

- Home-based Professionals (business type 2), which takes third place this year, instead of fourth in the previous edition.
- businesses marked by an intensive use of mobile communications, i.e. Mobile Professional type 1 (business type 3) and Mobile Professional type 2 (business type 4), which were in fourth and fifth place respectively in 2016, whereas they are mid-range in 2017.
- multi-user businesses: Local Trading Company (business type 6), Local Production Company (business type 7) and Local Service Company (business type 8). Belgium comes out cheapest in 2017, whereas these business types were second, fourth and fourth respectively in the 2016 country ranking.

The rankings for Belgium are unchanged for:

- the Local-based Individual Business (business type 1), with Belgium still coming out as the most expensive. For this business type, costs are fairly competitive for stand-alone services, but 3 of the 4 neighbouring countries have a more favourable environment for multiplay.

The rankings for Belgium have deteriorated for:

- Retail Outlets (business type 5), for which the ranking for Belgium fell from second cheapest position to second most expensive.

The key changes that have driven the evolution since last year are described below on a service by service basis.

- For business types where fixed telephony use is high, the result for Belgium has improved significantly, as a result of revisions to fixed voice pricing by one of the main operators. In the second half of 2016, the operator in question introduced optional “all-you-can-eat” packages that also encompassed international calls. For those businesses where fixed voice use is heavy, this resulted in a sharp reduction in the cost of that product and hence the total cost. By contrast, pricing and costs for light to moderate use of fixed telephony are broadly stable.

The position of the Netherlands has decreased substantially because one of the main operators no longer promotes any business “all-you-can-eat” fixed telephony options on its website. The result for this operator is now based on “pay-as-you-use” pricing, which results in considerably higher costs - especially for high usage - compared to last year. Even if those options were still available to business customers, they cannot be taken into account since they are not published.

- Fixed broadband pricing has not changed very much in general. There have been some small increases in Belgium, but this is also true in other countries (especially the UK). The exception to this is France, where the introduction of a very low priced (residential) broadband bundle from one provider resulted in a fairly large reduction in the cost for France for several of the single-user businesses.

When considering the multi-user business types, for which only business tariff plans have been considered, Belgium (still) ranks as second but last. Business broadband tariff plans are most expensive in France.

- Total mobile voice costs (including costs for data traffic on smartphones) have decreased in Belgium. This is mainly as a result of higher data allowances. These changes have generally been introduced with no (significant) price increases, resulting in an effective cost reduction as the user’s needs can be fulfilled by a cheaper mobile voice bundle compared to the year before.

Compared to 2016, the mobile offering is now more in line with the current (increased) data usage and this is the main cause of the better position of Belgium for this product. This has an impact on the results across all business types, but it is most visible on the position of Belgium for business type 3 and especially business type 4.

- Mobile broadband pricing (tablet and dongle usage) has seen some fairly substantial reductions in Belgium, and while mobile Internet only makes up a relatively small proportion of the total cost for most businesses, these decreases have helped to pull down the total cost. Notable examples include a reduction by one provider of €10 (incl. VAT) for 5Gb data (equivalent to 29% reduction) and an expansion of mobile broadband offers by another.

Pure bundle pricing

This study also pictures the cost of two “pure bundle” types, i.e. a double play fixed Internet and fixed telephony offer and a triple play offer (fixed Internet, fixed telephony and mobile telephony). Just like last year, Belgium comes out here as the most expensive in the country ranking.

Non-price related data

In terms of the non-price related data, changes since 2016 have been fairly minimal. The elements that have seen the greatest change are advertised download speeds for fixed Internet: a number of operators have removed products with lower speeds from their offer and increased the maximum speed of existing products.

Qualitative elements, such as the availability and performance of the fixed and mobile networks, are not analysed within the framework of this study. In connection with “speed offered through fixed networks” it is important to note that services with advertised higher speeds are not always available to each customer in every country. In Belgium, NGA (Next Generation Access) broadband is widely spread compared to other countries.

The findings in the context of this study are purely based on price related elements and do not take account of any quality differences between the study countries. In any case, as users will not attach equal importance to non-price related elements it is difficult to quantify them and include them in a meaningful sense in the benchmark.

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”⁹, 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.

⁹ The concept was originally developed for “households”, analysing the services used by a home, including television services.

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

- Fixed voice FV (PSTN, 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)

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 51: Communications service requirements for identified businesses

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

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 52: 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 53: 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	0.2	2.1	2.1	2.1
2	Home-based Professional	1	MV Low (per user)	40	17%	40%	39%	2%	2%	25	1.0	2.1	2.1	2.1
3	Mobile Professional 1	1	MV Medium (per user)	100	17%	40%	39%	2%	2%	25	1.0	2.3	2.3	2.3
4	Mobile Professional 2	1	MV High (per user)	250	17%	40%	39%	2%	2%	60	3.0	2.5	2.5	2.5
5	Retail Outlet	5	MV Medium (5 users)	80	17%	40%	39%	2%	2%	25	0.2	2.1	2.1	2.1
6	Local Trading Company	10	MV Low (10 users)	30	23%	37%	36%	2%	2%	25	1.0	1.8	1.8	1.8
7	Local Production Company	10	MV Low (10 users)	30	23%	37%	36%	2%	2%	25	3.0	1.8	1.8	1.8
8	Local Service Company	50	MV Medium (50 users)	80	17%	40%	39%	2%	2%	60	3.0	2.3	2.3	2.3

Figure 54: 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	50	80
2	Home-based Professional	1	FBB Medium (per line)	15	100	240
3	Mobile Professional 1	1	FBB Low (per line)	10	50	80
4	Mobile Professional 2	1	FBB Low (per line)	10	50	80
5	Retail Outlet	1	FBB Medium (per line)	30	100	240
6	Local Trading Company	1	FBB Medium (per line)	30	100	240
7	Local Production Company	1	FBB Medium (per line)	30	100	240
8	Local Service Company	3	FBB Medium (per line)	30	100	240

Figure 55: 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	1.8	20	20
3	Mobile Professional 1	1	MBB High (per user)	6	4.7	20	20
4	Mobile Professional 2	1	MBB High (per user)	6	4.7	20	20
5	Retail Outlet	3	MBB Medium (per user)	3	1.8	20	20
6	Local Trading Company	5	MBB Medium (per user)	3	1.8	20	20
7	Local Production Company	5	MBB Low (per user)	1	0.4	5	10
8	Local Service Company	25	MBB Low (per user)	1	0.4	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 56: 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 57: 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	0.2
Medium voice, low SMS/data	100	80	25	0.2
High voice, low SMS/data	250	160	25	0.2
Low voice, medium SMS/data	40	30	60	1.0
Medium voice, medium SMS/data	100	80	60	1.0
High voice, medium SMS/data	250	160	60	1.0
Low voice, high SMS/data	40	30	120	3.0
Medium voice, high SMS/data	100	80	120	3.0
High voice, high SMS/data	250	160	120	3.0

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

Figure 58: Belgian Fixed broadband baskets

Type of basket	Data usage GB/month	Hours used/ month	Minimum speed (Mb/s)
Low usage	50	80	10
Medium usage	100	240	15
High usage	300	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 59: Belgian Mobile broadband baskets

Type of basket	Data usage GB/month	Hours used/ month	Days used/ month
Low usage	0.4	5	10
Medium usage	1.8	20	20
High usage	4.7	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

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 60: Provider and service overview

	Fixed voice		Mobile voice		Fixed broadband		Mobile broadband	
	Business	Residential	Business	Residential	Business	Residential	Business	Residential
Belgium								
Proximus	✓	✓	✓	✓	✓	✓	✓	✓
Telenet	✓	✓	✓	✓	✓	✓	✓	✓
SFR	✓	✓	✓	✓	✓	✓	✓	
Orange	✓		✓	✓	✓		✓	✓
Base	✓	✓	✓	✓			✓	✓
EDPNet	✓	✓			✓	✓		
3 Stars Net	✓	✓						
United Telecom	✓	✓	✓	✓	✓	✓		
Belcenter					✓			
Voo		✓		✓		✓		
Colt	✓							
France								
Orange	✓	✓	✓	✓	✓	✓	✓	✓
SFR	✓	✓	✓	✓	✓	✓	✓	✓
Bouygues	✓	✓	✓	✓	✓	✓	✓	✓
Free	✓	✓		✓		✓		
Germany								
Telekom/T-Mobile	✓	✓	✓	✓	✓	✓	✓	✓
United Internet (1&1)	✓	✓		✓	✓	✓		
Unity Media	✓	✓			✓	✓		
Vodafone	✓	✓	✓	✓	✓	✓	✓	✓
O2	✓	✓	✓	✓	✓	✓	✓	✓
Base			✓	✓			✓	✓
Netherlands								
KPN	✓	✓	✓	✓	✓	✓	✓	✓
Ziggo	✓	✓	✓	✓	✓	✓		
Tele2	✓	✓		✓		✓		
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 an 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 and 2016 studies

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 61: 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 62: Results for single service and multiplay offers, by calculation type: Local-based Individual Business

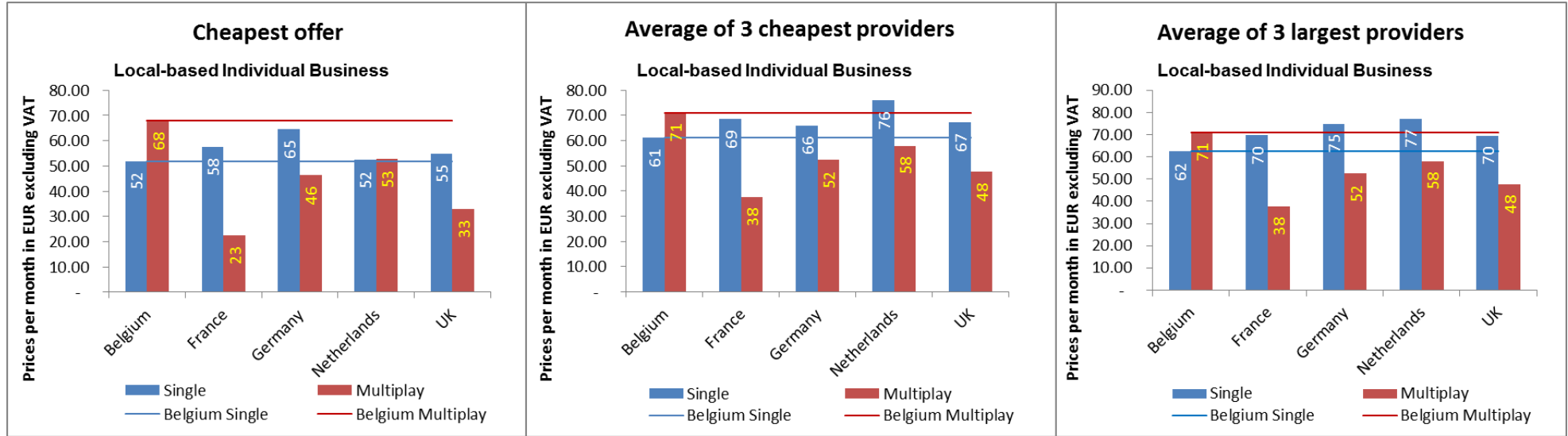
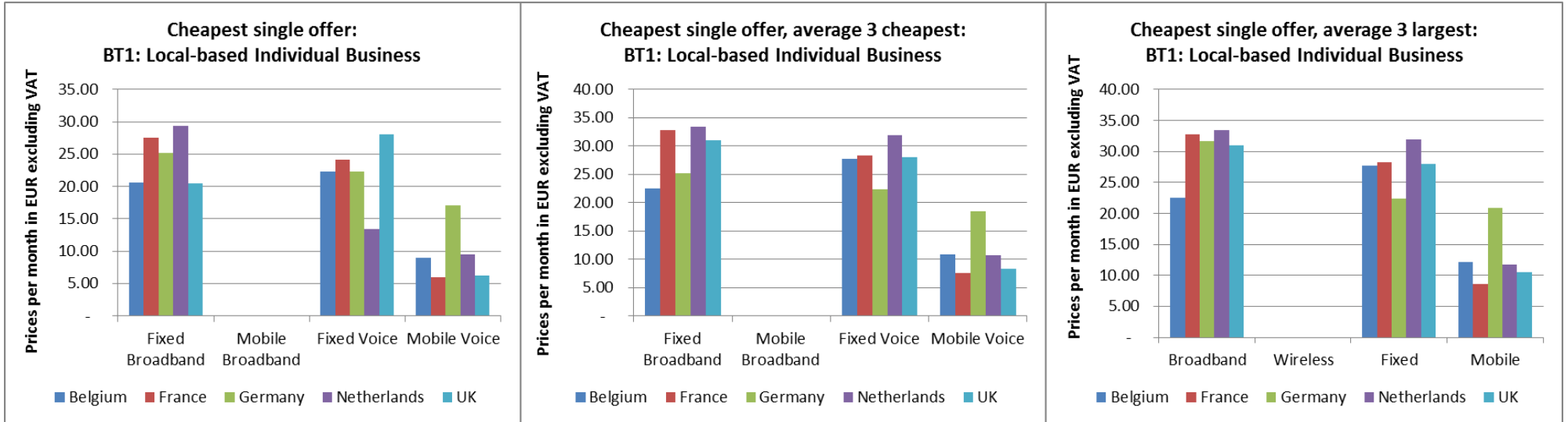


Figure 63: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Local-based Individual Business

	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	1	5	4	1	5	5	1	5	5
France	4	1	1	4	1	1	3	1	1
Germany	5	3	3	2	3	3	4	3	3
Netherlands	2	4	5	5	4	4	5	4	4
UK	3	2	2	3	2	2	2	2	2

Figure 64: Cheapest single offers, broken down by service, by calculation type: Local-based Individual Business



B.1.2: Home-based Professional

Figure 65: Results for single service and multiplay offers, by calculation type: Home-based Professional

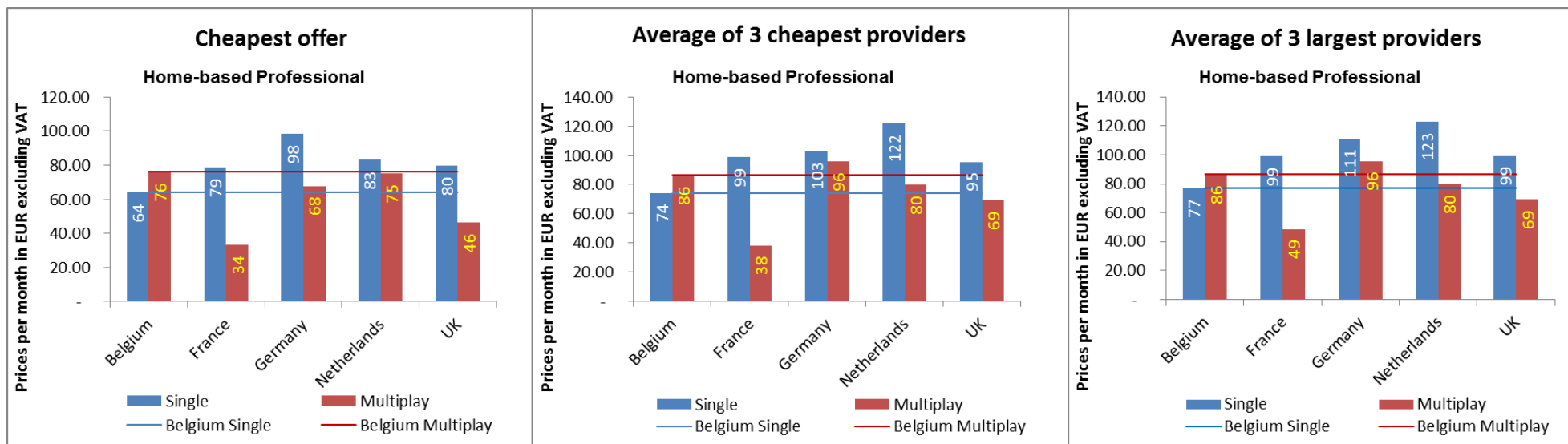
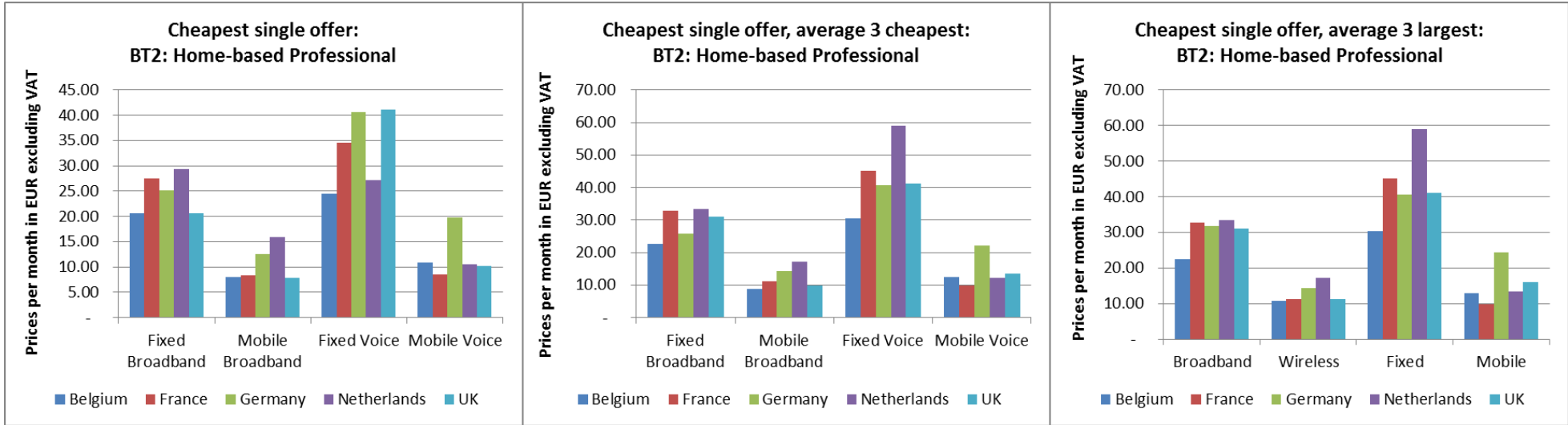


Figure 66: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Home-based Professional

	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	1	5	3	1	4	3	1	4	3
France	2	1	1	3	1	1	2	1	1
Germany	5	3	4	4	5	5	4	5	5
Netherlands	4	4	5	5	3	4	5	3	4
UK	3	2	2	2	2	2	3	2	2

Figure 67: Cheapest single offers, broken down by service, by calculation type: Home-based Professional



B.1.3: Mobile Professional 1

Figure 68: Results for single service and multiplay offers, by calculation type: Mobile Professional 1

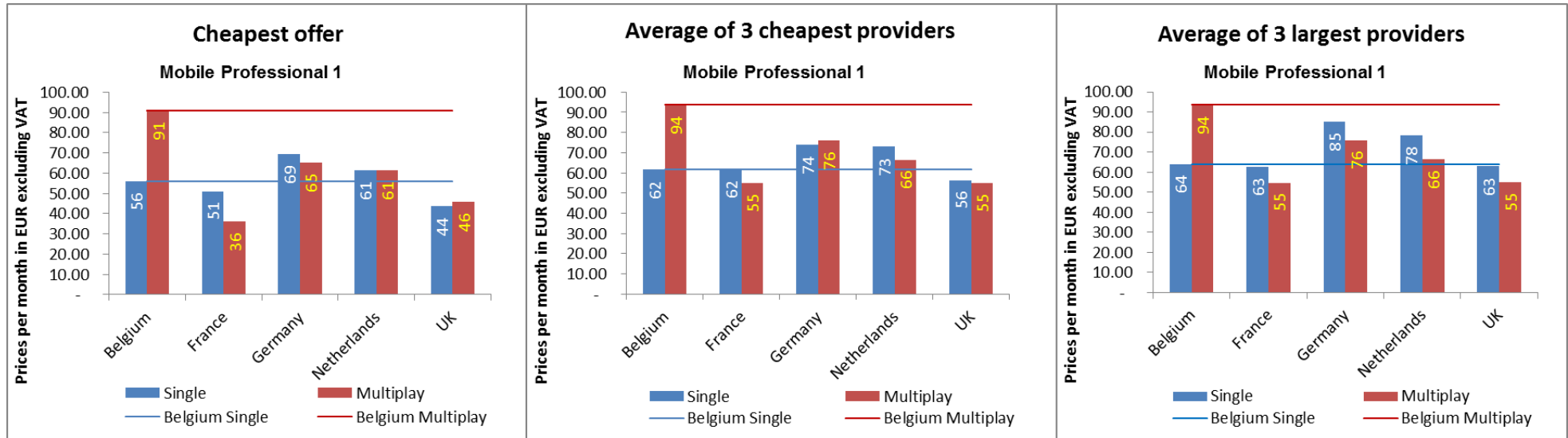
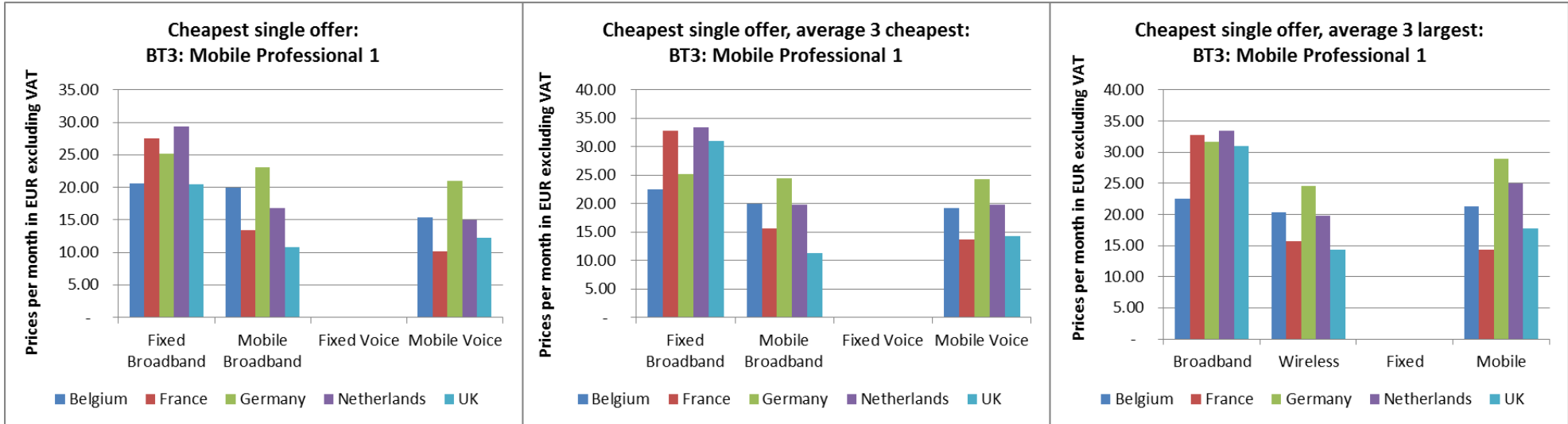


Figure 69: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Mobile Professional 1

	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	5	3	2	5	3	3	5	3
France	2	1	1	3	1	1	1	1	1
Germany	5	4	5	5	4	5	5	4	5
Netherlands	4	3	4	4	3	4	4	3	4
UK	1	2	2	1	2	2	2	2	2

Figure 70: Cheapest single offers, broken down by service, by calculation type: Mobile Professional 1



B.1.4: Mobile Professional 2

Figure 71: Results for single service and multiplay offers, by calculation type: Mobile Professional 2

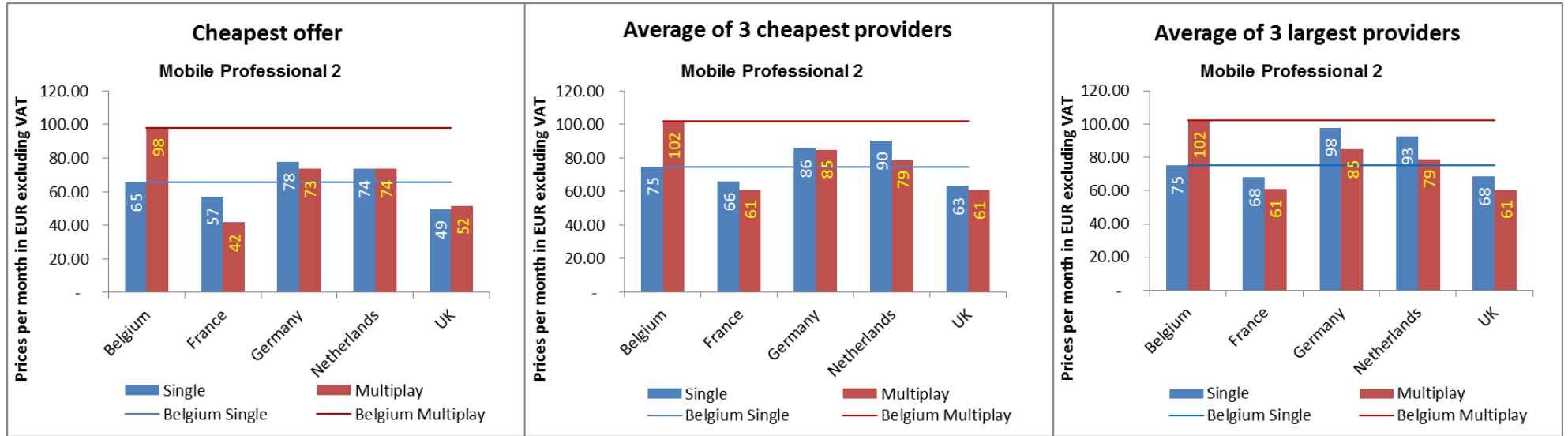
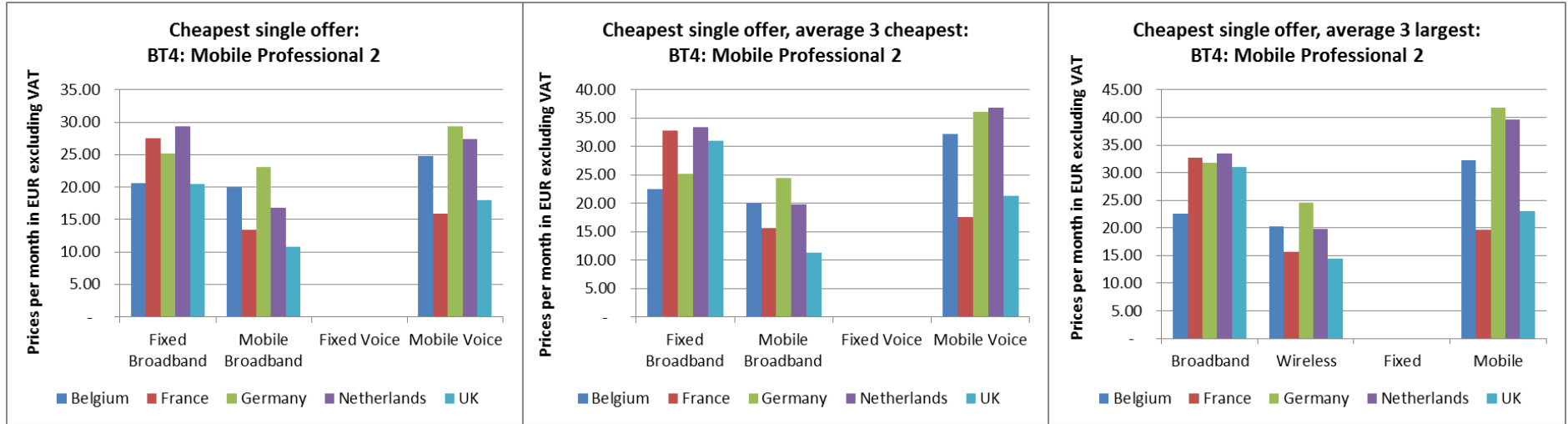


Figure 72: Country rankings for single service, multiplay, and cheapest overall offer, by calculation type: Mobile Professional 2

	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	3	5	3	3	5	3	3	5	3
France	2	1	1	2	2	2	1	2	2
Germany	5	3	4	4	4	5	5	4	5
Netherlands	4	4	5	5	3	4	4	3	4
UK	1	2	2	1	1	1	2	1	1

Figure 73: Cheapest single offers, broken down by service, by calculation type: Mobile Professional 2



B.1.5: Retail Outlet

Figure 74: Results for single service offers, by calculation type: Retail Outlet

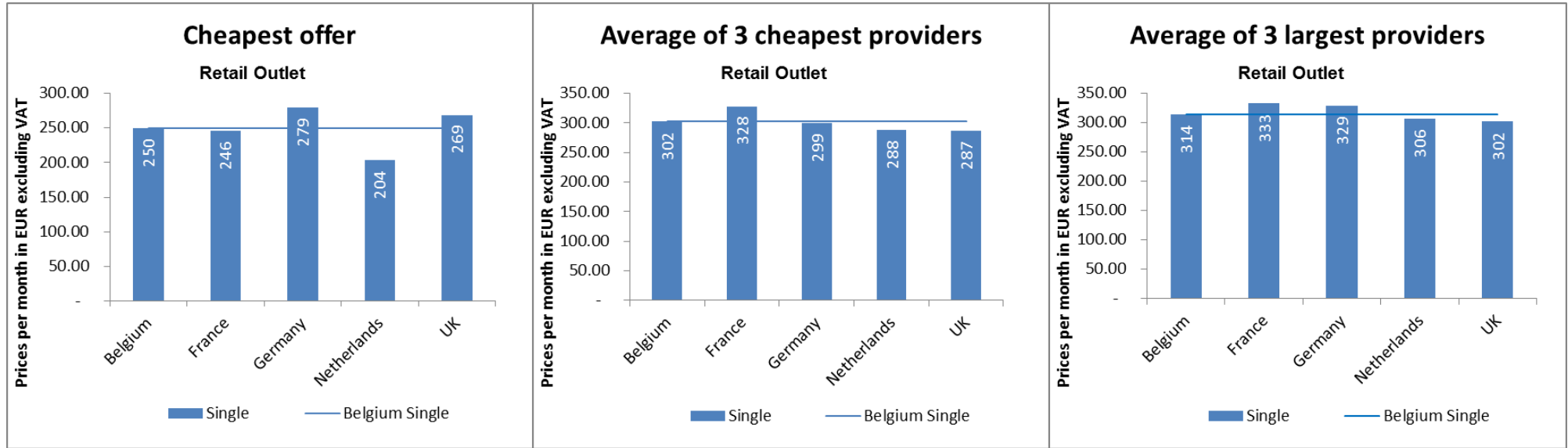
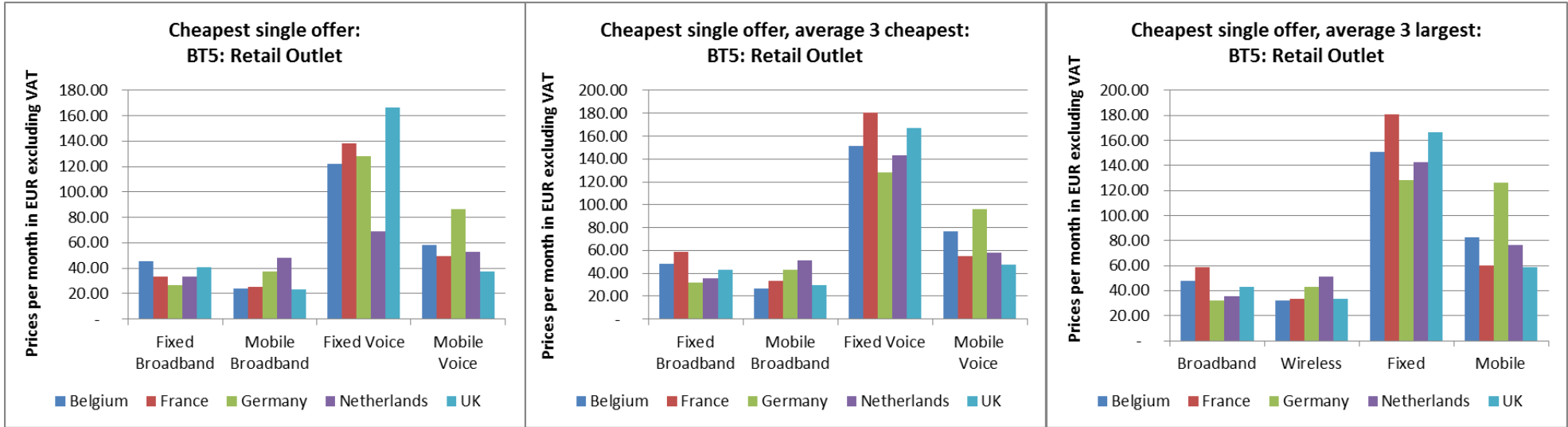


Figure 75: Country rankings for single service offers, by calculation type: Retail Outlet

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

Figure 76: Cheapest single offers, broken down by service, by calculation type: Retail Outlet



B.1.6: Local Trading Company

Figure 77: Results for single service offers, by calculation type: Local Trading Company

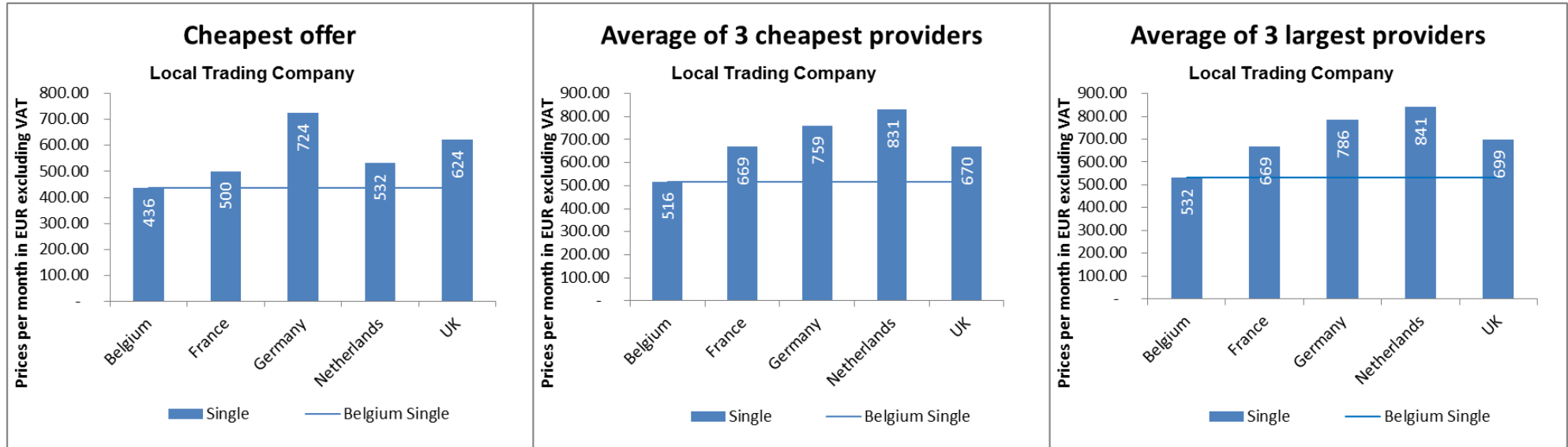
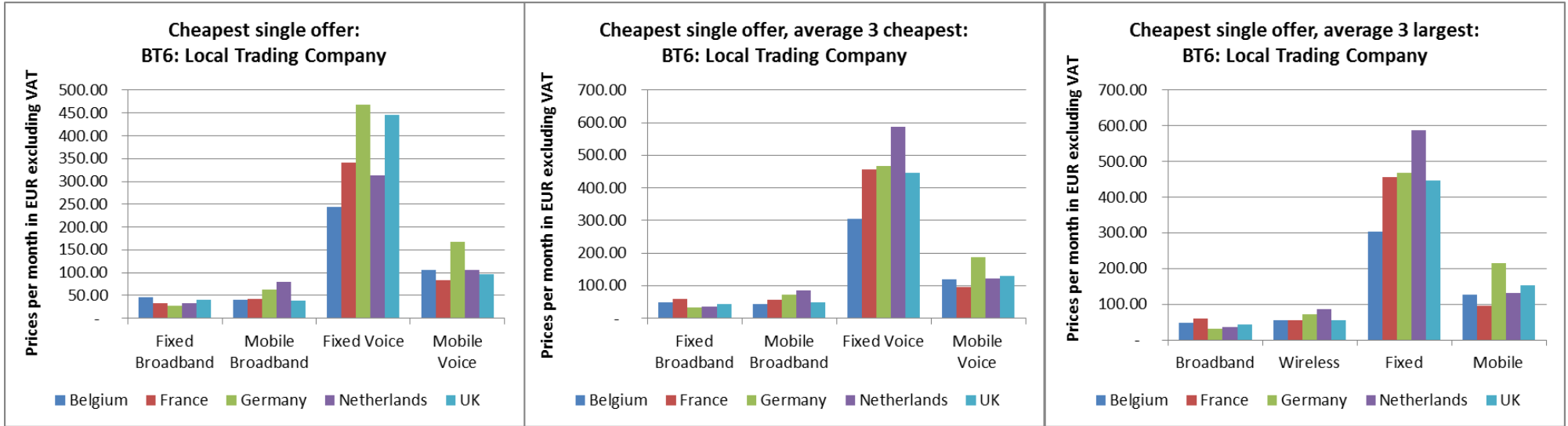


Figure 78: Country rankings for single service offers, by calculation type: Local Trading Company

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

Figure 79: Cheapest single offers, broken down by service, by calculation type: Local Trading Company



B.1.7: Local Production Company

Figure 80: Results for single service offers, by calculation type: Local Production Company

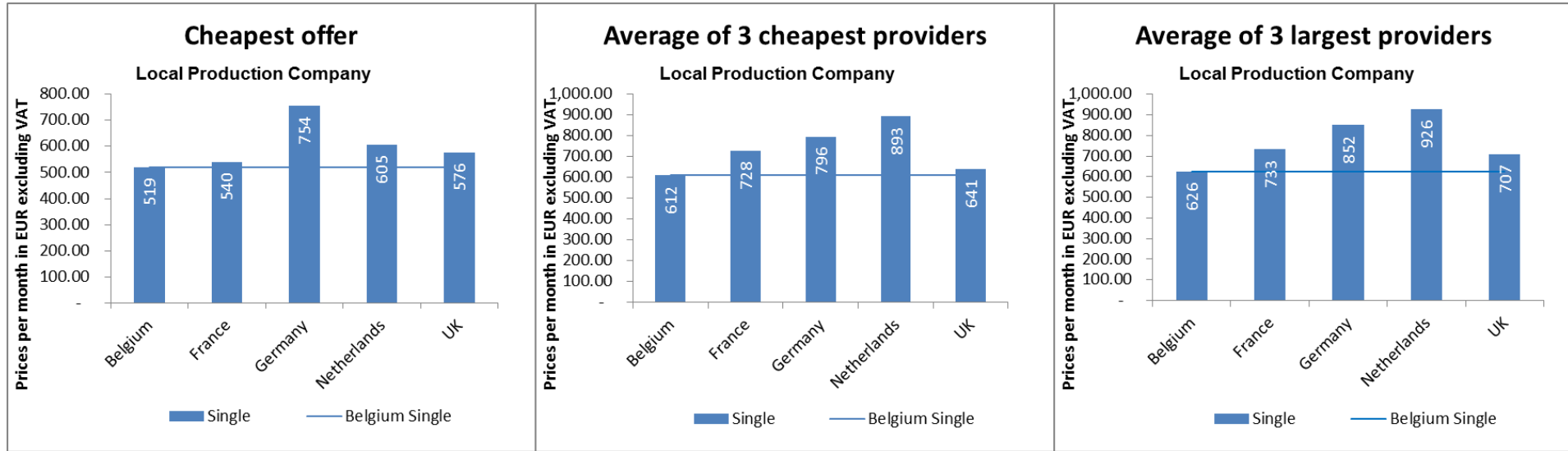
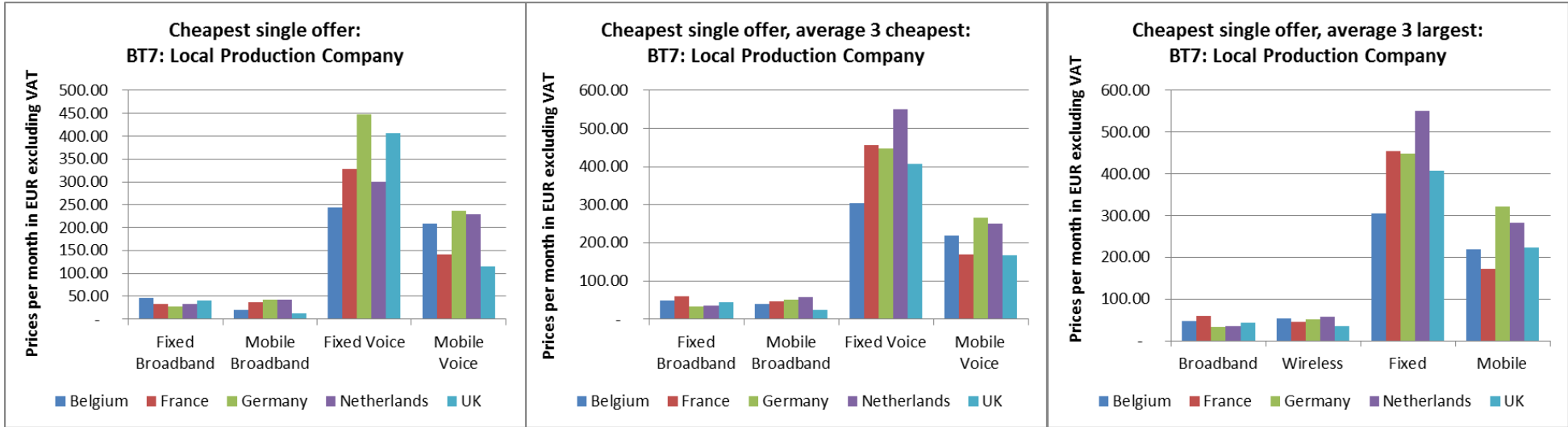


Figure 81: Country rankings for single service offers, by calculation type: Local Production Company

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

Figure 82: Cheapest single offers, broken down by service, by calculation type: Local Production Company



B.1.8: Local Service Company

Figure 83: Results for single service offers, by calculation type: Local Service Company

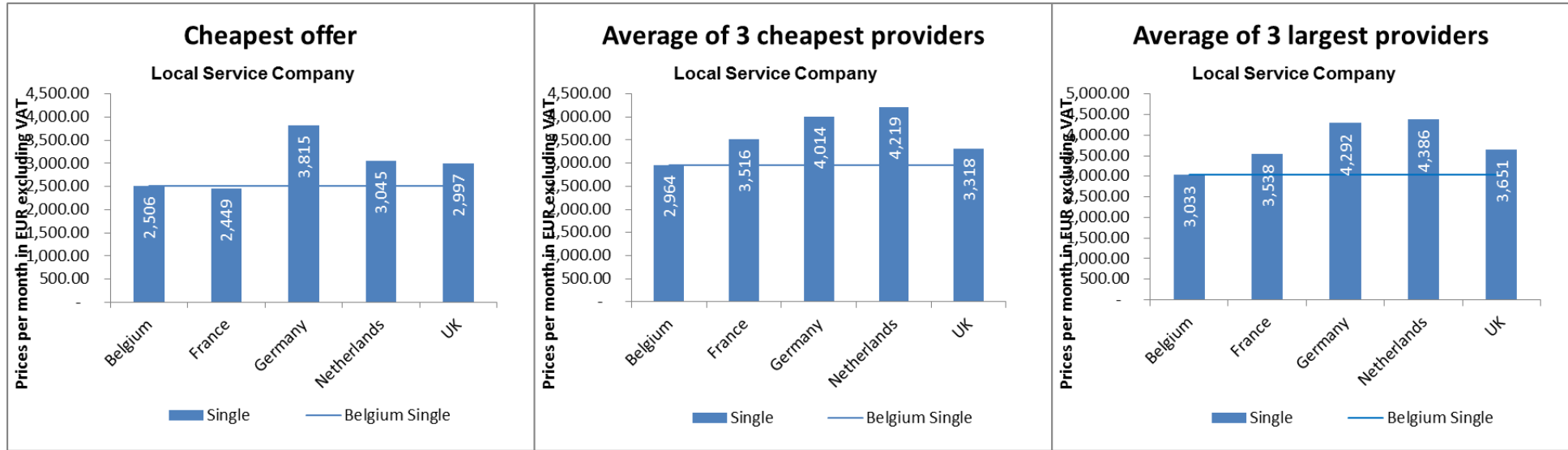
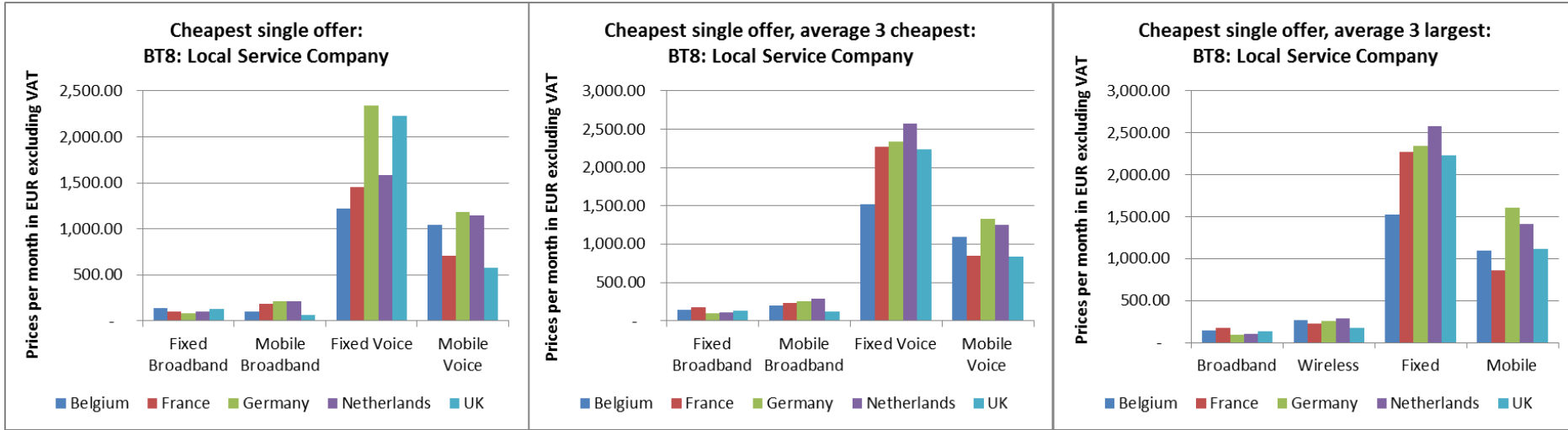


Figure 84: Country rankings for single service offers, by calculation type: Local Service Company

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

Figure 85: Cheapest single offers, broken down by service, by calculation type: Local Service Company



END OF APPENDICES