

Trends in telecommunications prices

December 2020

Contents

1. Trends in telecommunications prices in December 2020	5
2. Trends in telecommunications prices in the EU in December 2020	9
3. Minimum monthly charge per service and offer	14
4. Analysis of the Worldwide mobile data pricing 2020 report	18
Methodological note	20
Appendix	22

Index of tables

Table 1 – Trends in the Consumer Price Index (CPI and telecommunications prices).....	5
Table 2 – Trends in telecommunications prices: Portugal vs EU	9
Table 3 – Minimum monthly charges by type of offer – December 2020	14
Table 4 – Year-on-year variation rate of the minimum monthly charge by type of offer – December 2020.....	16
Table 5 – Average variation rate of the last 12 months of the minimum monthly charge by type of offer – December 2020	17
Table 6 – Variação média dos últimos 12 meses dos telecommunications prices na EU em dezembro de 2020	22

Index of figures

Figure 1 – Year-on-year variation rate of the CPI and telecommunications prices	6
Figure 2 – Average variation rate of the last twelve months of the CPI and telecommunications prices.....	7
Figure 3 – CPI and telecommunications price trends in Portugal (2010M12 = Base 100)	8
Figure 4 – Average variation rate of the last twelve months- telecommunications prices: Portugal vs EU	10
Figure 5 – Variation of the HICP of telecommunications in the EU between December 2009 and December 2020	11
Figure 6 – Evolution of telecommunications prices in Portugal and in the EU (2009M12 = Base 100)	12
Figure 7 – Telecommunications prices in Portugal, Spain, France and Italy (2009M12 = Base 100).....	13
Figure 8 – Number of services/offers of each provider presenting a minimum monthly charge in Portugal – December 2020	15
Figure 9 – Monthly average price of 1GB of mobile data in the UE27	18
Figure 10 – Minimum monthly price of 1GB of mobile data in the UE27	19

Executive Summary

- In December 2020, telecommunications prices, measured by the sub-index of the Consumer Price Index (CPI), fell by 0.1% compared to the previous month. This change was due to a price change in a triple-play bundle.
- Compared to the same month of the previous year, the observed variation in prices was -1.0%. The year-on-year variation of telecommunications prices has been lower than the growth of the CPI since November 2017.
- The average variation rate of telecommunications prices of the last twelve months was -2.1%, i.e., 2.1 percentage points (p.p.) below that recorded by the CPI (0.0%). This price reduction also reflects the entry into force on 15 May 2019 of the new European rules regulating the prices of intra-EU communications.
- In December 2020, the average variation rate of telecommunications prices in Portugal was lower than that observed in the European Union (-2.1 p.p.). The average variation rate of telecommunications prices of the last twelve months in Portugal was the 5th lowest (23rd highest) among EU countries. The country that recorded the highest increase of prices was Poland (+4.1%) while the strongest reduction occurred in Ireland (-3.6%). On average, telecommunications prices in the EU remained unchanged.
- Between the end of 2009 and December 2020, telecommunications prices in Portugal increased by 6.5%, while in EU they fell by 10.8%. The difference narrowed following the entry into force on 15 May 2019 of the new European rules regulating the prices of intra-EU communications.

A finer comparative analysis of some countries reveals that a divergent price trend was installed from 2011-2012 onwards. In particular, telecommunications prices in Portugal increased by 6.5%, while in Spain, Italy and France they fell by 9.4%, 16.9% and 24.3%, respectively, between the end of 2009 and December 2020.

- Minimum monthly charges are offered by NOWO in seven cases of a range of 13 services/offers, while MEO, NOS and Vodafone each showed the lowest monthly charges for two types of services/offers.

- Compared to the same month of the previous year, the following price variations stand out in particular: the minimum monthly charge of the most common quadruple play (4P) bundles fell by 0.4%, due to changes of the NOWO offers; the minimum monthly charge of the mobile telephone service with internet on the mobile phone fell by 36.1%, due to the reduction of the monthly charge of the NOWO offer from 7.5 euros to 5 euros and the introduction of the free offer of the first monthly charge; and the minimum monthly charge of individualised fixed broadband (BLF) increased by 4.3%, due to the end of the free offer of the first monthly charge of the basic service provided by NOWO.
- By provider, MEO decreased its monthly charge of two services/offers in relation to the same month of the previous year and increased the monthly charge in four services/offers. One of the MEO services whose monthly charge decreased significantly was the offer of mobile telephone service with internet on the mobile telephone (UZO offer), which now has values close to the minimum monthly charge (provided by NOWO). NOS increased the minimum monthly charges of seven services/offers, and Vodafone increased the minimum monthly charges of four services/offers. Particular note should be made of the increased monthly charge of the triple play offer of MEO, NOS and Vodafone, which occurred in October and November of 2020¹.

¹ See: <https://www.anacom.pt/render.jsp?contentId=1586142>.

1. Trends in telecommunications prices in December 2020

According to the Portuguese national statistics institute (INE), telecommunications prices fell by 0.1% in relation to the previous month. This change was due to a price change in a triple-play bundle.

Compared to the same month of the previous year, the variation of telecommunications prices was -1.0%. The variation of telecommunications prices was ranked in the 29th highest place (or 15th lowest) among the 43 subgroups of goods and services considered (Table 1).

Table 1 – Trends in the Consumer Price Index (CPI) and telecommunications prices

	December 2020			2019
	YoY var.	Average var. of the last 12 months	Var. of previous month	Average var. of the last 12 months
CPI (%)	-0.2	0.0	-0.1	0.3
Telecommunications (%)	-1.0	-2.1	-0.1	-2.7
... Mobile telephone services* (%)	0.20	-1.9	0.0	-3.7
Relative position (decreasing order among the 43 subgroups of goods and services)	29	31	27	37

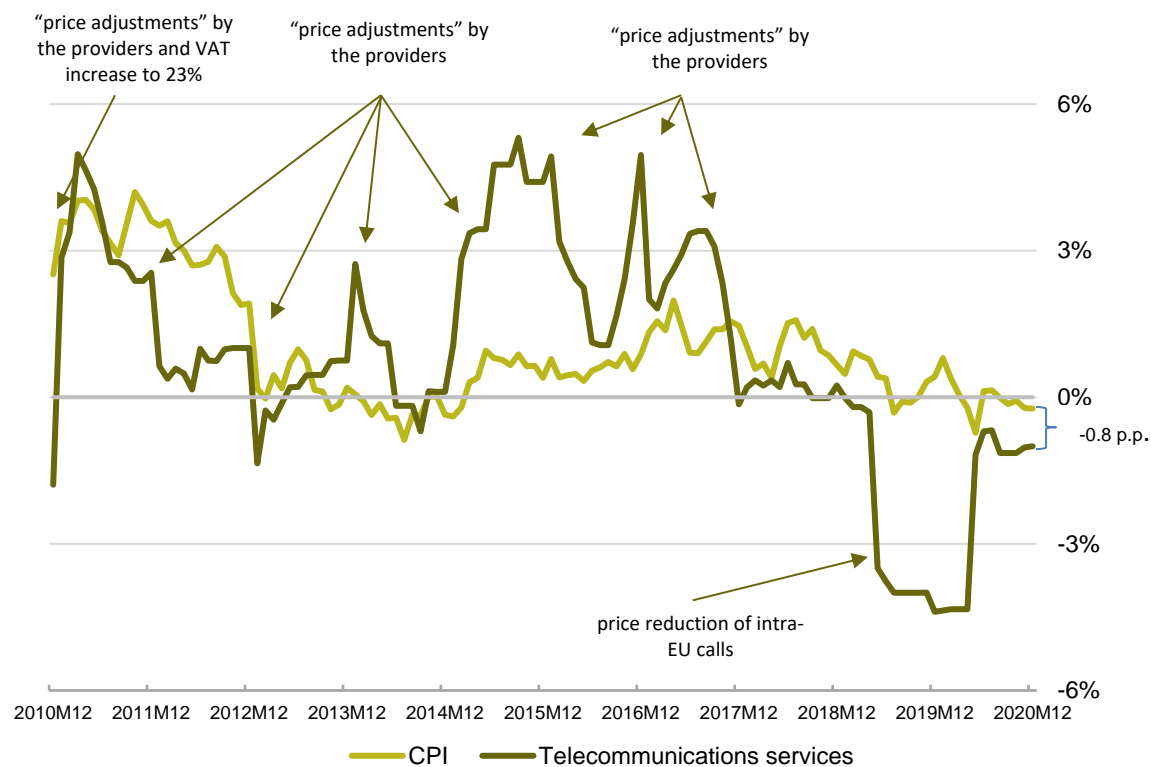
Unit: %

Source: INE, Eurostat

Note*: the HICP sub-index "Wireless telephone services", which is incorporated in the sub-index "Telephone and telefax services".

Between August 2013 and October 2017, the year-on-year growth of telecommunications prices was almost always higher than the growth of the Consumer Price Index (CPI) due to the "price adjustments" made by the providers, especially at the beginning of each year. However, this situation reversed in November 2017. In December 2020, the deviation in relation to the CPI reached -0.8 p.p. (Figure 1).

Figure 1 – Year-on-year variation rate of the CPI and telecommunications prices

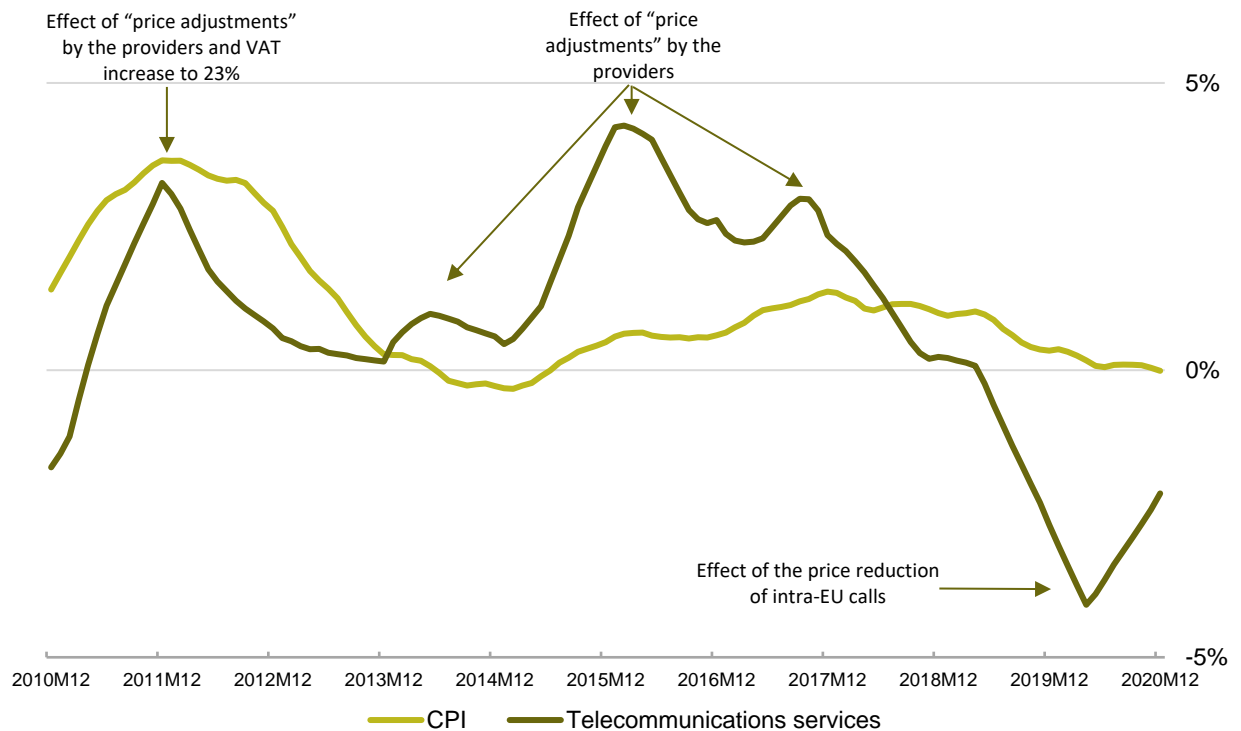


Unit: %
Source: INE

The average variation of telecommunications prices of the last twelve months (-2.1%) was ranked in 31st position among the 43 subgroups of goods and services considered, being higher than the price variation of “Footwear” and “Transport services” and lower than the price variation of “Hospital services” and “Water supply”.

The difference between the average variation rate of the last twelve months of telecommunications prices and the CPI reached -2.1 p.p. in December 2020. During the 121 months elapsed since December 2010, telecommunications prices have grown at rates below the CPI in 67 months (Figure 2). The positive deviations between the evolution of telecommunications prices and the CPI and the most significant growth of telecommunications prices in Portugal were due to the aforesaid “price adjustments” made by the providers.

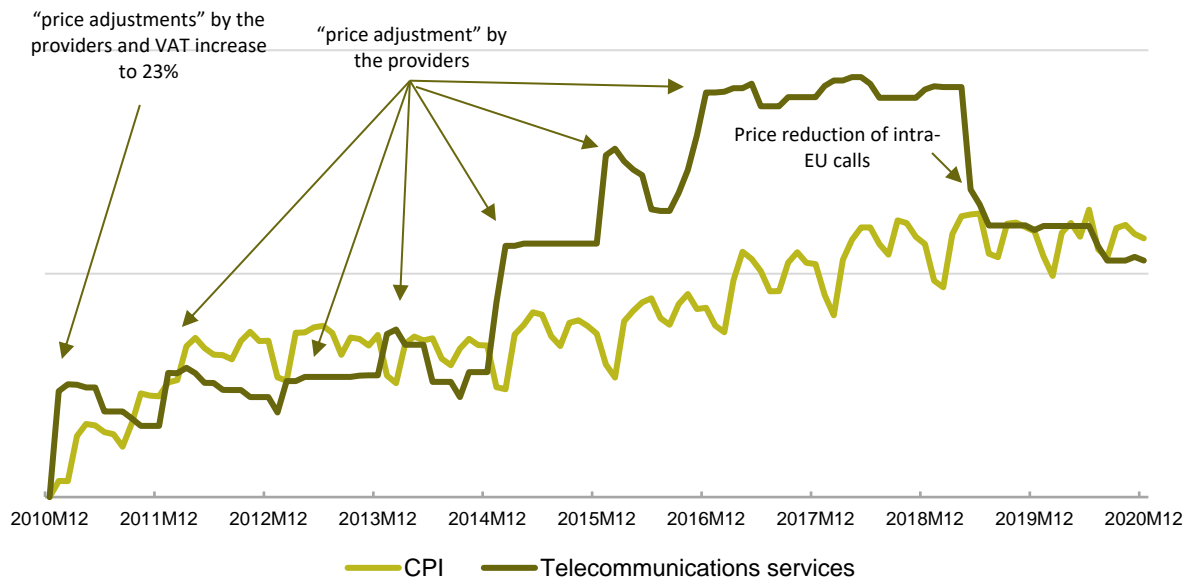
Figure 2 – Average variation rate of the last twelve months of the CPI and telecommunications prices



Unit: %
Source: INE

In cumulative terms, telecommunications prices increased by 8.5 p.p. since the end of 2010, while the CPI increased by 9.3 p.p. The divergence between the evolution of the two indices started in 2015 and exacerbated in 2016, associated to the "price adjustments" made by the main providers (Figure 3). From May 2019 onwards, the diminishing divergence between the two indices was due to the entry into force of Regulation (EU) 2018/1971 of the European Parliament and of the Council, which imposed a maximum price on intra-EU international calls and text messages (SMS) (see Box 1).

Figure 3 – CPI and telecommunications price trends in Portugal (2010M12 = Base 100)



Unit: index (2010M12 = Base 100)

Source: ANACOM, based on INE data

Box 1 – Reduction in prices of intra-EU calls

New European rules entered into force on 15 May 2019, establishing limits to the retail prices charged to consumers for regulated intra-EU communications¹. These new rules are applicable to international communications (fixed and mobile voice and SMS) made from a number in Member State to a number in another Member State, which is fully or partially charged based on effective consumption.

Calls made by the consumer in one country to a number (fixed or mobile) of another EU country are now chargeable at a maximum price of 0.19 euros per minute (without VAT) to the consumer who made the call. Text messages (SMS) sent by the consumer in one country to a number (fixed or mobile) of another EU country are now chargeable at a maximum price of 0.06 euros per SMS (without VAT) to the consumer who sent the SMS.

In May 2019, telecommunications prices fell by 3.2%.

¹ Pursuant to article 5 of Regulation (EU) 2015/2120 as amended by article 50 of Regulation (EU) 2018/1971 of the European Parliament and Council, available at <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:321:TOC>.

2. Trends in telecommunications prices in the EU in December 2020

According to Eurostat, in December 2020, the average variation rate of the last twelve months of the prices of telecommunications services in Portugal was 2.1 p.p. lower than the EU average, with Portugal having been ranked as the 5th country with the lowest price variation (or 23rd country with the highest variation). The countries in which the highest price increases occurred were Poland (+4.1%), Finland and Romania (+1.8%), while Ireland (-3.6%), the Czech Republic (-3.5%) and Denmark (-2.8%) showed the strongest reductions.

In relation to the same month of the previous year, the variation of telecommunications prices in Portugal was the 20th highest position (or 8th lowest) among the 27 countries considered (Table 2).

Table 2 – Trends in telecommunications prices: Portugal vs EU

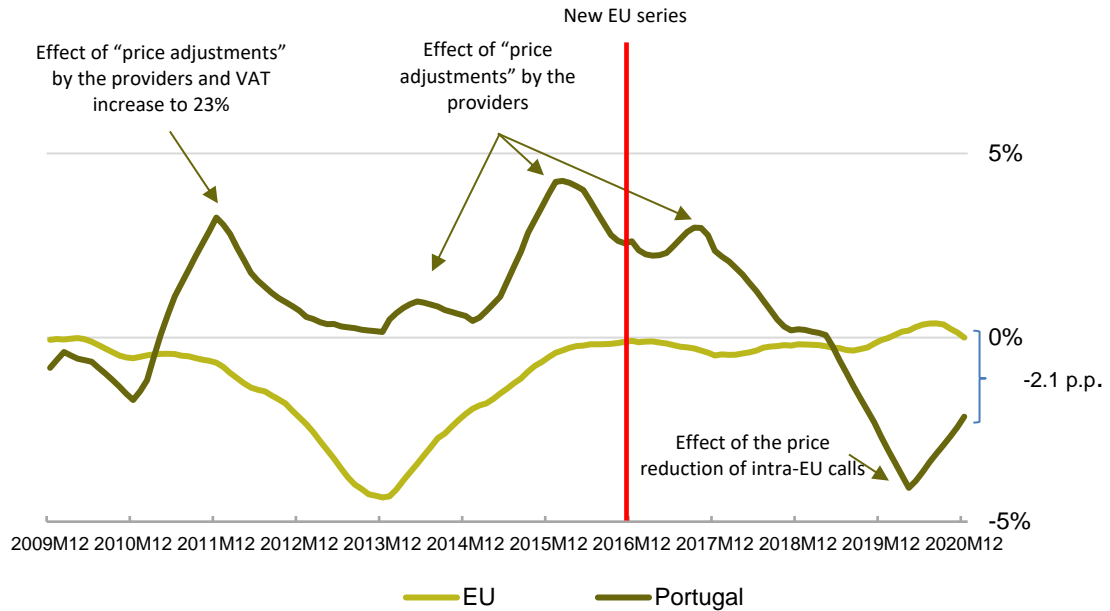
	December 2020			2019
	YoY var.	Average var. of the last 12 months	Var. of previous month	Average var. of the last 12 months
EU (%)	-0.9	0.0	-0.2	-0.1
PT / EU deviation (p.p.)	-0.1	-2.1	0.0	-2.6
<i>Relative position (decreasing order among 27 countries)</i>	20	23	17	23

Unit: %, p.p.

Source: Eurostat

Between April 2011 and May 2019, telecommunications prices grew more in Portugal than in the EU (in terms of the average variation rate of the last twelve months), above all due to the “price adjustments” referred to above. However, since June 2019, the variation of telecommunications prices in Portugal has been lower than the EU average (Figure 4).

Figure 4 – Average variation rate of the last twelve months – telecommunications prices: Portugal vs EU



Unit: %

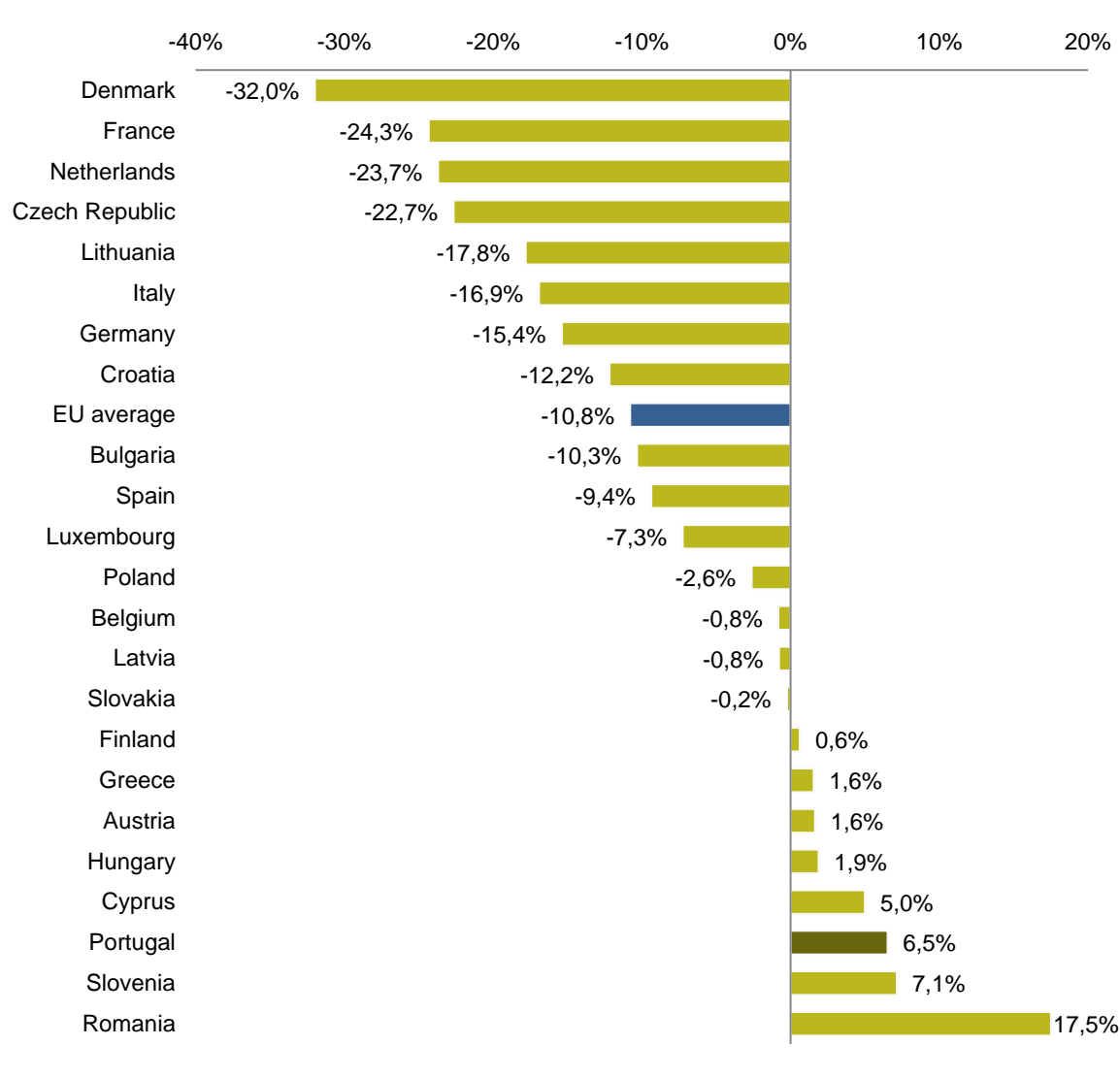
Source: ANACOM, based on Eurostat data

Note 1: Based on the publication, by Eurostat, on 25 February 2016, of data relative to January 2016, the reference year of the Harmonised Index of Consumer Prices (HICP) was changed from 2005 to 2015. There could be differences in the series due to the effect of rounding off.

Note 2: EU telecommunications prices from December 2016 differ from those published previously due to changes made by Eurostat. The information up to November 2016 was gathered on 16 March 2018. The information from December 2016 onwards was gathered on 20 February 2021.

Between the end of 2009 and December 2020, telecommunications prices in Portugal increased by 6.5%, while in the EU they fell by 10.8%. The difference narrowed following the entry into force on 15 May 2019 of the new European rules regulating the prices of intra-EU communications. (Figure 5).

Figure 5 – Variation of the HICP of telecommunications in the EU between December 2009 and December 2020



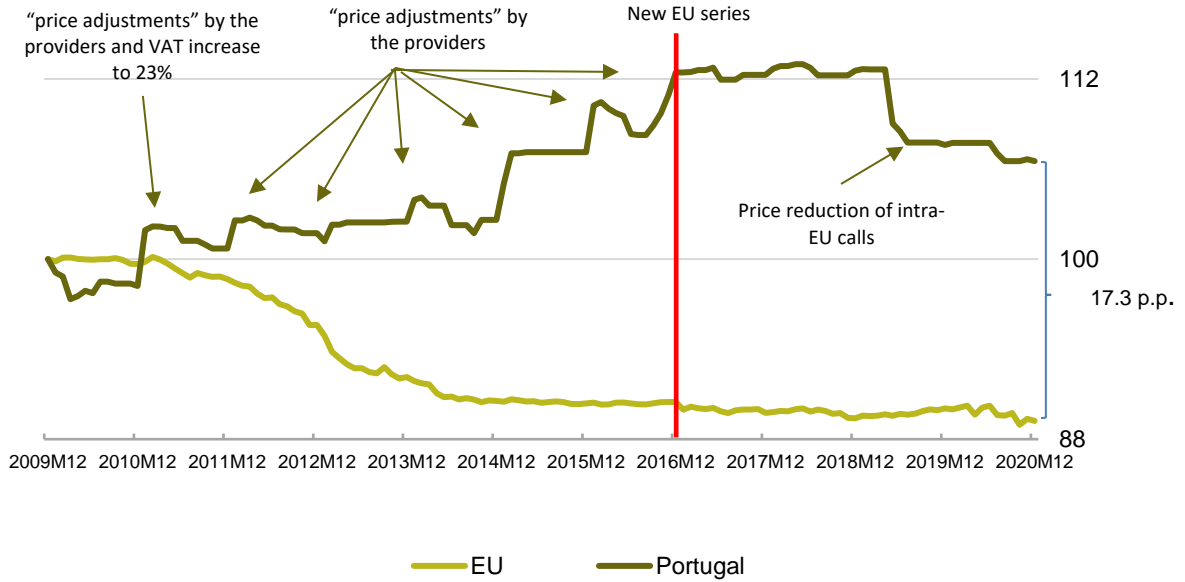
Unit: %

Source: ANACOM, based on Eurostat data

Note: Information not available for the United Kingdom, Ireland, Malta, Sweden and Estonia.

The differences between the evolution of telecommunications prices in Portugal and in the EU (+17.3 p.p. in accumulated terms) were primarily due to the “price adjustments” implemented by the providers, normally in the first months of each year (Figure 6).

Figure 6 – Evolution of telecommunications prices in Portugal and in the EU (2009M12 = Base 100)



Unit: index (2009M12 = Base 100)

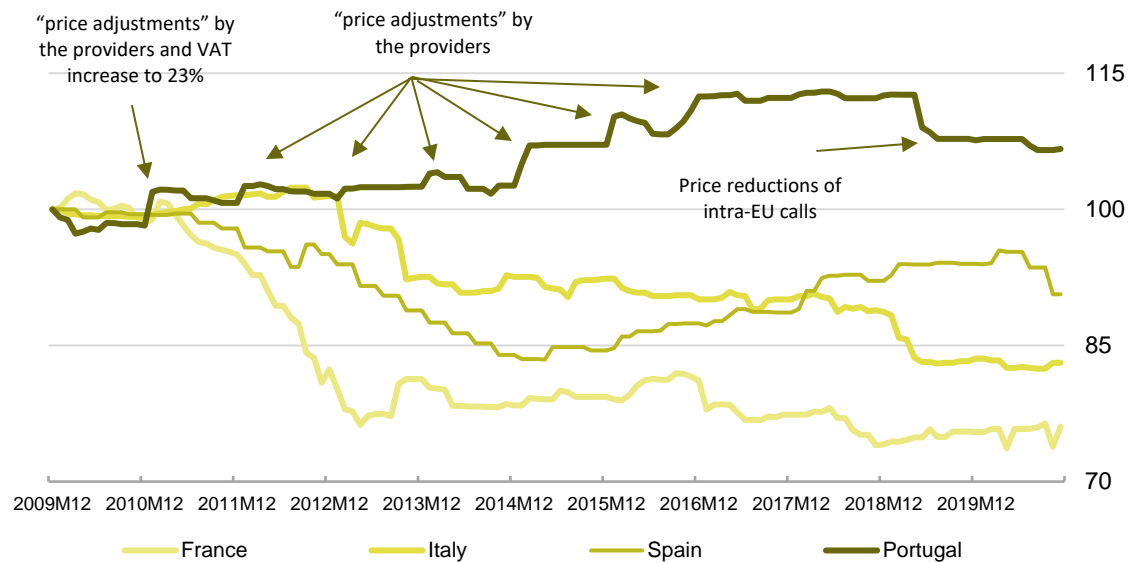
Source: ANACOM, based on Eurostat data

Note: EU telecommunications prices from December 2016 differ from those published previously due to changes made by Eurostat. The information up to November 2016 was gathered on 16 March 2018. The information from December 2016 onwards was gathered on 20 February 2021.

Box 2 – Comparison of the evolution of prices in Portugal, Spain, France and Italy

Between the end of 2009 and the end of 2020, telecommunications prices in Portugal increased by 6.5%, while in Spain, Italy and France they fell by 9.4%, 16.9% and 24.3%, respectively. The differences between the evolution of telecommunications prices in Portugal and in these countries were influenced, among other effects related to the dynamics of each one of these markets, by the “price adjustments” implemented by the providers, normally in the first months of each year.

Figure 7 – Telecommunications prices in Portugal, Spain, France and Italy (2009M12 = Base 100)



Unit: index (2009M12 = Base 100)

Source: ANACOM, based on Eurostat data

3. Minimum monthly charge per service and offer

Table 3 shows the minimum monthly charges of various services and offers in December 2020, according to the publicly available information on the websites of the four providers with the largest share of subscribers.

As can be seen, the minimum monthly charges of the 3P, 4P, 5P bundles and one 2P bundle offered by MEO, NOS and Vodafone are very similar.

Table 3 – Minimum monthly charge by type of offer – December 2020

	MEO	NOS	NOWO	Vodafone
TVS	17.06	13.49	21.56	30.90
BLF	24.99	24.99	20.00	25.90
STF	14.99	12.58	21.56	0.29
STM	0.36	1.11	4.79	1.11
STM with internet on mobile phone	5.00	12.00	4.79	12.50
BLM PC/Tablet	13.41	15.00	-	16.00
BLF+TVS	30.99	30.99	21.56	30.90
BLF+STF	26.99	30.99	21.56	25.90
TVS+STF	30.47	13.49	23.96	30.90
BLF+TVS+STF	30.99	30.99	23.96	30.90
BLF+TVS+STF+STM	49.82	49.82	28.75	49.74
BLF+TVS+STF+STM with internet on mobile phone	49.82	49.82	28.75	49.74
BLF+TV+STF+STM with internet on mobile phone + BLM PC/Tablet	54.62	54.62	-	54.53

Unit: Euros including VAT

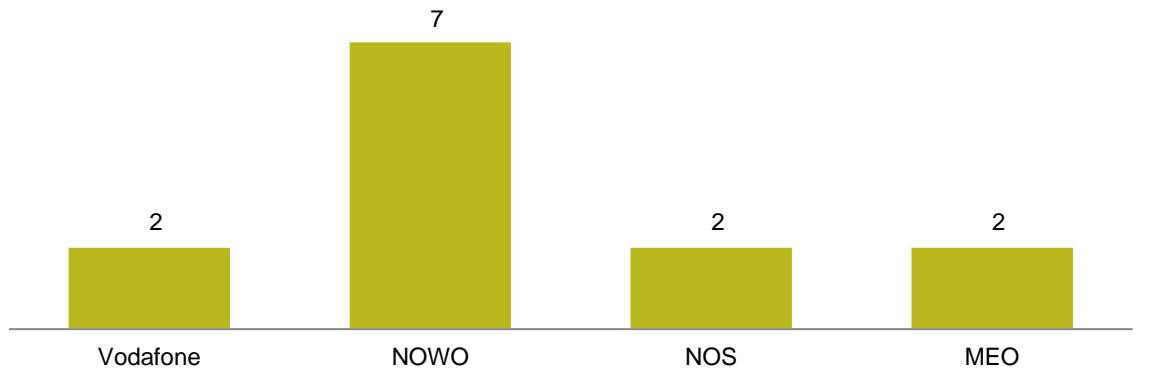
Source: ANACOM

Note 1: TVS – Subscription TV signal distribution service; BLF – Fixed broadband; STF – Fixed telephone service; STM – Mobile telephone service; BLM – Mobile broadband supported by PC/tablet.

Note 2: The minimum monthly charges for each service/offer are highlighted in bold.

Among the services/offers considered, the lowest monthly charges are offered by NOWO in seven cases out of a total of 13 services/offers, while MEO, NOS and Vodafone showed the lowest monthly charges for two types of services/offers (Figure 8).

Figure 8 – Number of services/offers of each provider presenting a minimum monthly charge in Portugal – December 2020



Unit: Number of services/offers

Source: ANACOM

Compared to the same month of the previous year, the following prices variations are noteworthy (Table 4):

- The minimum monthly charge of the most common quadruple play (4P) bundles fell by 0.4%, due to the alteration of the NOWO offer;
- The minimum monthly charge of the mobile telephone service with internet on mobile phone fell by 36.1%, due to the reduction of the monthly charge of the NOWO offer from 7.5 euros to 5 euros and introduction of the free offer of the first monthly charge;
- The minimum monthly charge of the individualised fixed broadband (BLF) service increased by 4.3%, following the elimination of the free offer of the first monthly charge of the basic service provided by NOWO.

Table 4 – Year-on-year variation rate of the minimum monthly charge by type of offer – December 2020

	Total	MEO	NOS	NOWO	Vodafone
TVS	0.0	0.0	0.0	0.0	3.3
BLF	4.3	-7.4	7.2	4.3	0.0
STF	0.0	20.0	1.0	0.0	0.0
STM	0.0	0.0	0.0	-36.1	0.0
STM with internet on mobile phone	-36.1	-33.3	0.0	-36.1	0.0
BLM PC/Tablet	0.0	0.0	0.0	-	0.0
BLF+TVS	0.0	3.3	3.3	0.0	3.3
BLF+STF	0.0	0.0	14.7	0.0	0.0
TVS+STF	0.0	1.6	0.0	0.0	3.3
BLF+TVS+STF	0.0	3.3	3.3	0.0	3.3
BLF+TVS+STF+STM	-0.4	0.0	4.0	-0.4	0.0
BLF+TVS+STF+STM with internet on mobile phone	-0.4	0.0	4.0	-0.4	0.0
BLF+TV+STF+STM with internet on mobile phone +BLM PC/Tablet	0.0	0.0	0.0	-	0.0

Unit: %

Source: ANACOM

Note: TVS – Subscription TV signal distribution service; BLF – Fixed broadband; STF – Fixed telephone service; STM – Mobile telephone service; BLM – Mobile broadband supported by PC/tablet.

By provider, MEO decreased its minimum monthly charge of two services/offers in relation to the same month of the previous year and increased the monthly charge in four services/offers. One of the MEO services whose monthly charge decreased significantly was the offer of mobile telephone service with internet on the mobile telephone (UZO offer), which now has values close to the minimum monthly charge (provided by NOWO). NOS increased the minimum monthly charges of seven services/offers, and Vodafone increased the minimum monthly charges of four services/offers. Particular note should be made of the increased monthly charge of the triple play offer of MEO, NOS and Vodafone, which occurred in October and November of 2020².

Table 5 shows the average variation rate of the last 12 months for each type of offer. The discontinuation of a NOWO offer in August 2019 (quadruple play offer with a monthly charge

² See “MEO, NOS and Vodafone increase monthly charges of 3P bundles by 3.3% and reduce quality” at <https://www.anacom.pt/render.jsp?contentId=1586142>.

of 19.99 euros) contributed to the increase of the average variation rate of the 2P, 3P and 4P offers. The discontinuation of the customised offers (i.e., “MEO by” and “Fibra ID”) in September and May 2019, respectively, contributed to the increase of the average variation rate of the quadruple play and quintuple play offers in that period in the cases of MEO and Vodafone.

Table 5 – Average variation rate of the last 12 months of the minimum monthly charge by type of offer – December 2020

	Total	MEO	NOS	NOWO	Vodafone
TVS	0.0	0.0	0.0	7.0	3.4
BLF	7.2	6.3	12.1	7.2	9.1
STF	0.0	15.0	0.8	7.0	0.0
STM	0.0	0.0	39.2	-11.0	39.2
STM with internet on mobile phone	-11.0	-2.8	0.0	-11.0	0.0
BLM PC/Tablet	0.0	0.0	0.0	-	0.0
BLF+TVS	7.0	2.6	16.0	7.0	3.4
BLF+STF	7.0	10.6	10.8	7.0	3.6
TVS+STF	0.0	1.5	0.0	13.2	3.4
BLF+TVS+STF	13.2	1.9	3.7	13.2	3.4
BLF+TVS+STF+STM	23.9	8.9	3.0	23.9	5.1
BLF+TVS+STF+STM with internet on mobile phone	23.9	8.9	3.0	23.9	5.1
BLF+TV+STF+STM with internet on mobile phone +BLM PC/Tablet	11.7	10.6	-4.0	-	5.9

Unit: %

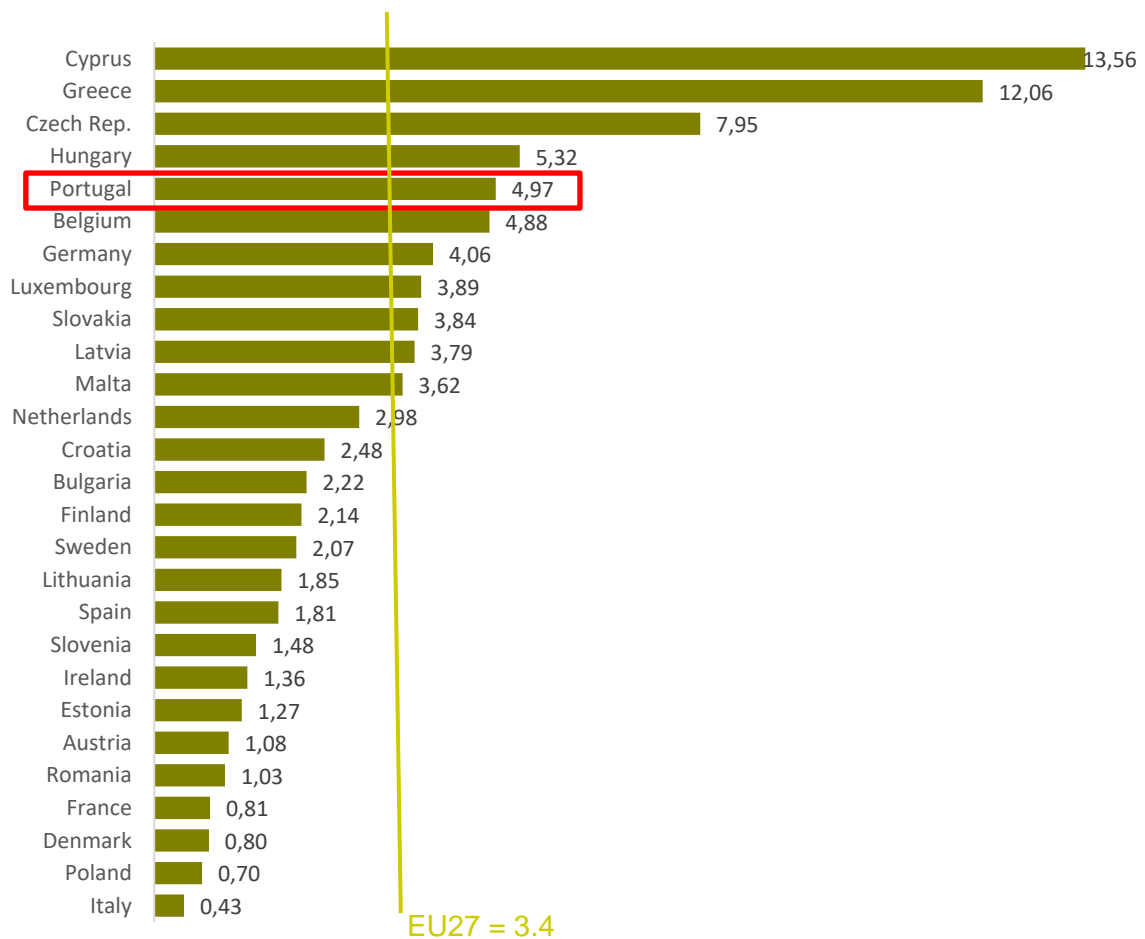
Source: ANACOM

Note: TVS – Subscription TV signal distribution service; BLF – Fixed broadband; STF – Fixed telephone service; STM – Mobile telephone service; BLM – Mobile broadband supported by PC/tablet.

4. Analysis of the Worldwide mobile data pricing 2020 report

According to the “Worldwide mobile data pricing 2020” study conducted by Cable.co.uk³, on the date of this international comparison, Portugal was the 23rd country of the UE27 with the lowest average price of 1 GB of mobile data, 45% above the average (see Figure 9).

Figure 9 – Monthly average price of 1GB of mobile data in the EU27



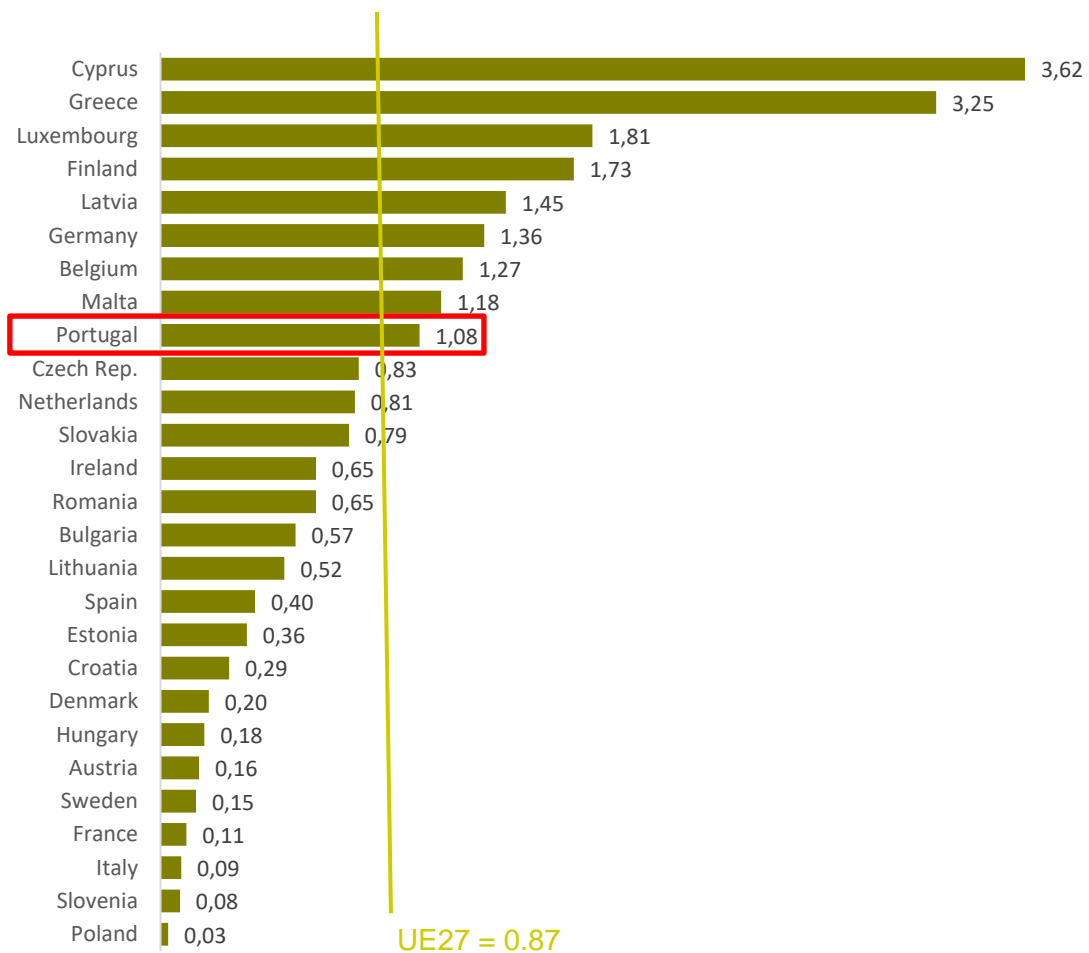
Unit: USD

Source: Cable.co.uk

³ Cable.co.uk is a price comparison service provider that was established in the United Kingdom some 10 years ago. Cable.co.uk is one of the seven entities accredited by the UK's communications regulator (OFCOM) for the provision of price comparison services. The accreditation process involves independent audits on the accessibility, accuracy, transparency, comprehensiveness and up-to-dateness of the information provided (see <https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/cable-reaccredited>).

Analysing only the cheapest offers in each country, Portugal was ranked in the 19th position of the EU27. The price of 1 GB of the cheapest offer in Portugal was approximately 24% higher than the average of the cheapest offers of the EU27 (see Figure 10).

Figure 10 – Monthly minimum price of 1GB of mobile data in the EU27



Unit: USD

Source: Cable.co.uk

Methodological note

a. Sources

- “Consumer Price Index – December 2020” (INE, 2021), available at https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine_destaquas&DESTAQUESdest_boui=415206286&DESTAQUESmodo=2
- “HICP- monthly data” (Eurostat, 2020), available at http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc_hicp_midx&lang=en. The methodology used is available at http://ec.europa.eu/eurostat/statistics-explained/index.php/HICP_methodology
- Pricing available on the websites of the four providers with the highest national coverage (MEO, NOS, NOWO and Vodafone).
- Worldwide mobile data pricing 2020: The “Worldwide mobile data pricing 2020” study, conducted by Cable.co.uk, compares the price of 1 GB of mobile data in 228 countries. The methodology used is also available at <https://s3-eu-west-1.amazonaws.com/assets.cable.co.uk/mobile-data-cost/global-broadband-pricing-study-2020-methodology.pdf>. Cable.co.uk is an entity accredited by OFCOM (see <https://www.ofcom.org.uk/about-ofcom/latest/features-and-news/cable-reaccredited>)

b. Definitions

- Year-on-year variation rate: compares the level of the variable between the current month and the same month of the previous year. This variation rate, assuming a stable seasonality pattern, is not affected by fluctuations of this nature but, nevertheless, may be influenced by localised effects in one (or in both) of the months that are compared – see <http://smi.ine.pt/VariavelFisica/Detalhes?id=4263&LANG=PT>
- Average variation rate of the last twelve months: compares the level of the average price index of the last twelve months with that of the immediately preceding twelve months. Due to being a mobile average, this variation rate is less sensitive to sporadic changes in prices. The value obtained in the month of December has been used as a reference in the sphere of social dialogue, for this reason being associated to the annual inflation rate – see https://www.ine.pt/bddXplorer/htdocs/minfo.jsp?var_cd=0002390&lingua=PT

c. Notes

- The trends in telecommunications prices presented in this report are derived from the variation of the “Telephone and telefax services” sub-index of the Consumer Price Index (CPI) and Harmonised Index of Consumer Prices (HICP), which aggregates the voice, Internet and TV signal distribution services by subscription acquired in an individualised or package form. The information presented herein should be complemented with an appraisal of the features of the offers, the details of which are available in the reports on “Packages of electronic communications services”, “Fixed telephone and nomadic VoIP service”, “Mobile services”, “Internet access service” and “Subscription television service” available on ANACOM’s website.
- EU telecommunications prices do not include information relative to the United Kingdom.
- EU telecommunications prices from December 2016 differ from those published previously due to changes made by Eurostat. The information up to November 2016 was gathered on 16 March 2018. The information from December 2016 onwards was gathered on 20 February 2021.

d. Evolution of the minimum monthly charge by type of offer

The minimum monthly charge was estimated for each type of individualised service and bundled offer, irrespective of the features of the offers or utilisation requirements and the number of services included, considering a loyalty period of 24 months. The figure presented corresponds to the average monthly charge of the 24 months. In the case of mobile offers, 1 call/1 SMS of utilisation (duration of a call of 2 minutes and 37 seconds to the same network, with billing per second) is considered, in order to take into account the prepaid voice/SMS offers. For fixed telephone service offers, 1 call of utilisation is considered (duration of a call of 4 minutes and 11 seconds to a fixed network). For offers with the TVS signal distribution service, the monthly charge of the box is considered in cases where it is not possible to offer the service without a box.

The monthly prices are taken from the websites of the four providers with the highest national coverage (MEO, NOS, NOWO and Vodafone), which account for close to 99% of the telecommunications market in Portugal.

The calculated indicators are the monthly variation, the variation in relation to the same month of the previous year and the average variation of the last twelve months. The calculation of these indicators follows the calculation formulas and rules used by INE for the consumer price index (CPI) – see <http://smi.ine.pt/VariavelFisica/Details?id=4263&LANG=PT> https://www.ine.pt/bddXplorer/htdocs/minfo.jsp?var_cd=0002390&lingua=PT

Appendix

Table 6 – Average variation of the last 12 months of telecommunications prices in the EU in December 2020

	Average var. of the last 12 months
Poland	4.1
Finland	1.8
Romania	1.8
Croatia	1.8
Lithuania	1.7
Hungary	1.2
Latvia	1.2
Cyprus	0.7
France	0.6
Sweden	0.4
Slovenia	0.4
Slovakia	0.0
Netherlands	-0.2
Bulgaria	-0.3
Malta	-0.4
Spain	-0.4
Belgium	-0.7
Estonia	-0.8
Italy	-1.4
Germany	-1.7
Austria	-1.9
Greece	-2.0
Portugal	-2.2
Luxembourg	-2.7
Denmark	-2.8
Czech Republic	-3.5
Ireland	-3.6

Unit: %

Source: Eurostat