# Trends in telecommunications prices

November 2020

# Contents

1. Frends in telecommunications prices in November 2020
2. Trends in telecommunications prices in the EU in November 20209
3. Trends in communications prices in the EU in 201913
4. Minimum monthly charge per service and offer14
Methodological note
Appendix21
Index of tables
Table 1 – Trends in the Consumer Price Index (CPI) and telecommunications prices
Table 2 – Trends in telecommunications prices: Portugal vs EU
Table 3 – Minimum monthly charge per type of offer – November 2020
Table 4 – Year-on-year variation rate of the minimum monthly charge by type of offer – November 2020 17
Table 5 – Average variation rate of the last 12 months of the minimum monthly charge by type of offer – November 2020
Table 6 – Average variation of the last 12 months of telecommunications prices in the EU in November 2020
Index of figures
Figure 1 – Year-on-year variation rate of the CPI and telecommunications prices
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)
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 November 2020
Figure 6 – Evolution of telecommunications prices in Portugal and in the EU (2009M12 = Base 100)
Figure 7 – Telecommunications prices in Portugal, Spain, France and Italy (2009M12 = Base 100) 13
Figure 8 – Evolution of communications prices in the EU (2019, EU = 100)
Figure 9 – Number of services/offers with minimum monthly charges, per provider – November 2020 16

# **Executive summary**

- In November 2020, telecommunications prices, measured by the sub-index of the Consumer Price Index (CPI), increased by 0.12% compared to the previous month.
   This change was due to the price increase of the triple-play bundles.
- Compared to the same month of the previous year, the observed variation in prices was -1.03%. 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 -2.43%, i.e., 2.47 percentage points (p.p.) below that recorded by the CPI (0.04%). This price reduction primarily reflects the entry into force on 15 May 2019 of the new European rules regulating the prices of intra-European Union (EU) communications
- In November 2020, the average variation rate of telecommunications prices in Portugal was lower than that observed in the EU (-2.6 p.p.). The average variation rate of telecommunications prices of the last twelve months in Portugal was the 4th lowest (24th highest) among EU countries. The country that recorded the highest increase of prices was Poland (+4.1%) while the strongest reduction occurred in Ireland (-3.9%). On average, telecommunications prices in the EU Increased by 0.1%.
- Between the end of 2009 and November 2020, telecommunications prices in Portugal increased by 6.7%, while in the EU they fell by 10.6%. 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 6.7%, while in Spain, Italy and France they fell by 9.4%, 16.9% and 24%,
  respectively, between the end of 2009 and November 2020.
- According to Eurostat, communications were 21.4% more expensive in Portugal in 2019 than the average of the 27 Member States.

- Minimum monthly charges are offered by NOWO in seven cases of services/offers, while NOS and NOS showed the lowest monthly charges for three types of services/offers and Vodafone for one type of service/offer. It should be noted that the individualised internet access service offer of NOWO is the one with the lowest monthly charge (20 euros).
- 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 quintuple play (5P) bundles fell by 0.3%, due to promotions at the end of November, related to "Black Friday" by MEO, NOS and Vodafone; the minimum monthly charge of the most common quadruple play (4P) bundles fell by 0.4%, also due to alterations 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 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.
- In addition to this, MEO decreased its minimum monthly charge of four services/offers in relation to the same month of the previous year, and increased the monthly charge in another four services/offers, while NOS reduced the minimum monthly charges of three services/offers and increased the minimum monthly charges of five services/offers, and Vodafone increased the monthly charges in six services/offers. Some of these variations were related to "Black Friday" promotions. Particular note should be made of the increased monthly charge of the triple play offer of MEO, NOS and Vodafone<sup>1</sup>.

-

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

#### 1. Trends in telecommunications prices in November 2020

According to the Portuguese national statistics institute (INE), in November 2020, telecommunications prices increased by 0.12% in relation to the previous month. This change was due to the price increase of the triple-play bundles.

Compared to the same month of the previous year, the variation of telecommunications prices was -1.03%. The variation of telecommunications prices was ranked in the 25th highest place (or 19th lowest) among the 43 subgroups of goods and services considered (Table 1).

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

		2019		
	YoY var.	Average var. of the last 12 months	Var. of previous month	Average var. of the last 12 months
CPI (%)	-0.22	0.04	-0.30	0.34
Telecommunications (%)	-1.03	-2.43	0.12	-2.69
Mobile telephone services* (%)	0.20	-2.39	0.00	-3.66
Relative position (decreasing order among the 43 subgroups of goods and services)	25	33	16	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 November 2020, the deviation in relation to the CPI reached -0.81 p.p. (Figure 1).

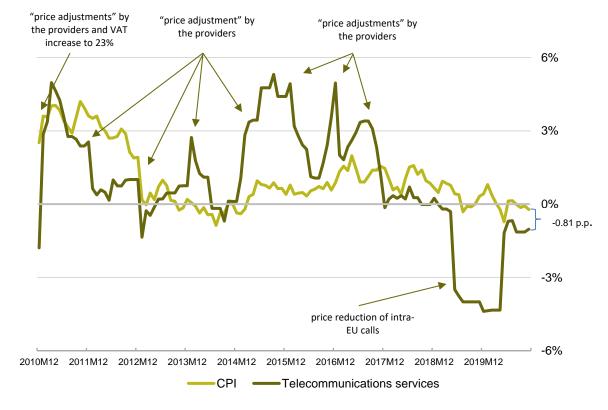


Figure 1 - Year-on-year variation rate of the CPI and telecommunications prices

Unit: % Source: INE

The average variation of telecommunications prices of the last twelve months (-2.43%) was ranked in 33rd 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 -2.43 p.p. in November 2020. During the 120 months elapsed since December 2010, telecommunications prices have grown at rates below the CPI in 66 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.

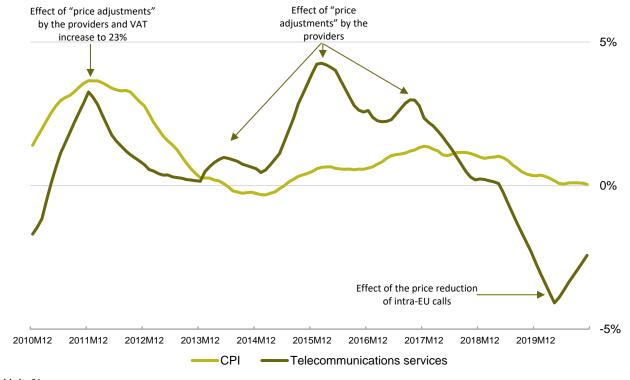


Figure 2 – Average variation rate of the last twelve months of the CPI and telecommunications prices

Unit: % Source: INE

In cumulative terms since the end of 2010, telecommunications prices have increased by 8.6 p.p. while the CPI increased by 9.4 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).

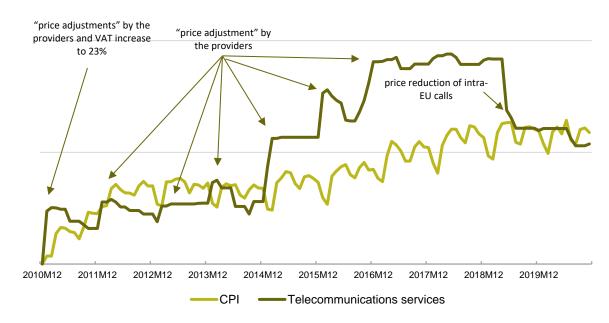


Figure 3 – CPI and telecommunications price trends in Portugal (2010M12 = Base 100)

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 communications<sup>1</sup>. 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%.

<sup>&</sup>lt;sup>1</sup> 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 <a href="https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:321:TOC">https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=OJ:L:2018:321:TOC</a>.

## 2. Trends in telecommunications prices in the EU in November 2020

According to Eurostat, in November 2020, the average variation rate of the last twelve months of the prices of telecommunications services in Portugal was 2.6 p.p. lower than the EU average, with Portugal having been ranked as the 4th country with the lowest price variation (or 25th country with the highest variation). The countries in which the highest price increases occurred were Poland (+4.1%), Romania (+2.1%) and Finland (+1.8%) while Ireland (-3.9%), the Czech Republic (-3.8%) and Luxembourg (-2.5%) recorded the strongest reductions.

In relation to the same month of the previous year, the variation of telecommunications prices in Portugal was ranked in the 18th highest place (or 10th lowest) among the 27 countries considered (Table 2).

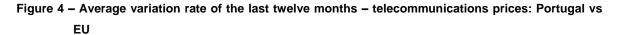
Table 2 - Trends in telecommunications prices: Portugal vs EU

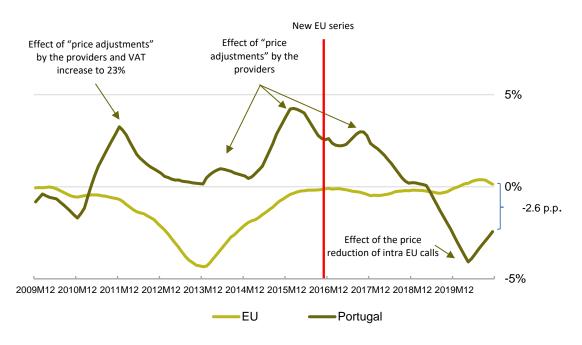
		2019		
	YoY var.	Average var. of the last 12 months	Var. of previous month	Average var. of the last 12 months
EU (%)	-0.6	0.1	0.4	-0.1
Portugal (%)	-1.0	-2.4	0.1	-2.7
PT / EU deviation (p.p.)	-0.4	-2.6	-0.3	-2.6
Relative position (decreasing order among 27 countries)	18	24	9	23

Unit: %, p.p.
Source: Eurostat

Note 1: The differences between the values of Portugal in Tables 1 and 2 arise from the different number of decimal places with which the information is published by INE (CPI) and Eurostat (HICP), and the consequent rounding off.

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).





Unit: %

Source: ANACOM, based on Eurostat data

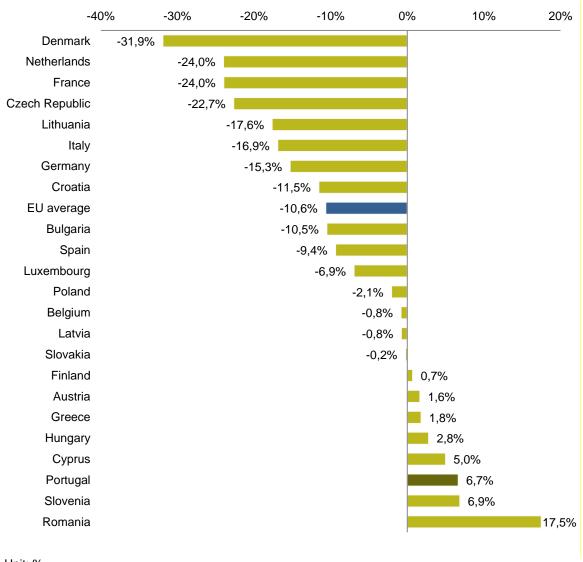
Note 1: Based on the publication, by Eurostat, on 25 February 2016, of data relative to January 2016, the reference year of the Harmonised Index of Consumer Prices (HICP) was changed from 2005 to 2015. There could be differences in the series due to the effect of rounding off.

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 17 December 2020.

Between the end of 2009 and November 2020, telecommunications prices in Portugal increased by 6.7%, while in the EU they fell by 10.6%. 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).



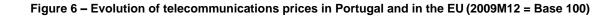


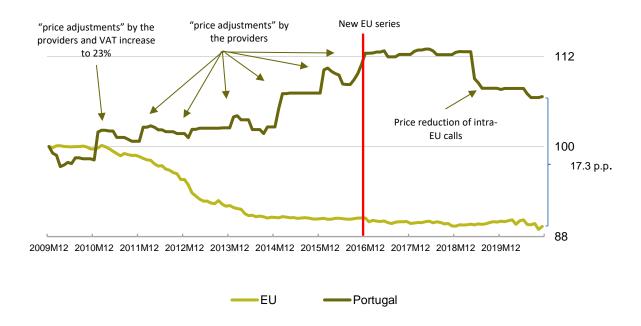
Unit: %

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).





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 17 December 2020.

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

Between the end of 2009 and November 2020, telecommunications prices in Portugal increased by 6.7%, while in Spain, Italy and France they fell by 9.4%, 16.9% and 24%, 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.

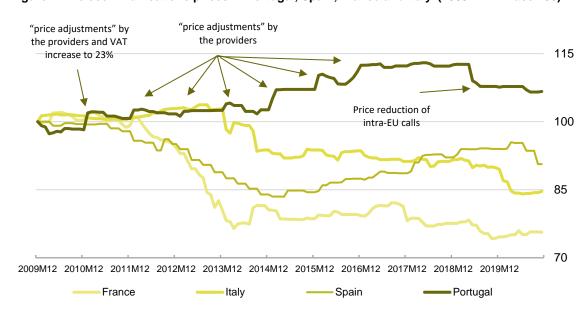


Figure 7 – Telecommunications prices in Portugal, Spain, France and Italy. (2009M12 = Base 100)

## 3. Trends in communications prices in the EU in 2019

According to the Eurostat analysis<sup>2</sup>, which compares the price level of communications in the EU27 countries with the EU average price level index (100), Portugal was ranked the

Unit: index (2009M12 = Base 100) Source: ANACOM, based on Eurostat data

13/21

<sup>&</sup>lt;sup>2</sup> Eurostat, "How communication prices vary across the EU".

eighth country of the European Union in which communications prices are highest (with a price level index of 121.4) – see Figure 8. This difference has progressively increased over the last few years, and reached the highest figure last year since 2012 (+6 p.p. In relation to 2018 and +28 p.p. in relation to 2013).

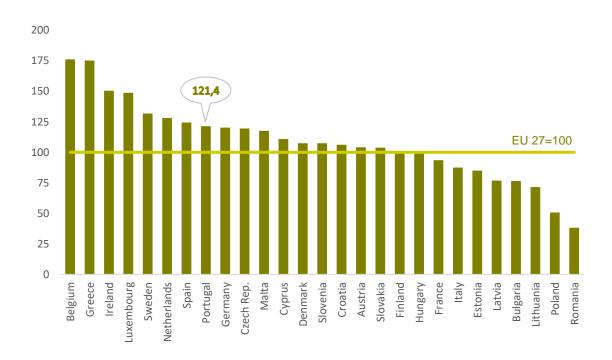


Figure 8 – Evolution of communications prices in the EU (2019, EU = 100)

Unit: index (UE27 = Base 100)

Source: ANACOM, based on Eurostat data

Note: Includes prices of telephone and fax equipment, the provision of internet access, mobile and fixed telephone services, telecommunications bundles and postal services. Prices adjusted to purchasing power parity.

According to the same data, Belgium and Greece are the countries with the most expensive communications (76% and 75% above the European average, respectively) and Romania is the country where communications were most affordable (62% below the average).

#### 4. Minimum monthly charge per service and offer

According to the publicly available information on the websites of the four providers with the highest share of subscribers, in November 2020 the lowest monthly charges of the different services and offers are those shown in Table 3.

Table 3 – Minimum monthly charge by type of offer – November 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	7.50	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	47.66	47.66	28.75	47.82
BLF+TVS+STF+STM with internet on mobile phone	47.66	47.66	28.75	47.82
BLF+TV+STF+STM with internet on mobile phone + BLM PC/Tablet	52.45	52.45	-	52.61

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 of services/offers, while MEO and NOS presented the lowest monthly charges for three types of services/offers and Vodafone for one type of service/offer (Figure 9).

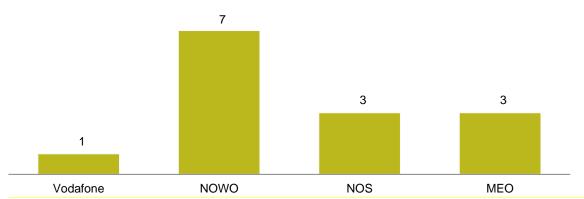


Figure 9 – Number of services/offers with minimum monthly charge, per provider – November 2020

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 quintuple play (5P) bundles fell by 0.3%, due to promotions at the end of November, related to "Black Friday", by MEO and NOS;
- 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%, due to the end of the free offer of the first monthly charge of the basic service provided by NOWO.

Table 4 - Year variation rate of the minimum monthly charge by type of offer - November 2020

	Total	MEO	NOS	NOWO	Vodafone
TVS	0.0	0.0	0.0	0.0	24.1
BLF	4.3	-7.4	7.2	4.3	4.0
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	0.0	0.0	-36.1	0.0
BLM PC/Tablet	0.0	0.0	0.0	-	0.0
BLF+TVS	0.0	3.3	24.0	0.0	24.1
BLF+STF	0.0	0.0	24.0	0.0	4.0
TVS+STF	0.0	1.6	0.0	0.0	24.1
BLF+TVS+STF	0.0	3.3	24.0	0.0	24.1
BLF+TVS+STF+STM	-0.4	-4.3	-0.5	-0.4	0.0
BLF+TVS+STF+STM with internet on mobile phone	-0.4	-4.3	-0.5	-0.4	0.0
BLF+TV+STF+STM with internet on mobile phone +BLM PC/Tablet	-0.3	-4.0	-4.0	-	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.

In addition to this, MEO decreased its minimum monthly charge of four services/offers in relation to the same month of the previous year, and increased the monthly charge in another four services/offers, while NOS reduced the minimum monthly charges of three services/offers and increased the minimum monthly charges of five services/offers, and Vodafone increased the monthly charges in six services/offers. Some of these variations were related to the "Black Friday" promotions. In the opposite direction, 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<sup>3</sup>.

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 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

-

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.

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 – November 2020

	Total	MEO	NOS	NOWO	Vodafone
TVS	0.0	0.0	0.0	7.2	3.5
BLF	6.6	9.0	13.1	5.9	11.1
STF	0.0	13.3	0.8	7.1	0.0
STM	0.0	0.0	51.1	-3.7	51.1
STM with internet on mobile phone	-3.7	0.0	0.0	-3.7	0.0
BLM PC/Tablet	0.0	0.0	0.0	-	0.0
BLF+TVS	7.9	2.7	19.7	7.2	3.5
BLF+STF	7.1	12.5	9.7	7.1	3.9
TVS+STF	0.0	1.7	0.0	14.4	3.5
BLF+TVS+STF	14.4	2.0	3.8	14.4	3.5
BLF+TVS+STF+STM	25.3	10.1	3.1	25.3	6.6
BLF+TVS+STF+STM with internet on mobile phone	25.3	10.1	3.1	25.3	6.6
BLF+TV+STF+STM with internet on mobile phone +BLM PC/Tablet	13.7	12.2	-4.7	-	7.7

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.

# Methodological note

#### a. Sources

- "Consumer Price Index November 2020" (INE, 2020), available at https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_destaques&DESTAQUESdest\_boui=415206244&DE STAQUESmodo=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 three providers with the highest national coverage (MEO, NOS, NOWO and Vodafone).

#### 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 <a href="http://smi.ine.pt/VariavelFisica/Detalhes?id=4263&LANG=PT">http://smi.ine.pt/VariavelFisica/Detalhes?id=4263&LANG=PT</a>
- 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 17 December 2020.

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 <a href="https://smi.ine.pt/VariavelFisica/Detalhes?id=4263&amp;LANG=PT">https://smi.ine.pt/VariavelFisica/Detalhes?id=4263&amp;LANG=PT</a> <a href="https://www.ine.pt/bddXplorer/htdocs/minfo.jsp?var_cd=0002390&amp;lingua=PT">https://www.ine.pt/bddXplorer/htdocs/minfo.jsp?var_cd=0002390&amp;lingua=PT</a>

# **Appendix**

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

	Average var. of the last 12 months
Poland	4.1
Romania	2.1
Finland	1.8
Croatia	1.7
Hungary	1.6
Lithuania	1.5
Latvia	1.2
Cyprus	1.0
France	0.7
Sweden	0.5
Slovenia	0.2
Spain	0.1
Slovakia	0.0
Netherlands	-0.2
Malta	-0.3
Bulgaria	-0.4
Belgium	-0.6
Estonia	-0.8
Germany	-1.5
Greece	-1.7
Italy	-1.9
Austria	-2.1
Denmark	-2.4
Portugal	-2.4
Luxembourg	-2.5
Czech Republic	-3.8
Ireland	-3.9

Unit: % Source: Eurostat