# Trends in telecommunications prices

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#### **Executive summary**

- In February 2021, telecommunications prices, measured by the sub-index of the Consumer Price Index (CPI), increased by 0.8% compared to the previous month. This change was due to the price increase of some quadruple-play bundles.
- Compared to the same month of the previous year, the observed variation in prices was -0.4%. 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 in the last twelve months was -1.5%, i.e., 1.5 percentage points (p.p.) below that recorded by the CPI (0.0%). This price reduction reflects the entry into force on 15 May 2019 of the new European rules regulating the prices of intra-EU communications, and the reduction of the monthly charge of some post-paid mobile broadband offers via PC/Tablet and some bundled offers.
- In February 2021, the average variation rate of telecommunications prices in Portugal was lower than that observed in the European Union (-1.5 p.p.). The average variation rate of telecommunications prices of the last twelve months in Portugal was the 8th lowest (20th highest) among EU countries. The country that recorded the highest increase of prices was Poland (+4.7%) while the strongest reduction occurred in Denmark (-3.3%). On average, telecommunications prices in the EU decreased by 0.1%.
- Between the end of 2009 and February, telecommunications prices in Portugal increased by 7.3%, while in EU they fell by 9.8%. 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 with some countries with a GDP per capita similar to that of Portugal, shows that telecommunications prices increased by 7.5% in Slovakia, 7.3% in Portugal and 1.0% in Greece, while in the Czech Republic they fell by 22.7% between the end of 2009 and February 2021.

- Minimum monthly charges are offered by NOWO in seven cases of a range of 13 services/offers, while the providers MEO, NOS and Vodafone each present the lowest monthly charges for two types of services/offers.
- Compared to the same month of the previous year, there were 19 price variations of the minimum monthly charges of services/offers, 16 of which were price increases and 3 were reductions.
- The following price variations stand out in particular: the minimum monthly charge of the mobile telephone service with internet on the mobile phone fell by 33.3%, thanks to the reduction of the monthly charge of the NOWO offer from 7.5 euros to 5 euros (with 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 minimum monthly charge of one service/offer 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.

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See: https://www.anacom.pt/render.jsp?contentId=1575644.

# 1. Trends in telecommunications prices in February 2021

According to the Portuguese national statistics institute (INE), in February 2021, telecommunications prices increased by 0.8% in relation to the previous month. This change was due to the price increase of some quadruple-play bundles.

Compared to the same month of the previous year, the variation of telecommunications prices was -0.4%. 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

		2020		
	YoY var.	Average var. of the last 12 months	Var. of previous month	Average var. of the last 12 months
CPI (%)	0.5	0.0	-0.5	0.0
Telecommunications (%)	-0.4	-1.5	0.8	-2.1
Mobile telephone services* (%)	0.2	-0.8	0.0	-1.9
Relative position (decreasing order among the 43 subgroups of goods and services)	25	27	6	31

Unit: %

Source: INE, Eurostat

Note\*: 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 February 2021, the deviation in relation to the CPI reached -0.9 p.p. (Figure 1).

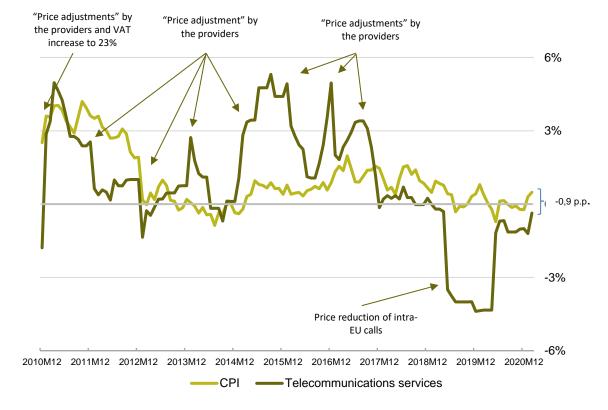


Figure 1 – Year-on-year variation rate of the CPI and telecommunications prices

Unit: % Source: INE

The average variation of telecommunications prices of the last twelve months (-1.5%) was ranked in 27th 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 -1.5 p.p. in February 2021. During the 123 months elapsed since December 2010, telecommunications prices have grown at rates below the CPI in 69 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.

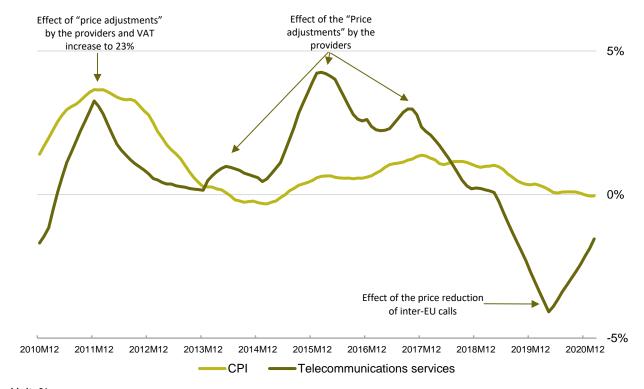


Figure 2 – Average variation rate of the last 12 months of the CPI and telecommunications prices

Unit: % Source: INE

In cumulative terms, telecommunications prices increased by 9.3 p.p. since the end of 2010, while the CPI increased by 8.4 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 primarily 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).

If the reduction of intra-EU calls had not occurred, it is estimated that telecommunications prices would have grown by 12.9 p.p. since the end of 2010, thus being, in cumulative terms, 4.5 p.p. above the CPI variation in that period.

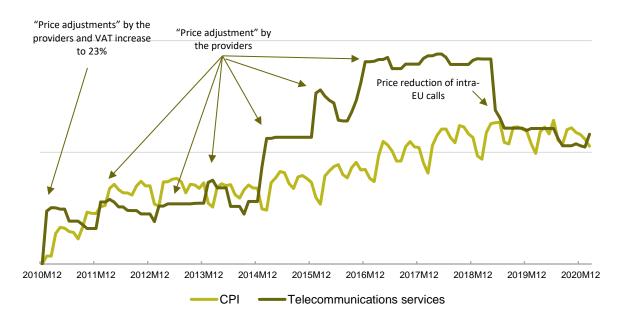


Figure 3 – CPI and telecommunications price trends in Portugal (2010M12 = Base 100)

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 February 2021

According to Eurostat, in February 2021, the average variation rate of the last twelve months of the prices of telecommunications services in Portugal was 1.5 p.p. lower than the EU average, with Portugal having been ranked as the 8th country with the lowest price variation (or 20th country with the highest variation). The countries in which the highest price increases occurred were Poland (+4.7%), Lithuania (+2.4%) and Finland (+1.9%), while Denmark (-3.3%), Luxembourg (-3.0%) and Ireland (-3.0%) recorded the strongest reductions.

In relation to the same month of the previous year, the variation of telecommunications prices in Portugal was the 9th lowest (or the 19th highest) among the 27 countries considered (Table 2).

Table 2 - Trends in telecommunications prices: Portugal vs EU

		2020		
	YoY var.	Average var. of the last 12 months	Var. of previous month	Average var. of the last 12 months
EU (%)	0.1	-0.1	0.1	0.1
PT / EU deviation (p.p.)	-0.5	-1.5	0.7	-2.1
Relative position (decreasing order among 27 countries)	19	20	2	22

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), due to the aforesaid 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), and due to the reduction of the monthly charges of some post-paid mobile broadband via PC/tablet and bundled offers.

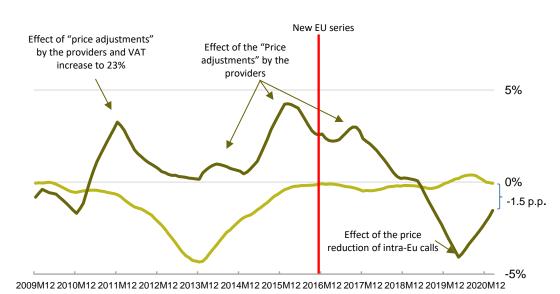


Figure 4 – Average variation rate of the last 12 months – telecommunications prices: Portugal vs EU

Unit: %

Source: ANACOM, based on Eurostat data

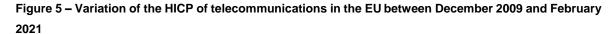
Note 1: Based on the publication, by Eurostat, on 25 February 2016, of data relative to January 2016, the reference year of the Harmonised Index of Consumer Prices (HICP) was changed from 2005 to 2015. There could be differences in the series due to the effect of rounding off.

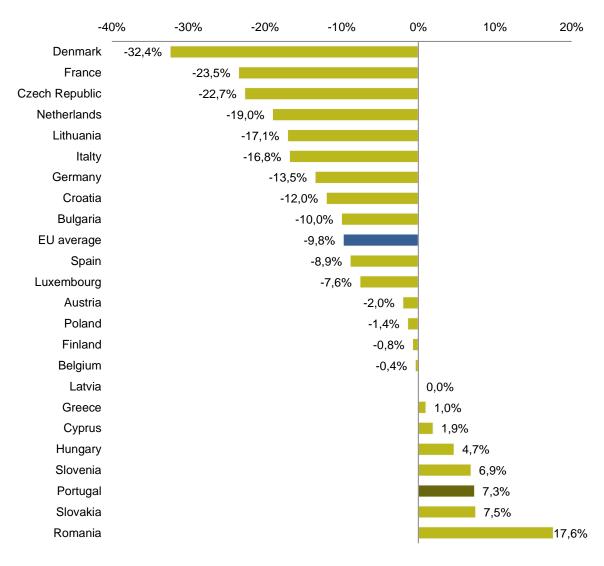
Portugal

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 18 March 2021.

-EU

Between the end of 2009 and February 2021, telecommunications prices in Portugal increased by 7.3%, while in EU they fell by 9.8%. 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).



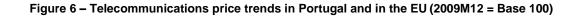


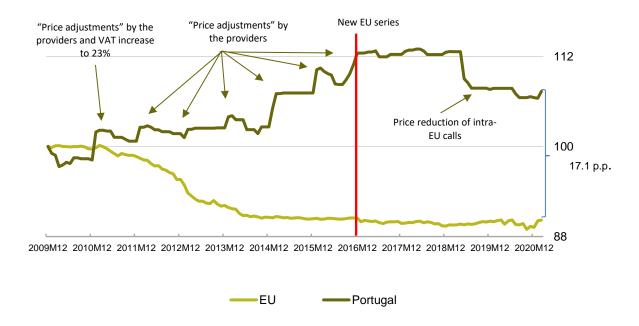
Unit: %

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 (+17.1 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 18 March 2021

# Box 2 – Comparison of the evolution of prices in Portugal, Greece, Slovakia and the Czech Republic

Between the end of 2009 and February 2021, telecommunications prices increased by 7.5% in Slovakia, 7.3% in Portugal and 3.9 in Greece, while in the Czech Republic they fell by 22.7%, where these countries have a GDP per capita similar to that of Portugal. 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 in Portugal, normally in the first months of each year.

Figure 7 – Telecommunications prices in Portugal, Greece, Slovakia and the Czech Republic (2009M12 = Base 100) "Price adjustments" by "Price adjustments" by the providers the providers and VAT increase to 23% 115 Price reduction of intra-EU calls 85 Czech Republic Portugal Slovakia Greece Unit: Index (2009M12 = Base 100) Source: ANACOM, based on Eurostat data

13/20

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

Table 3 shows the minimum monthly charges of various services and offers in February 2021, 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 - February 2021

	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

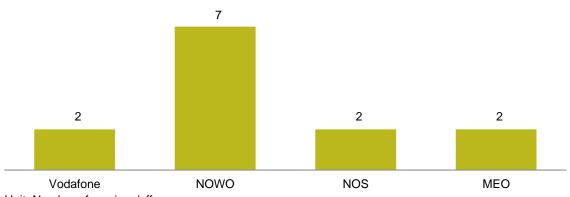
Source: ANACOM

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 – February 2021



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 mobile telephone service with internet on mobile phone fell by 33.3%, due to the reduction of the monthly charge of NOWO's offer from 7.5 euros to 5 euros (with 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 - February 2021

	Total	MEO	NOS	NOWO	Vodafone
TVS	0.0	0.0	0.0	0.0	3.3
BLF	4.3	0.0	7.2	4.3	0.0
STF	0.0	20.0	1.0	0.0	0.0
STM	0.0	0.0	0.0	-33.3	0.0
STM with internet on mobile phone	-33.3	-33.3	0.0	-33.3	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	0.0	0.0	4.0	0.0	0.0
BLF+TVS+STF+STM with internet on mobile phone	0.0	0.0	4.0	0.0	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 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 sign "\_" indicates that the offer is not available.

Compared to the same month of the previous year, there were 19 price variations of the minimum monthly charges of services/offers, 16 of which were price increases and 3 were reductions.

By provider, MEO decreased its minimum monthly charge of one service/offer in relation to the same month of the previous year and increased the monthly charge in four services/offers. The MEO service 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 2020<sup>2</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 "MEO by" and "Fibra ID" customised offers 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 – February 2021

	Total	MEO	NOS	NOWO	Vodafone
TVS	0.0	0.0	0.0	4.9	3.3
BLF	7.9	2.7	10.2	7.9	5.5
STF	0.0	18.3	1.0	4.9	0.0
STM	0.0	0.0	20.4	-22.7	20.4
STM with internet on mobile phone	-22.7	-8.3	0.0	-22.7	0.0
BLM PC/Tablet	0.0	0.0	0.0	_	0.0
BLF+TVS	4.9	2.5	9.3	4.9	3.3
BLF+STF	4.9	6.9	13.3	4.9	2.8
TVS+STF	0.0	1.0	0.0	9.1	3.3
BLF+TVS+STF	9.1	1.7	3.5	9.1	3.3
BLF+TVS+STF+STM	15.9	6.4	3.0	15.9	2.5
BLF+TVS+STF+STM with internet on mobile phone BLF+TV+STF+STM	15.9	6.4	3.0	15.9	2.5
with internet on mobile phone +BLM PC/Tablet	8.3	7.7	-2.6	-	2.9

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.

See "MEO, NOS and Vodafone increase monthly charges of 3P bundles by 3.3% and reduce quality" at <a href="https://www.anacom.pt/render.jsp?contentId=1575644">https://www.anacom.pt/render.jsp?contentId=1575644</a>.

## Methodological note

#### a. Sources

- "Consumer Price Index February 2021" (INE, 2021), available at <a href="https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_destaques&DESTAQUESdest\_boui=466207833&DESTAQUESmodo=2">https://www.ine.pt/xportal/xmain?xpid=INE&xpgid=ine\_destaques&DESTAQUESdest\_boui=466207833&DESTAQUESmodo=2</a>
- "HICP monthly data" (Eurostat, 2021), available at <a href="http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc\_hicp\_midx&lang=en">http://appsso.eurostat.ec.europa.eu/nui/show.do?dataset=prc\_hicp\_midx&lang=en</a>.

  The methodology used is available at <a href="http://ec.europa.eu/eurostat/statistics-explained/index.php/HICP\_methodology">http://ec.europa.eu/eurostat/statistics-explained/index.php/HICP\_methodology</a>
- Pricing available on the websites of the four 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 <a href="https://www.ine.pt/bddXplorer/htdocs/minfo.jsp?var\_cd=0002390&lingua=PT">https://www.ine.pt/bddXplorer/htdocs/minfo.jsp?var\_cd=0002390&lingua=PT</a>

#### 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 18 March 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 features of the offers or utilisation requirements and the number of services included, considering a loyalty period months. The figure presented corresponds to the average monthly charge of the 24 months. In the case of mobile 1 call/1 SMS of utilisation (duration of a call of 2 minutes and 37 seconds to the same network, with billing per sis considered, in order to take into account the prepaid voice/SMS offers. For fixed telephone service offers, utilisation is considered (duration of a call of 4 minutes and 11 seconds to a fixed network). For offers with the TV distribution service, the monthly charge of the box is considered in cases where it is not possible to offer the without a box.	od of 24 e offers, second) I call of S signal
The monthly prices are taken from the websites of the four providers with the highest national coverage (MEC NOWO and Vodafone), which account for close to 99% of the telecommunications market in Portugal.	), NOS,
The calculated indicators are the monthly variation, the variation in relation to the same month of the previous y the average variation of the last twelve months. The calculation of these indicators follows the calculation formurules used by INE for the consumer price index (CPI) – see <a href="http://smi.ine.pt/VariavelFisica/Detalhes?id=4263&amp;LAhttps://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>	las and

# **Appendix**

Table 6 – Average variation of the last 12 months of telecommunications prices in the EU in February 2021

	Average var. of the last 12 months
Poland	4.7
Lithuania	2.4
Finland	1.9
Croatia	1.8
Romania	1.4
Slovakia	1.3
Latvia	1.0
Slovenia	1.0
Hungary	0.8
France	0.5
Netherlands	0.5
Sweden	0.4
Bulgaria	0.0
Malta	-0.4
Cyprus	-0.7
Estonia	-0.7
Belgium	-0.7
Italy	-0.8
Spain	-1.0
Portugal	-1.5
Germany	-1.8
Austria	-1.9
Greece	-2.4
Czech Republic	-3.0
Ireland	-3.0
Luxembourg	-3.0
Denmark	-3.3

Unit: % Source: Eurostat