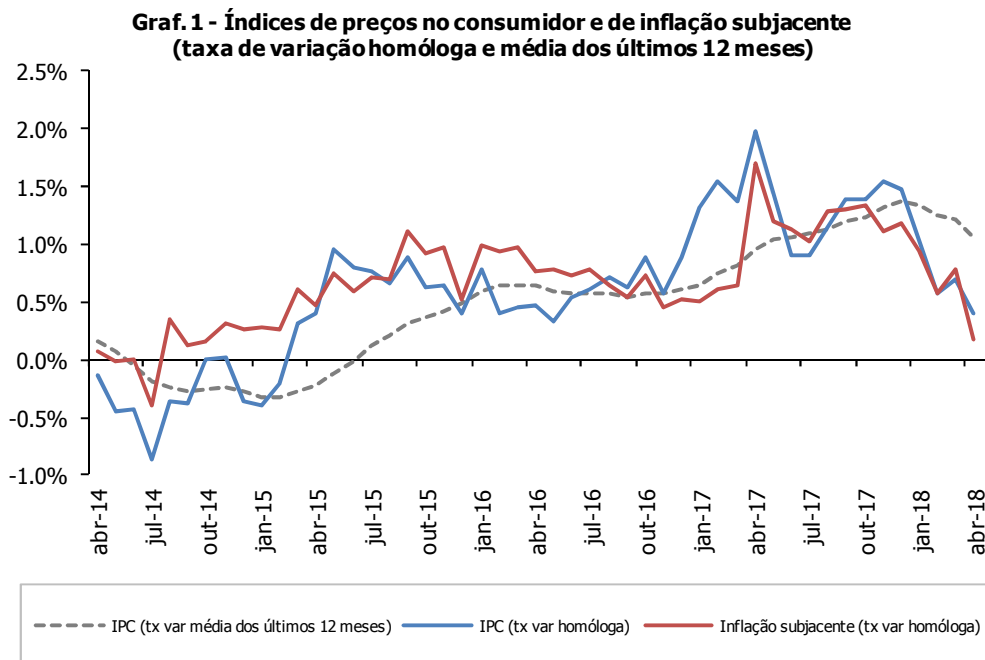# Consumer Prices Index

April 2018

CPI annual rate of change decreased to 0.4%

The CPI annual rate moved from 0.7% in March to 0.4% in April 2018. The annual core inflation rate, which excludes energy and unprocessed food products components, was 0.2% (0.8% in the previous month). The deceleration of the CPI reflects, to some extent, a base effect due to significant increase in the prices of some products in April 2017 in the Easter period, in particular *Restaurants and Hotels* and *Transportation*.

The CPI monthly rate was 0.7% (1.9% in the previous month and 1.0% in April 2017), while the CPI 12-month average was 1.1% (1.2% in the previous month).

In April 2018, the Portuguese Harmonised Index of Consumer Prices (HICP) annual rate of change was 0.3% (0.8% in the previous month), 0.9 percentage points (p.p.) below the rate estimated by Eurostat for the Euro area (in March this difference was 0.5 p.p.).

**Graf. 1 - Índices de preços no consumidor e de inflação subjacente
(taxa de variação homóloga e média dos últimos 12 meses)**

Legend: IPC (tx var média dos últimos 12 meses) — IPC (tx var homóloga) — Inflação subjacente (tx var homóloga)

In April 2018, the annual inflation rate measured by the CPI was 0.4%, 0.3 p.p. below the rate of the previous month (see Fig. 1). When rounded up to one decimal place, this figure coincides with the value provided in the flash estimate, which was released on April 30th (see table 3 for further details on the differences between estimated and final CPI figures at the end of this press release).

The annual core inflation rate, which excludes energy and unprocessed food products components, was 0.2% (0.8% in the previous month). The unprocessed food aggregate recorded an annual rate of 0.4% in April (-0.5% in March) while energy presented an annual rate of 2.5% (1.2% in the previous month).

The deceleration of the CPI reflects, to some extent, a base effect due to significant price increases for some products in April 2017 in the Easter period, in particular *Restaurants and Hotels* and *Transportation*.
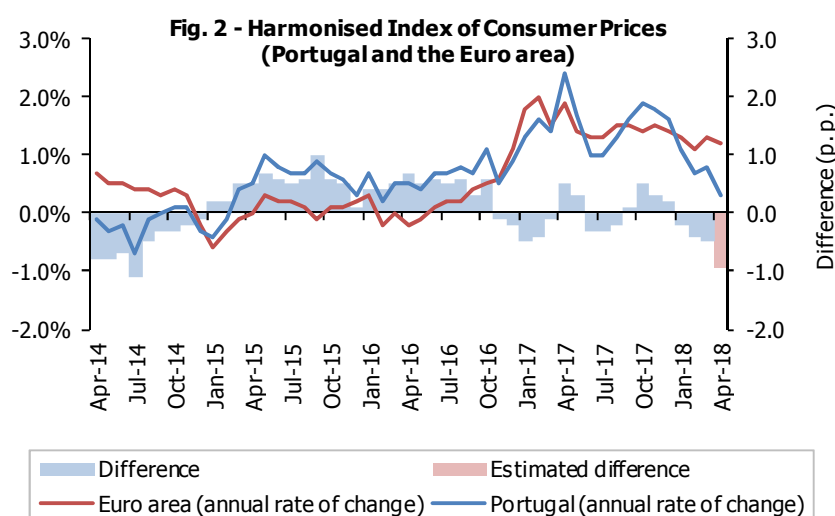
The largest downward pressure on the overall annual rate of change came from decreases in the prices of *Clothing and Footwear*, while upward pressures came from changes in the prices of *Food and non-alcoholic beverages* and *Housing, water, electricity, gas and other fuels.*

In April, the CPI monthly rate was 0.7% (1.9% in the previous month and 1.0% in April 2017). The main downward contribution to this result came from changes in the prices of *Recreation and culture.* Conversely, upward contributions were observed in the prices of *Food and non-alcoholic beverages*.

The CPI 12-month average rate was 1.1% in April (1.2% in the previous month).

In April, the HICP annual rate was 0.3% (0.8% in the previous month) while the HICP monthly rate was 1.0% (2.2% in March and 1.5% in April 2017).

In March 2018, the annual rate of change of the Portuguese HICP was 0.5 p.p. below the annual rate of change for the Euro area. This difference is estimated to have increased to 0.9 p.p. in April.

Fig. 2 - Harmonised Index of Consumer Prices (Portugal and the Euro area)

The HICP 12-month average rate was 1.2% in April (1.4% in the previous month).

Housing Rents

In April, the annual change rate of the housing rents for the whole country was 1.4%. The highest increase was observed in the Lisboa region (1.7%), with all the other regions displaying positive rates of change.

For the same period, the monthly rate of change of the average value of rents per square meter for the whole country was 0.2% (the same value as in the previous month). The main increase was observed in the Algarve region (0.3%) and all the other regions presented positive rates.

Consumer Price Index - April 2018

Consumer Price Index

The Consumer Price Index (CPI) measures the change over time of the prices of a certain basket of goods and services bought by a "typical" consumer. The CPI has been designed to capture price changes and not to measure price levels.

The CPI is updated every year with the most recent information on prices and quantities. The 2018 CPI weighting structure and the sample of goods and services included in the basket are a result of the combination of three fundamental sources of information: results of the Portuguese National Accounts complemented with the Household Budget Survey and the Census for more detailed levels of expenditure. Administrative data is also used.

The CPI is compiled through the aggregation of seven regional price indexes and the goods and services included in the index are grouped according to the COICOP classification.

Table 1: CPI - COICOP Divisions

01	Food and non-alcoholic beverages	07	Transports
02	Alcoholic beverages and tobacco	08	Communications
03	Clothing and footwear	09	Recreation and culture
04	Housing, water, electricity, gas and other fuels	10	Education
05	Furnishings, household equipment and routine maintenance of the house	11	Restaurants and hotels
06	Health	12	Miscellaneous goods and services

[1] COICOP: Classification Of Individual Consumption by Purpose

Monthly rate

The monthly rate is the change in the index of a certain month compared with the index of the previous month expressed as a percentage. Although up-to-date, this measure can be affected by seasonal and other effects.

Annual rate

The annual rate is the change in the index of a certain month compared with the index of the same month in the previous year expressed as a percentage. In the presence of a stable seasonal pattern, seasonal effects do not influence this measure.

12-month average rate

The 12-month average rate is the change in the average index of one year compared with the average index of the previous year expressed as a percentage. This moving average is less sensitive to transient changes in prices.

Core inflation index (all items CPI excluding unprocessed food and energy products)

The core inflation index is compiled by excluding the prices of unprocessed food and energy products from the all items CPI. The primary objective of this index is to capture the underlying inflation pressures in the economy.

Harmonised Index of Consumer Prices

The Harmonised Index of Consumer Prices (HICP) is compiled in each member state of the European Union for the purposes of inflation comparisons across EU countries, as required by the Treaty on European Union[1]. This index plays an important role as a guideline for the achievement of the European System of Central Banks primary objective: price stability. In 1998, the European Central Bank adopted the HICP as "the most appropriate price measure" for its definition of price stability in the Euro area[2].

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[1] Article 109j and protocol on the convergence criteria referred to in that article.
[2] A stability oriented monetary policy strategy for the ESCB". ECB press notice released on 13 October 1998.

The HICP is produced in each Member State following a harmonized methodology developed by experts in the field of price statistics, under the "Price Statistics Working Group" and related Task Forces. From the methodological point of view, there are no major differences between the HICP and CPI. However, the different scope of coverage leads to differences in the weighting structure, mainly in Restaurants and hotels. This is mostly an effect of the inclusion of non-residents expenditure ("tourists") in the HICP and the corresponding exclusion from the CPI.

Additional information on the methodology of the HICP is available at http://ec.europa.eu/eurostat/web/hicp.

Table 2: CPI and HICP 2018 weighting structure

COICOP divisions		CPI	HICP
01	Food and non-alcoholic beverages	204.6	195.6
02	Alcoholic beverages and tobacco	36.5	35.7
03	Clothing and footwear	74.0	74.7
04	Housing, water, electricity, gas and other fuels	97.9	91.5
05	Furnishings, household equipment and routine maintenance of the house	60.8	58.8
06	Health	62.6	59.5
07	Transport	157.7	154.2
08	Communication	31.3	29.2
09	Recreation and culture	74.2	61.5
10	Education	15.2	14.1
11	Restaurants and hotels	86.7	132.3
12	Miscellaneous goods and services	98.6	92.7
00	All items	**1000**[2]	**1000**[2]

[1] COICOP: Classification Of Individual Consumption by Purpose.
[2] Due to rounding, the sum of the parts may not add exactly to 1000.

Presentation of data and rounding rules

Since the release of the January 2013 CPI indices are published with base 100 in the year 2012.

Due to rounding procedures, those indices may not reproduce exactly the published rates of change. However, it should be noted that the published rates prevail.

In this press release the descriptive analysis is based on rounded values to one decimal.

Differences between estimated and final values

In table 3, some descriptive statistics are presented for the differences between the estimated and final values of the annual rate for the last 24 months. The table also includes the differences for the last three months, in p.p..

Table 3: Differences between the estimated and final values of the annual rate

	Differences last 24 months (p.p.)			Differences last 3 months (p.p.)		
	Mean	Max	Min	Feb-18	Mar-18	**Apr-18**
Total	0.00	0.08	-0.07	-0.02	0.01	**-0.01**
All items excluding housing	0.00	0.08	-0.07	-0.03	0.01	**-0.01**
All items excl. unproc. food and energy	0.00	0.10	-0.09	-0.02	0.00	**-0.01**
Unprocessed food	-0.04	0.01	-0.27	-0.05	-0.04	**-0.10**
Energy	0.03	0.16	-0.06	-0.06	0.13	**0.16**

Next press releases

The May 2018 flash estimate will be available on May 30th, 2018.

The May 2018 CPI/HICP will be released on June 12th, 2018.

Annex:

CPI rate of change (index division and all items CPI)

	Index divisions[1]												All-items CPI
	01	02	03	04	05	06	07	08	09	10	11	12	
Annual average rate													
2015	1.01	4.09	-2.02	0.23	0.67	0.41	-0.99	4.12	-0.63	0.65	1.31	0.42	0.49
2016	0.49	2.61	-0.39	0.39	0.43	-0.61	-0.56	3.17	1.02	0.89	2.21	0.60	0.61
2017	1.53	2.57	-2.39	0.59	-0.45	0.44	3.06	2.60	1.42	0.95	3.73	0.83	1.37
Annual rate													
2016 April	0.09	2.41	0.04	0.69	0.89	-0.92	-0.93	2.95	0.74	0.94	1.99	0.43	0.48
May	-0.10	2.27	-0.76	0.65	0.67	-0.98	-1.29	2.76	0.94	0.94	2.19	0.50	0.33
June	1.01	1.89	-0.86	0.69	0.62	-0.90	-1.49	1.75	0.94	0.94	2.61	0.74	0.55
July	1.65	1.77	1.32	0.12	0.35	-0.72	-2.10	1.66	0.36	0.91	2.62	0.63	0.61
August	1.82	2.16	0.78	0.28	0.02	-0.76	-1.29	1.57	-0.29	0.89	3.29	0.41	0.72
September	0.99	1.65	-0.81	-0.05	-0.26	-0.59	-0.29	2.51	0.76	0.89	3.38	0.39	0.63
October	0.45	2.23	-1.44	0.24	0.02	-0.60	0.94	3.05	2.56	0.77	4.20	0.10	0.88
November	0.49	2.05	-1.36	0.28	0.04	-0.62	0.68	4.07	1.21	0.81	1.76	-0.01	0.58
December	0.62	2.28	-0.93	0.61	-0.35	-0.84	1.89	5.18	0.91	0.82	1.85	0.42	0.88
2017 January	1.33	2.40	-0.69	0.49	-0.19	-0.47	5.38	2.47	1.38	0.85	1.61	-0.13	1.33
February	2.37	2.57	-1.83	0.11	-0.19	-0.27	5.89	1.92	0.83	0.85	1.89	0.44	1.55
March	2.68	3.73	-1.72	0.31	-0.83	-0.26	3.09	2.43	0.99	0.86	2.02	0.28	1.37
April	1.97	3.29	-2.01	0.15	-0.52	0.73	4.58	3.07	2.70	0.85	5.70	0.41	1.98
May	2.07	3.03	-1.77	0.05	-0.23	0.48	1.09	3.26	2.15	0.85	4.91	1.14	1.45
June	0.22	2.21	-1.64	-0.22	-0.55	0.45	1.52	3.58	2.13	0.83	3.51	0.80	0.91
July	0.31	2.26	-2.47	0.51	-0.79	0.60	1.09	3.69	2.54	0.85	3.68	0.86	0.90
August	0.37	2.25	-1.90	0.65	-0.57	0.64	1.73	3.83	2.79	0.85	3.91	1.12	1.14
September	1.12	2.61	-3.44	1.33	-0.45	0.70	2.61	3.09	1.53	0.87	4.48	1.25	1.39
October	1.32	1.88	-3.70	1.18	-0.44	0.83	2.60	2.46	-0.19	1.21	6.01	1.43	1.39
November	2.43	2.63	-3.63	1.26	-0.40	0.84	3.57	1.47	0.16	1.23	3.77	1.19	1.55
December	2.28	2.04	-3.43	1.31	-0.26	1.02	3.83	0.12	0.13	1.24	3.02	1.12	1.47
2018 January	1.45	2.31	-4.68	1.48	-1.02	0.74	3.23	0.59	-0.18	1.23	2.49	1.20	1.03
February	0.45	0.70	-2.44	1.66	-0.93	1.00	1.02	0.78	-0.07	1.22	2.37	0.95	0.58
March	0.30	1.24	-4.43	1.44	-0.06	1.07	1.90	0.50	0.77	1.22	2.51	0.98	0.69
April	0.92	2.25	-3.67	1.56	-0.43	0.97	0.76	0.41	-0.61	1.19	0.08	1.04	0.40

Note: (1) The names of the divisions are given in the explanatory notes.

Source: INE - Portugal

HICP rate of change (international comparison)[1]

	EA-19[2]	EICP[3]	BE	BG	CZ	DK	DE	EE	EL	ES	FR	HR	IE	IT	CY	LV	LT	LU	HU	MT	NL	AT	PL	PT	RO	SI	SK	FI	SE	UK
Annual average rate																														
2015	0.0	0.0	0.6	-1.1	0.3	0.2	0.1	0.1	-1.1	-0.6	0.1	-0.3	0.0	0.1	-1.5	0.2	-0.7	0.1	0.1	1.2	0.2	0.8	-0.7	0.5	-0.4	-0.8	-0.3	-0.2	0.7	0.0
2016	0.2	0.3	1.8	-1.3	0.6	0.0	0.4	0.8	0.0	-0.3	0.3	-0.6	-0.2	-0.1	-1.2	0.1	0.7	0.0	0.4	0.9	0.1	1.0	-0.2	0.6	-1.1	-0.2	-0.5	0.4	1.1	0.7
2017	1.5	1.7	2.2	1.2	2.4	1.1	1.7	3.7	1.1	2.0	1.2	1.3	0.3	1.3	0.7	2.9	3.7	2.1	2.4	1.3	1.3	2.2	1.6	1.6	1.1	1.6	1.4	0.8	1.9	2.7
Annual rate																														
2016 April	-0.2	-0.2	1.5	-2.5	0.5	-0.3	-0.3	0.0	-0.4	-1.2	-0.1	-0.9	-0.2	-0.4	-2.1	-0.7	0.8	-0.6	0.3	0.8	-0.2	0.6	-0.5	0.5	-2.6	-0.7	-0.4	0.3	1.0	0.3
May	-0.1	-0.1	1.6	-2.5	0.0	-0.1	0.0	0.0	-0.2	-1.1	0.1	-1.2	-0.2	-0.3	-1.9	-0.8	0.2	-0.6	-0.1	1.0	-0.2	0.6	-0.4	0.4	-3.0	-0.5	-0.7	0.3	0.8	0.3
June	0.1	0.1	1.8	-1.9	-0.1	0.1	0.2	0.4	0.2	-0.9	0.3	-1.2	0.1	-0.2	-2.0	-0.6	0.4	-0.4	-0.1	1.0	-0.2	0.6	-0.4	0.7	-0.7	0.0	-0.7	0.3	1.2	0.5
July	0.2	0.2	2.0	-1.1	0.5	0.1	0.4	0.8	0.2	-0.7	0.4	-1.1	0.1	-0.2	-0.4	0.1	0.0	-0.4	-0.3	0.9	-0.6	0.6	-0.6	0.7	-0.3	-0.1	-0.9	0.5	1.1	0.6
August	0.2	0.3	2.0	-1.1	0.6	0.0	0.3	1.1	0.4	-0.3	0.4	-1.5	-0.4	-0.1	-0.6	-0.1	0.5	-0.2	-0.1	1.0	0.1	0.6	-0.5	0.8	0.3	-0.2	-0.8	0.5	1.2	0.6
September	0.4	0.4	1.8	-1.1	0.5	-0.3	0.5	1.7	-0.1	0.0	0.5	-0.7	-0.3	0.1	-0.4	0.5	0.6	0.3	0.7	0.9	-0.1	1.1	-0.2	0.7	-0.1	0.2	-0.5	0.5	0.8	1.0
October	0.5	0.5	1.9	-1.0	0.8	0.1	0.7	1.0	0.6	0.5	0.5	-0.3	-0.4	-0.1	-1.0	1.1	0.7	0.7	1.1	0.5	0.3	1.4	0.1	1.1	0.1	0.7	-0.3	0.6	1.1	0.9
November	0.6	0.6	1.7	-0.8	1.6	0.1	0.7	1.4	-0.2	0.5	0.7	0.2	-0.2	0.1	-0.8	1.2	1.1	0.6	1.1	0.8	0.4	1.5	0.2	0.5	-0.2	0.7	-0.2	0.8	1.3	1.2
December	1.1	1.2	2.2	-0.5	2.1	0.3	1.7	2.4	0.3	1.4	0.8	0.7	-0.2	0.5	0.1	2.1	2.0	1.6	1.8	1.0	0.7	1.6	0.9	0.9	-0.1	0.6	0.2	1.1	1.7	1.6
2017 January	1.8	1.7	3.1	0.4	2.3	0.7	1.9	2.8	1.5	2.9	1.6	0.9	0.2	1.0	0.7	2.9	2.5	2.5	2.4	1.4	1.6	2.1	1.4	1.3	0.3	1.5	0.8	0.9	1.5	1.8
February	2.0	2.0	3.3	0.9	2.6	0.9	2.2	3.4	1.4	3.0	1.4	1.4	0.3	1.6	1.4	3.2	3.2	2.7	2.9	1.2	1.7	2.4	1.9	1.6	0.5	2.5	1.2	1.4	1.9	2.3
March	1.5	1.6	2.5	1.0	2.6	0.9	1.5	3.0	1.7	2.1	1.4	1.1	0.6	1.4	1.5	3.3	3.2	2.5	2.7	1.2	0.6	2.1	1.8	1.4	0.4	2.0	1.0	0.9	1.4	2.3
April	1.9	2.0	2.7	1.7	2.1	1.0	2.0	3.6	1.6	2.6	1.4	1.4	0.7	2.0	2.1	3.3	3.5	2.6	2.3	1.1	1.4	2.3	1.8	2.4	0.6	1.7	0.8	1.0	2.0	2.7
May	1.4	1.6	1.9	1.4	2.5	0.7	1.4	3.5	1.5	2.0	0.9	1.0	0.0	1.6	0.9	2.7	3.2	1.9	2.1	1.1	0.7	2.1	1.5	1.7	0.5	1.5	1.1	0.9	1.8	2.9
June	1.3	1.5	1.5	1.1	2.4	0.4	1.5	3.1	0.9	1.6	0.8	1.1	-0.6	1.2	0.9	3.1	3.5	1.5	2.0	1.0	1.0	2.0	1.3	1.0	0.7	0.9	1.0	0.9	1.8	2.6
July	1.3	1.5	1.8	0.6	2.4	1.5	1.5	3.9	0.9	1.7	0.8	1.2	-0.2	1.2	-0.1	2.6	4.1	1.8	2.2	1.2	1.5	2.0	1.4	1.0	0.9	1.2	1.5	0.6	2.3	2.6
August	1.5	1.7	2.0	0.7	2.4	1.5	1.8	4.2	0.6	2.0	1.0	1.5	0.4	1.4	0.5	3.2	4.6	2.3	2.7	1.2	1.5	2.1	1.4	1.3	0.6	1.4	1.6	0.8	2.2	2.9
September	1.5	1.8	2.0	1.3	2.5	1.6	1.8	3.9	1.0	1.8	1.1	1.6	0.2	1.3	0.1	3.0	4.6	2.0	2.5	1.2	1.4	2.5	1.6	1.6	1.3	1.4	1.8	0.8	2.2	3.0
October	1.4	1.7	1.8	1.5	2.8	1.4	1.5	4.0	0.5	1.7	1.2	1.6	0.5	1.1	0.4	2.7	4.2	2.0	2.2	1.5	1.3	2.4	1.6	1.9	2.0	1.3	1.8	0.5	1.7	3.0
November	1.5	1.8	2.1	1.9	2.5	1.3	1.8	4.5	1.1	1.8	1.2	1.6	0.5	1.1	0.2	2.7	4.2	2.0	2.6	1.5	1.5	2.4	2.0	1.8	2.6	1.4	2.1	0.9	1.9	3.1
December	1.4	1.7	2.1	1.8	2.2	0.8	1.6	3.8	1.0	1.2	1.2	1.3	0.5	1.0	-0.4	2.2	3.8	1.6	2.2	1.3	1.2	2.3	1.7	1.6	2.6	1.9	2.0	0.5	1.7	3.0
2018 January	1.3	1.6	1.8	1.3	2.1	0.6	1.4	3.6	0.2	0.7	1.5	1.2	0.3	1.2	-1.5	2.0	3.6	1.3	2.1	1.2	1.5	1.9	1.6	1.1	3.4	1.7	2.6	0.8	1.6	3.0
February	1.1	1.4 Rc	1.5	1.5	1.6	0.5	1.2	3.2	0.4	1.2	1.3	0.9	0.7	0.5	-0.4	1.8	3.2	1.1	1.9	1.3	1.3	1.9	0.7	0.7	3.8	1.4	2.2	0.6	1.6	2.7
March	1.3	1.5	1.5	1.9	1.6	0.4	1.5	2.9	0.2	1.3	1.7	1.2	0.5	0.9	-0.4	2.3	2.5	1.1	2.0	1.3	1.0	2.1	0.7	0.8	4.0	1.5	2.5	0.9	2.0	x
April	1.2 f	x	x	x	x	x	1.4 f	x	0.5 f	1.1 f	1.8 f	x	x	0.6 f	-0.3 f	2.1 f	2.1 f	1.3 f	x	1.8 f	x	x	0.9 f	0.3	x	1.9 f	2.9 f	0.8 f	x	x

Symbols: f estimated   Po provisional   Rc revised   x not available

Notes:
(1) From January 2006 onwards: base 100=2005; index rates of change calculated based on indexes rounded up to two decimal places.

(2) Member States belonging to the Euro area: EA-13 until December 2007, EA-15 until December 2008, EA-16 until December 2010, EA-17 until December 2013, EA-18 until December 2014, EA-19 from January 2015 (including Lithuania).

(3) European Index of Consumer Prices: EU-15 until April 2004, EU-25 until December 2006, EU-27 until June 2013 and EU-28 onwards.

Source: INE-Portugal and Eurostat.

Code abbreviations of the Member States:

BE	Belgium	EE	Estonia	IT	Italy	HR	Croatia	PL	Poland	FI	Finland
BG	Bulgaria	EL	Greece	CY	Cyprus	HU	Hungary	PT	Portugal	SE	Sweden
CZ	Czech Republic	ES	Spain	LV	Latvia	MT	Malta	RO	Romania	UK	United Kingdom
DK	Denmark	FR	France	LT	Lithuania	NL	Netherlands	SI	Slovenia		
DE	Germany	IE	Ireland	LU	Luxembourg	AT	Austria	SK	Slovakia		