

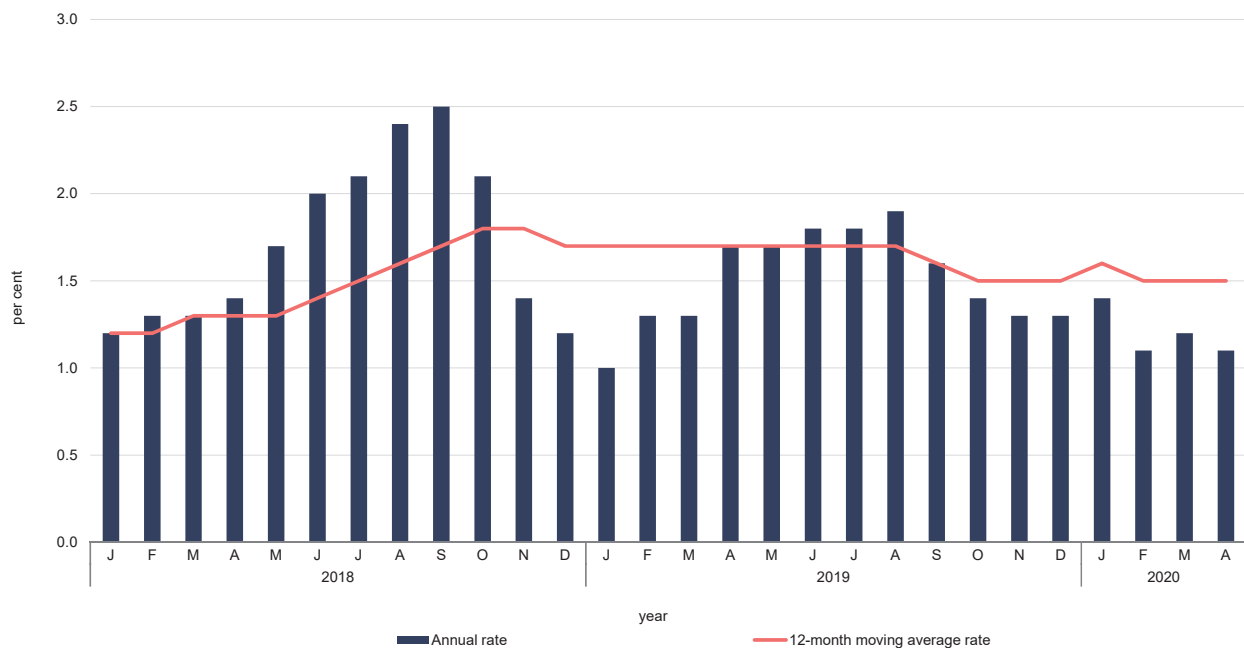
20 May 2020 | 1100 hrs | 083/2020

## Harmonised Index of Consumer Prices (HICP): April 2020

### 1. Main points

- In April 2020, the annual rate of inflation as measured by the Harmonised Index of Consumer Prices (HICP) was 1.1 per cent, down from 1.2 per cent in March 2020 (Table 2).
- The twelve-month moving average rate for April stood at 1.5 per cent (Table 2).
- The largest upward impact on annual inflation was measured in the Food and Non-Alcoholic Beverages Index, while the largest downward impact was recorded in the Education Index (Chart 2).

**Chart 1. Inflation rates**



The COVID-19 situation presented challenges to the established data collection processes. To preserve continuity and, in the case of the HICP, to ensure that developments in prices continue to be measured systematically and reliably, the NSO has adapted its methodology in full collaboration with Eurostat and the Member States' National Statistical Institutes. Details on the compilation of the HICP within the context of COVID-19 are available in the methodological notes.

## 2. Overview

The HICP measures monthly price changes in the cost of purchasing a representative basket of consumer goods and services. The HICP is calculated according to rules specified in a series of European Union Regulations that were developed by Eurostat in conjunction with the EU Member States. The HICP is used to compare inflation rates across the European Union. A closely related measure of price movements is the Retail Price Index (RPI). For a description of the differences between the HICP and the RPI, refer to page 5 of this news release.

Each monthly HICP News Release includes three different measures of inflation:

- i. The annual inflation rate measures average price changes between the reference month and the same month of the previous year. Although responsive to recent changes in price levels, this measure can be influenced by one-off effects in either month.
- ii. The monthly inflation rate compares price changes between the reference month and the previous month. This measure can be highly influenced by seasonal effects.
- iii. The 12-month moving average rate overcomes the volatility of the above two rates by comparing the average of the latest 12 indices to the average of the previous 12 indices. This measure is less sensitive to temporary changes in prices.

## 3. Price changes and effects on inflation

Table 1 shows that the highest annual inflation rates in April 2020 were registered in the following divisions: Food and Non-alcoholic Beverages (3.2 per cent) and Transport (2.3 per cent). On the other hand, the lowest annual inflation rates were registered in Education (-9.0 per cent) and Clothing and Footwear (-1.5 per cent).

**Table 1. HICP indices**

*Average 2015=100<sup>1</sup>*

Division	Weight	Indices			Annual rate (%)	Monthly rate (%)
		Apr 2019	Mar 2020	Apr 2020	Apr 2020	Apr 2020
Food and Non-alcoholic Beverages	<b>160.55</b>	109.71	111.95	113.22	3.2	1.1
Alcoholic Beverages and Tobacco	<b>36.49</b>	108.34	108.53	108.61	0.2	0.1
Clothing and Footwear	<b>48.96</b>	97.57	92.24	96.13	-1.5	4.2
Housing, Water, Electricity, Gas and Other Fuels	<b>85.44</b>	105.10	106.81	106.53	1.4	-0.3
Furnishings, Household Equipment and Routine Household Maintenance	<b>77.55</b>	109.15	107.54	107.85	-1.2	0.3
Health	<b>40.50</b>	105.98	107.88	107.97	1.9	0.1
Transport	<b>136.84</b>	100.78	102.79	103.05	2.3	0.3
Communication	<b>32.87</b>	96.48	96.51	96.50	0.0	0.0
Recreation and Culture	<b>102.90</b>	98.75	99.26	99.54	0.8	0.3
Education	<b>22.62</b>	104.78	107.17	95.40	-9.0	-11.0
Restaurants and Hotels	<b>178.25</b>	110.06	97.25	111.32	1.1	14.5
Miscellaneous Goods and Services	<b>77.03</b>	104.67	106.01	106.50	1.8	0.5
<b>All Items</b>	<b>1,000.00</b>	<b>105.57</b>	<b>103.68</b>	<b>106.70</b>	<b>1.1</b>	<b>2.9</b>

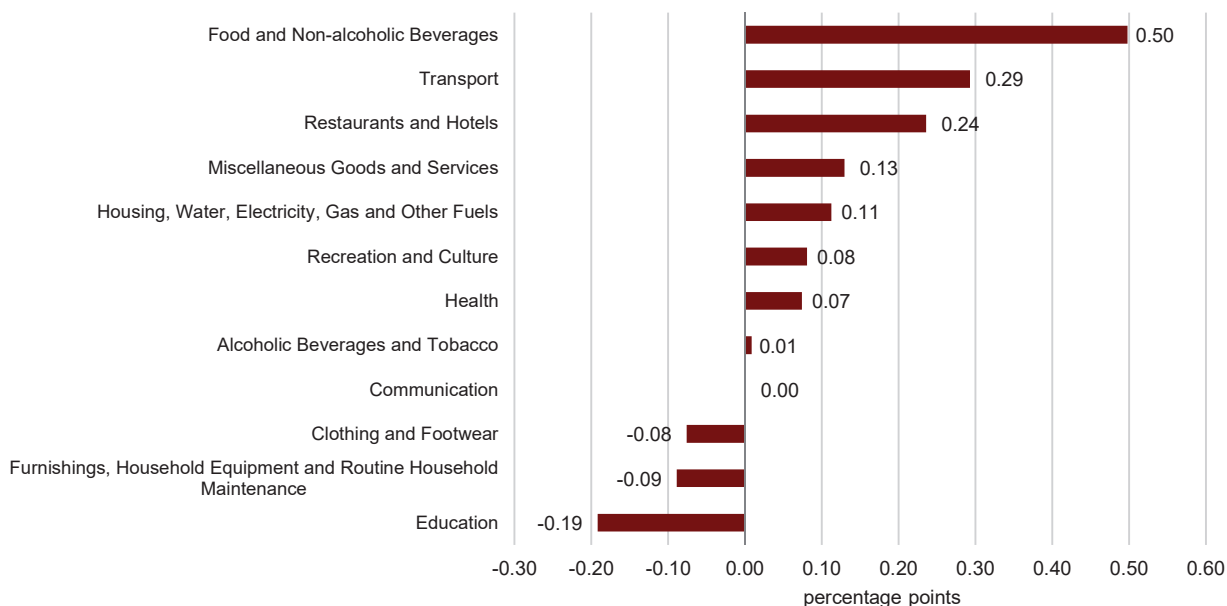
<sup>1</sup> see methodological note 5.3

Chart 2 depicts the impacts on the annual inflation rate by the 12 main divisions. An impact is a measure showing the change in inflation as a result of the inclusion of an index. Such an impact takes into account both the weight and the annual rate of inflation by division.

In April 2020, the largest upward impact on annual inflation was registered in the Food and Non-alcoholic Beverages Index (+0.50 percentage points), due to higher prices of milk. The second and third largest impacts were measured in the Transport Index (+0.29 percentage points) and the Restaurants and Hotels Index (+0.24 percentage points), mainly on account of higher prices of fuels and restaurant services (including cafés and similar outlets) respectively (Chart 2).

The downward impacts on annual inflation were registered in the Education Index (-0.19 percentage points), the Furnishings, Household Equipment and Routine Household Maintenance Index (-0.09 percentage points) and the Clothing and Footwear Index (-0.08 percentage points), mainly reflecting lower prices of private school fees, furniture/furnishings and footwear respectively (Chart 2).

**Chart 2. Contribution to the annual inflation rate by the 12 main divisions: April 2020**



Note: A percentage point is the arithmetic difference between two percentages.

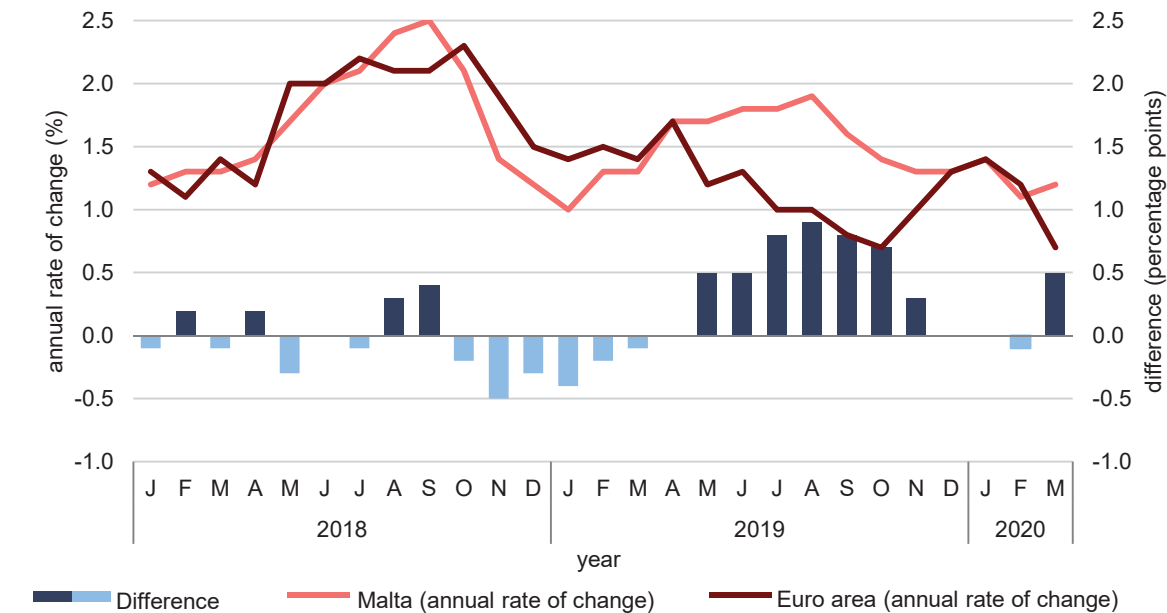
**Table 2. Inflation rates by month and year**

Month	2018		2019		2020	
	Annual rate (%)	12-month moving average rate (%)	Annual rate (%)	12-month moving average rate (%)	Annual rate (%)	12-month moving average rate (%)
January	1.2	1.2	1.0	1.7	1.4	1.6
February	1.3	1.2	1.3	1.7	1.1	1.5
March	1.3	1.3	1.3	1.7	1.2	1.5
April	1.4	1.3	1.7	1.7	1.1	1.5
May	1.7	1.3	1.7	1.7		
June	2.0	1.4	1.8	1.7		
July	2.1	1.5	1.8	1.7		
August	2.4	1.6	1.9	1.7		
September	2.5	1.7	1.6	1.6		
October	2.1	1.8	1.4	1.5		
November	1.4	1.8	1.3	1.5		
December	1.2	1.7	1.3	1.5		

#### 4. HICP (Malta and euro area)

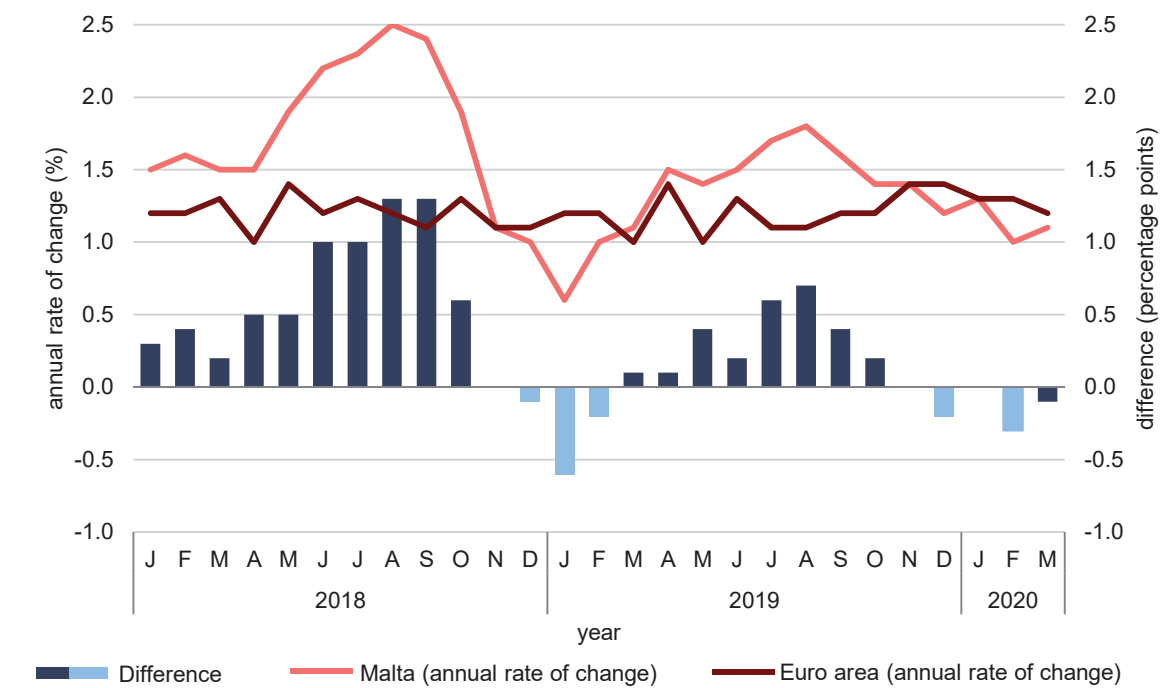
This section compares the Maltese HICP with the euro area counterpart for the latest available data, that is March 2020. In March, the annual rate of change registered by the Maltese HICP All-Items Index was 1.2 per cent, 0.5 percentage points higher than the 0.7 per cent registered for the euro area (Chart 3). The annual rate of change for the Maltese All-Items HICP excluding energy and unprocessed food was 1.1 per cent, 0.1 percentage points lower than the 1.2 per cent registered for the euro area (Chart 4).

**Chart 3. All-Items HICP in Malta and the euro area**



Source: Eurostat

**Chart 4. All-Items HICP excluding energy and unprocessed food in Malta and the euro area**



Source: Eurostat

## 5. Background notes

### 5.1 Accessing data

Further information on HICP and RPI NSO publications may be accessed from:

[https://nso.gov.mt/en/News\\_Releases/View\\_by\\_Unit/Unit\\_A5/Price\\_Statistics/Pages/Harmonised-Index-of-Consumer-Prices.aspx](https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A5/Price_Statistics/Pages/Harmonised-Index-of-Consumer-Prices.aspx) and [https://nso.gov.mt/en/News\\_Releases/View\\_by\\_Unit/Unit\\_A5/Price\\_Statistics/Pages/Retail-Price-Index.aspx](https://nso.gov.mt/en/News_Releases/View_by_Unit/Unit_A5/Price_Statistics/Pages/Retail-Price-Index.aspx) respectively.

Eurostat publications on HICP may be accessed from:

<http://ec.europa.eu/eurostat/news/news-releases>

### 5.2 Differences between HICP and RPI

Both indices are compiled using a large and representative selection of more than 440 different goods and services for which price movements are regularly monitored. Around 10,000 separate price quotations are used each month to compile the Index.

The methodology underlying HICP and RPI is similar, yet there are differences:

- i. The RPI captures private households only whereas the HICP covers private households, institutional households (such as retirement homes) and foreign visitors to Malta.
- ii. The population base year of the two indices is different. The RPI is a fixed base index with weights periodically updated in line with the Household Budgetary Survey. On the other hand, the HICP is a chain-linked index with the weights reviewed on an annual basis. Unlike the RPI where the sample of goods and services changes every time the weights are updated, newly significant goods and services can be introduced in the HICP framework on an annual basis.
- iii. The coverage of the HICP is based on an international classification system, COICOP (Classification of Individual Consumption by Purpose), whereas the RPI has a different set of codes for each group of items.

Group	COICOP division	Weight (out of 1000)	RPI group	Weight (out of 100)
1	Food and Non-alcoholic Beverages	160.55	Food (including restaurant services and take-aways)	21.49
2	Alcoholic Beverages and Tobacco	36.49	Beverages and Tobacco	5.56
3	Clothing and Footwear	48.96	Clothing and Footwear	6.62
4	Housing, Water, Electricity, Gas and Other Fuels	85.44	Housing	7.90
5	Furniture, Household Equipment and Routine Household Maintenance	77.55	Water, Electricity, Gas and Fuels	3.31
6	Health	40.50	Household Equipment and House Maintenance Costs	6.97
7	Transport	136.84	Transport and Communication	22.10
8	Communication	32.87	Personal Care and Health	8.81
9	Recreation and Culture	102.90	Recreation and Culture (including education)	9.90
10	Education	22.62	Other Goods and Services	7.34
11	Restaurants and Hotels	178.25		
12	Miscellaneous Goods and Services	77.03		
	<b>Total</b>	<b>1,000.00</b>	<b>Total</b>	<b>100.00</b>

Apart from the disparities identified above, both the RPI and the HICP:

- have the same geographic coverage, implying that both indices refer to the whole country;
- utilise the same price collection methodologies; and
- utilise the same outlet sample (with some exceptions).

### 5.3 Further information

The HICP is used to compare inflation rates across the European Union (EU). It has been used by the European Central Bank (ECB) as the measure of price stability across the euro area since January 1999. Indeed, the HICP was developed in the EU for the purpose of assessing whether prospective members of the European Monetary Union would meet the inflation convergence criterion, and later acting as the measure of inflation used by the ECB to assess price stability in the euro area. The main requirement was for a measure that could be used to make reliable comparisons of inflation rates across EU Member States. Such comparisons are not possible using national consumer price indices due to differences in index coverage and construction.

The HICP is being published with 2015 as its base year. The previous series with reference 2005=100 has been discontinued. Commission Regulation (EU) No 2015/2010 provides the legal basis for updating the HICP reference year from 2005=100 to 2015=100. It should be noted that the re-basing operation was conducted after rounding all past indices to one decimal place. Therefore, there might be slight differences when comparing this series with past data due to rounding.

The HICP largely follows National Accounts concepts of what constitutes household consumption in determining the index scope and mainly uses National Accounts data sources to weight the items in the basket. This makes for increased coherence between the HICP commodity and population coverage and National Accounts principles. As a result, HICP weights are therefore based on the final consumption expenditure of all individuals in the domestic territory, including spending by private households, institutional households and foreign visitors. National Accounts principles have also influenced the classification of goods and services within this index. The basket of consumption items considered for the HICP is reviewed annually in line with National Accounts (NA) data collected over a 12-month period in order to obtain an estimate of the average household expenditure. New products are included in the basket of items when achieving a sales volume of over one part per thousand of total consumer expenditure covered by the HICP.

The HICP weighting scheme is annually updated in accordance with Commission Regulation (EU) No 1114/2010. The treatment of seasonal items is in accordance with Commission Regulation (EC) No 330/2009.

The HICP Flash Estimates started being compiled and transmitted to Eurostat on a monthly basis as from January 2017. These refer to tentative HICP indices and are used to provide an insight to users about the annual rates of special aggregates as determined by Eurostat. Eurostat collects data from all European member countries and compiles annual rates of special aggregates for the whole of the euro area. The latest release published by Eurostat may be accessed at this link: <https://ec.europa.eu/eurostat/publications/news-releases>

Users are advised to consult the NSO before comparing the results of the HICP and the RPI.

More information on the metadata underlying HICP and RPI News Releases may be accessed from:

Sources and Methods:

[https://nso.gov.mt/en/nso/Sources\\_and\\_Methods/Unit\\_A5/Price\\_Statistics/Pages/Harmonised-Index-of-Consumer-Prices.aspx](https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_A5/Price_Statistics/Pages/Harmonised-Index-of-Consumer-Prices.aspx)

Statistical Concepts: <https://nso.gov.mt/metadata/concepts.aspx>

Metadata (HICP): <https://nso.gov.mt/metadata/reports.aspx?id=9>

Metadata (RPI): <https://nso.gov.mt/metadata/reports.aspx?id=10>

Classifications: <https://nso.gov.mt/metadata/classificationdetails.aspx?id=COICOP%201999>

HICP and RPI Manual:

[https://nso.gov.mt/en/nso/Sources\\_and\\_Methods/Unit\\_A5/Price\\_Statistics/Documents/RPI\\_and\\_HICP\\_Manual](https://nso.gov.mt/en/nso/Sources_and_Methods/Unit_A5/Price_Statistics/Documents/RPI_and_HICP_Manual).

Statistical database: <https://ec.europa.eu/eurostat/web/hicp/data/database>

References to this news release are to be cited appropriately.

The euro area mentioned in Section 4 refers to the 19 Member States that adopted Euro as their national

### 5.4 Publication policy

A calendar for future news releases may be accessed at the link:

[https://nso.gov.mt/en/News\\_Releases/Release\\_Calendar/Pages/News-Release-Calendar.aspx](https://nso.gov.mt/en/News_Releases/Release_Calendar/Pages/News-Release-Calendar.aspx)

## 6. Methodological notes

### 6.1 The Compilation of the Harmonised Index of Consumer Prices (HICP) in the Context of COVID-19

The methodological approach to the compilation of the HICP, developed by Eurostat within the EU statistical community and in collaboration with the National Statistical Institutes, has two aims: to counteract the restrictions brought about by the COVID-19 pandemic and to ensure a harmonised approach across countries. These guidelines are summarised below:

## Data collection

Price collection takes place over at least one working week around the middle of the calendar month to which the index refers. During April 2020, whenever the restrictive measures in place inhibited field price collection, alternative sources and methods such as websites, email exchanges and telephone interviews, were undertaken. The overall objective was to maintain a comparative level of coverage and to retain consistency in the indices to the extent possible.

## Weights and coverage

The weights of the sub-indices used to compile the HICP are updated at the beginning of each year to reflect household consumption patterns. These remain unchanged throughout the year in question. Therefore, in line with this standard methodology, the weights shall remain constant throughout 2020 and will not be changed as a result of the current situation. Moreover, the HICP shall still cover the full ECOICOP structure, meaning that all sub-indices will be compiled.

## Imputation

In situations where: (i) the product was available on the market but a price reading could not be obtained or (ii) the product was not available on the market, the price was imputed. This also applies to products that exhibit seasonal patterns. The imputation method takes into consideration the seasonal pattern of the time series and should not distort it. Further details on imputation techniques are available from Eurostat's methodological note, to which we are providing the link below.

## Flags for data quality

Sub-indices considered to have a comparatively lower quality were flagged. Specifically, when the share of imputations for a sub-index exceeded 50 per cent, the sub-index is flagged as having low reliability, and information is given on the extent and method of imputation. More details are available in the metadata at: <https://ec.europa.eu/eurostat/web/hicp/methodology>

Eurostat's methodological note: "Guidance on the Compilation of the HICP in the Context of the COVID-19 Crisis" is available at:

[https://ec.europa.eu/eurostat/documents/10186/10693286/HICP\\_guidance.pdf](https://ec.europa.eu/eurostat/documents/10186/10693286/HICP_guidance.pdf)

## 6.2 Reassessments / revisions:

The HICP series is published with base year 2015 according to Eurostat base year revisions

<https://ec.europa.eu/eurostat/documents/272892/272971/HICP+reference+year+2015%3D100/>

This policy for revisions was published in November 2004 and is used for the calculation of consumer price inflation statistics [https://nso.gov.mt/en/nso/About\\_NS0/Documents/Annual\\_Reports/AnnualReport2004.pdf](https://nso.gov.mt/en/nso/About_NS0/Documents/Annual_Reports/AnnualReport2004.pdf) (page 64). Note that the RPI series is published in accordance to the reference base December 2016.

## 6.3 Time series

Data from 1996 onwards is accessible from the following link:

[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)