

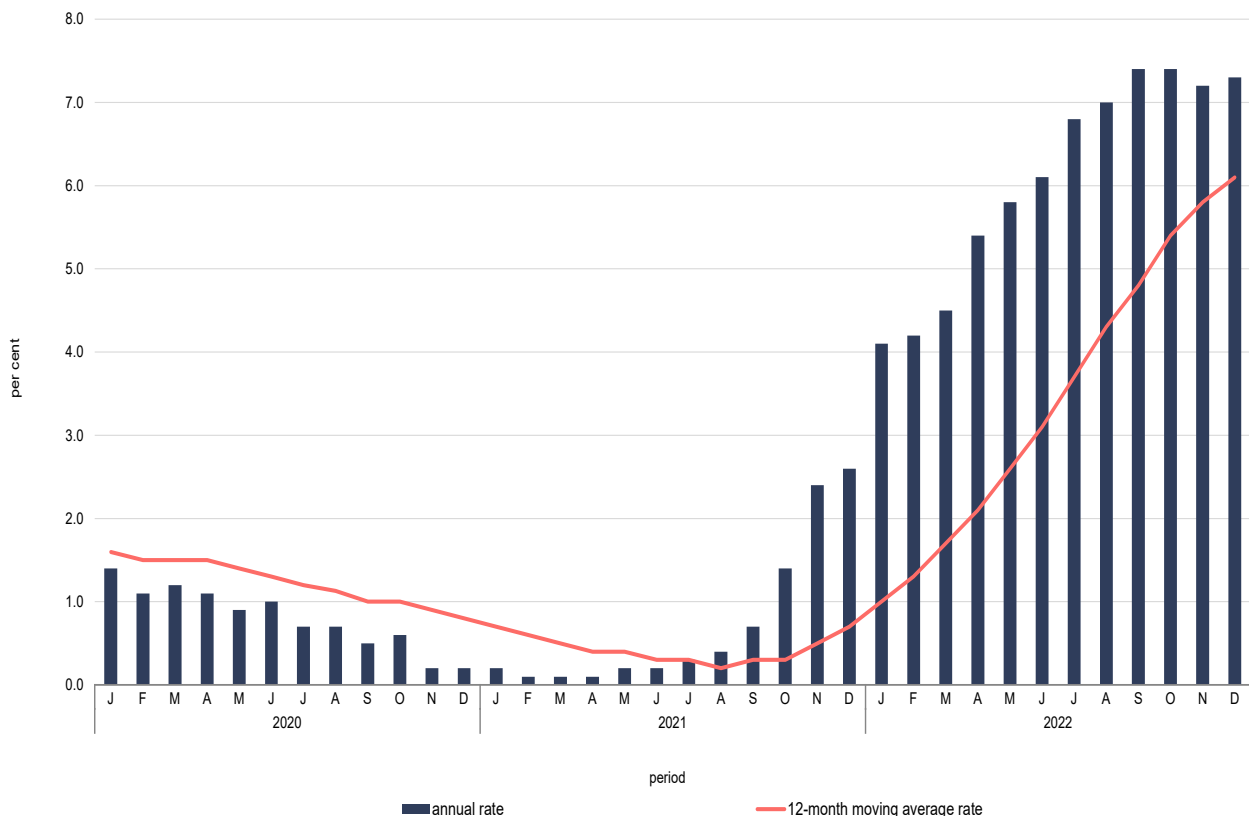
18 January 2023 | 1100 hrs | 008/2023

## Harmonised Index of Consumer Prices (HICP): December 2022

### 1. Main points

- In December 2022, the annual rate of inflation as measured by the HICP was 7.3 per cent, up from the 7.2 per cent in November 2022 (Table 2).
- The 12-month moving average rate for December stood at 6.1 per cent (Table 2).
- The largest upward impact on annual inflation was measured in the Food and non-alcoholic beverages Index (+2.41 percentage points) (Chart 2).

Chart 1. Inflation rates



## 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 (EU) regulations that were developed by Eurostat in conjunction with the EU Member States. The HICP is used to compare inflation rates across the EU. A closely related measure of price movements is the Retail Price Index (RPI). A description of the differences between the HICP and the RPI can be found in Section 5.2 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

The highest annual inflation rates in December 2022 were recorded in Food and non-alcoholic beverages (13.5 per cent) and Housing, water, electricity, gas and other fuels (10.6 per cent). On the other hand, the lowest annual inflation rates were registered in Alcoholic beverages and tobacco (2.3 per cent) and Communication (2.4 per cent) (Table 1).

**Table 1. HICP indices**

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

ECOICOP division	Weight	Indices			Annual rate (%)	Monthly rate (%)
		Dec 2021	Nov 2022	Dec 2022	Dec 2022	Dec 2022
Food and non-alcoholic beverages	<b>178.71</b>	118.78	134.19	134.78	13.5	0.4
Alcoholic beverages and tobacco	<b>38.85</b>	109.01	111.64	111.49	2.3	-0.1
Clothing and footwear	<b>42.46</b>	101.06	104.36	104.54	3.4	0.2
Housing, water, electricity, gas and other fuels	<b>100.09</b>	109.57	120.89	121.23	10.6	0.3
Furnishings, household equipment and routine household maintenance	<b>87.40</b>	109.43	118.73	119.67	9.4	0.8
Health	<b>48.79</b>	111.33	115.10	115.52	3.8	0.4
Transport	<b>124.02</b>	104.40	107.87	109.37	4.8	1.4
Communication	<b>39.81</b>	93.64	96.03	95.93	2.4	-0.1
Recreation and culture	<b>79.29</b>	105.04	110.83	111.45	6.1	0.6
Education	<b>26.45</b>	113.33	118.71	118.71	4.7	0.0
Restaurants and hotels	<b>149.75</b>	95.80	104.49	101.45	5.9	-2.9
Miscellaneous goods and services	<b>84.38</b>	108.93	113.34	114.03	4.7	0.6
<b>All-items</b>	<b>1,000.00</b>	<b>106.33</b>	<b>114.06</b>	<b>114.08</b>	<b>7.3</b>	<b>0.0</b>

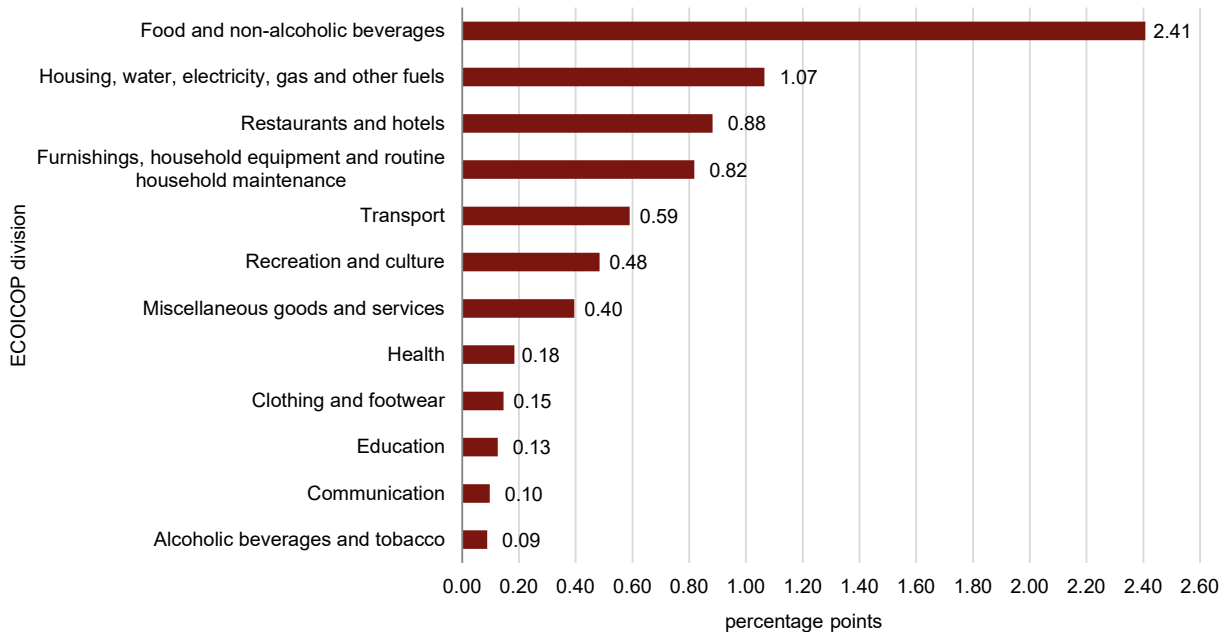
<sup>1</sup> refer to Section 5.4

Chart 2 depicts the impact on the annual inflation rate by the 12 ECOICOP 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 December 2022, the largest upward impact on annual inflation was registered in the Food and non-alcoholic beverages Index (+2.41 percentage points), largely due to higher prices of meat. The second and third largest impacts were measured in the Housing, water, electricity, gas and other fuels Index (+1.07 percentage points) and the Restaurants and hotels Index (+0.88 percentage points), mainly on account of higher prices of house maintenance services and restaurant services, respectively (Chart 2).

On the other hand, no downward impacts on annual inflation were registered for the month of December (Chart 2).

**Chart 2. Contribution to the annual inflation rate by the 12 ECOICOP main divisions: December 2022**



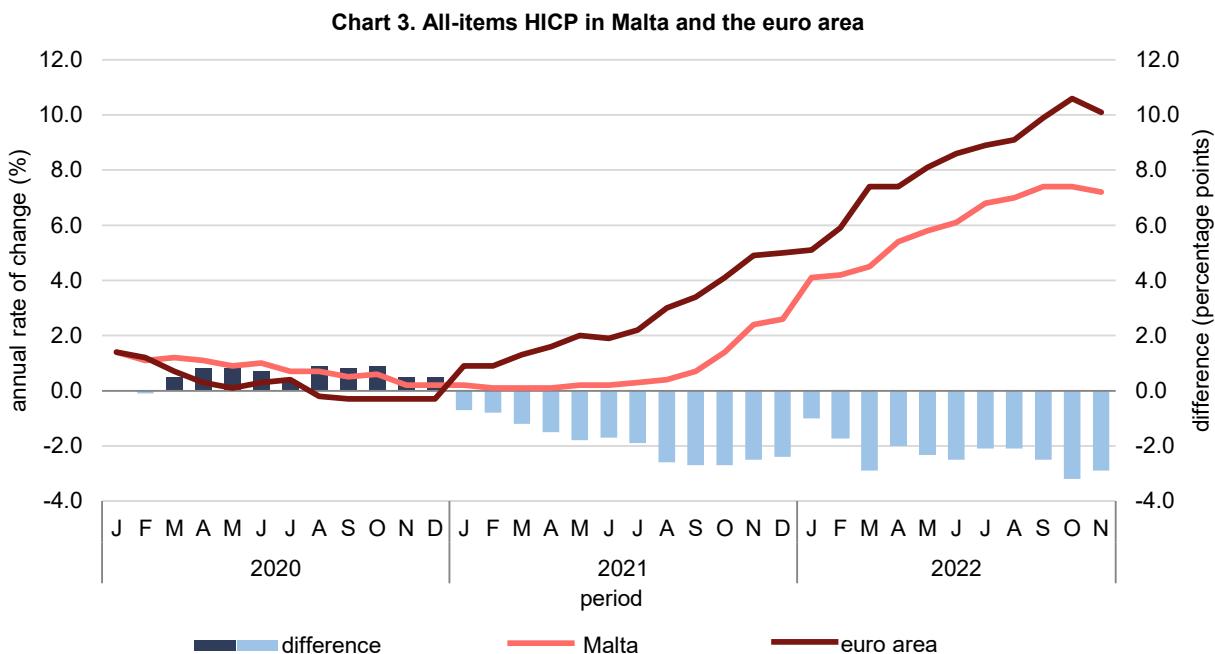
Note: A percentage point is the arithmetic difference between two percentages.

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

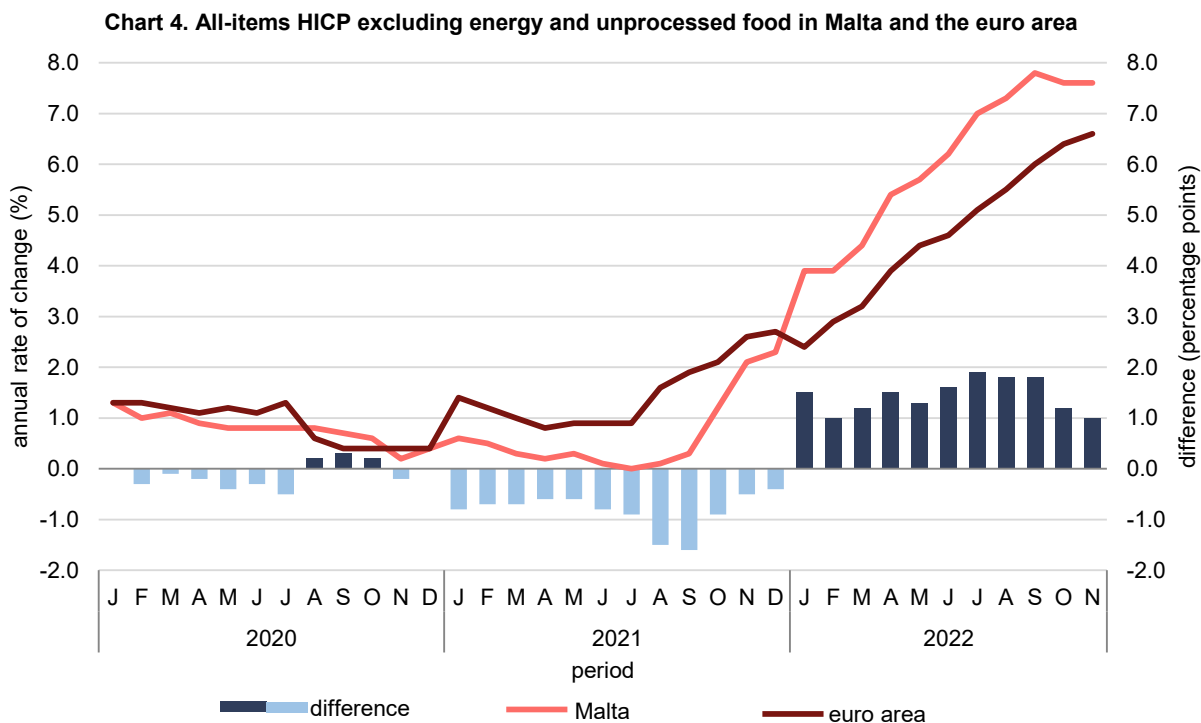
Month	2020		2021		2022	
	Annual rate (%)	12-month moving average rate (%)	Annual rate (%)	12-month moving average rate (%)	Annual rate (%)	12-month moving average rate (%)
January	1.4	1.6	0.2	0.7	4.1	1.0
February	1.1	1.5	0.1	0.6	4.2	1.3
March	1.2	1.5	0.1	0.5	4.5	1.7
April	1.1	1.5	0.1	0.4	5.4	2.1
May	0.9	1.4	0.2	0.4	5.8	2.6
June	1.0	1.3	0.2	0.3	6.1	3.1
July	0.7	1.2	0.3	0.3	6.8	3.7
August	0.7	1.1	0.4	0.2	7.0	4.3
September	0.5	1.0	0.7	0.3	7.4	4.8
October	0.6	1.0	1.4	0.3	7.4	5.4
November	0.2	0.9	2.4	0.5	7.2	5.8
December	0.2	0.8	2.6	0.7	7.3	6.1

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

This section compares the Maltese HICP with the euro area counterpart for the latest available data, that is, November 2022. In November, the annual rate of change registered by the Maltese All-items HICP was 7.2 per cent, 2.9 percentage points lower than the 10.1 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 7.6 per cent, 1.0 percentage point higher than the 6.6 per cent registered for the euro area (Chart 4).



Source: Eurostat



Source: Eurostat

## 5. Background notes

### 5.1 Accessing data

HICP and RPI NSO news releases 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 news releases on HICP may be accessed from:

<https://ec.europa.eu/eurostat/web/hicp/publications>

### 5.2 Differences between HICP and RPI

Both indices are compiled using a large and representative selection of more than 470 different goods and services for which price movements are regularly monitored. More than 14,000 separate price quotations are used each month to compile the Index.

The methodology underlying HICP and RPI is similar, yet they differ by the following:

- i. The HICP covers private households, institutional households (such as retirement homes) and foreign visitors to Malta, whereas the RPI captures private households only.
- ii. The population base year of the two indices is different. The HICP is a chain-linked index with the weights reviewed on an annual basis. On the other hand, the RPI is a fixed base index with weights periodically updated in line with the Household Budgetary Survey. 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, ECOICOP (European Classification of Individual Consumption by Purpose), whereas the RPI has a different set of codes for each group of items, as explained in the table below.

	<b>ECOICOP division</b>	<b>Weight (out of 1000)</b>	<b>RPI group</b>	<b>Weight (out of 100)</b>
1	Food and non-alcoholic beverages	178.71	Food (including restaurant services and take-aways)	21.49
2	Alcoholic beverages and tobacco	38.85	Beverages and tobacco	5.56
3	Clothing and footwear	42.46	Clothing and footwear	6.62
4	Housing, water, electricity, gas and other fuels	100.09	Housing	7.90
5	Furniture, household equipment and routine household maintenance	87.40	Water, electricity, gas and fuels	3.31
6	Health	48.79	Household equipment and house maintenance costs	6.97
7	Transport	124.02	Transport and communication	22.10
8	Communication	39.81	Personal care and health	8.81
9	Recreation and culture	79.29	Recreation and culture (including education)	9.90
10	Education	26.45	Other goods and services	7.34
11	Restaurants and hotels	149.75		
12	Miscellaneous goods and services	84.38		
	<b>Total</b>	<b>1,000.00</b>	<b>Total</b>	<b>100.00</b>

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

- 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 Explaining Divergences between HICP and RPI Inflation

The HICP and RPI price indices bear several similarities and often produce similar inflation estimates. However, in some cases, inherent methodological differences between the two indices, particularly differences in the consumption basket and in the weights given to these products, cause the inflation rates reported by these two measures to diverge.

### 5.4 Further information

The HICP is used to compare inflation rates across the 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, 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 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 (NA) concepts of what constitutes household consumption in determining the index scope and mainly uses NA data sources to weight the items in the basket. This makes for increased coherence between the HICP commodity and population coverage and NA principles. As a result, HICP weights are based on the final consumption expenditure of all individuals in the domestic territory, including spending by private households, institutional households and foreign visitors. NA 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 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 States and compiles annual rates of special aggregates for the entire euro area.

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://metadata.nso.gov.mt/concepts.aspx>

Metadata (HICP): <https://metadata.nso.gov.mt/ConceptDetails.aspx?id=942>

Metadata (RPI): <https://metadata.nso.gov.mt/ConceptDetails.aspx?id=1779>

ECOICOP division classification:

[https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST\\_NOM\\_DTL&StrNom=HICP\\_2019&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=HIERARCHIC](https://ec.europa.eu/eurostat/ramon/nomenclatures/index.cfm?TargetUrl=LST_NOM_DTL&StrNom=HICP_2019&StrLanguageCode=EN&IntPcKey=&StrLayoutCode=HIERARCHIC)

RPI and HICP manual:

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

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

ECB digital publication on inflation:

<https://www.euro-area-statistics.org/digital-publication/statistics-insights-inflation/?lang=en>

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 currency.

## 5.5 Publication policy

A calendar for future news releases may be accessed through 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 Weights

As a result of the COVID-19 pandemic, consumer spending patterns have changed. To capture this, the HICP weights for 2022 were compiled using preliminary quarterly consumer expenditure data for 2021 from the NA, complemented with additional data for 2021 from other sources, such as short-term statistics on retail trade and services. This is in line with Eurostat's recommendations, which are available at:

<https://ec.europa.eu/eurostat/documents/10186/10693286/Guidance-on-the-compilation-of-HICP-weights-in-case-of-large-changes-in-consumer-expenditures.pdf>

<https://ec.europa.eu/eurostat/documents/10186/10693286/Derivation-of-HICP-weights-for-2022.pdf>

The HICP weights for 2022 show that, compared to the previous year, the divisions to witness the highest increase in weight in absolute terms were Restaurants and hotels and Recreation and culture, while Food and non-alcoholic beverages and Housing, water, electricity, gas and other fuels registered the largest decline in weight.

### 6.2 Reassessments / revisions

The HICP series is published with base year 2015 according to the latest Eurostat base year revisions as explained in the document which can be accessed through the following link:

<https://ec.europa.eu/eurostat/documents/272892/10977288/HICP+reference+year+2015%3D100/>

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 through the following link:

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