



**HELLENIC STATITSTICAL AUTHORITY**

**DIRECTORATE GENERAL OF STATISTICS**

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**Retail Price Indices Section**

**Methodological Note on the compilation of the  
National Consumer Price Index (CPI) and of the  
Harmonized Index of Consumer Prices (HICP)  
in the context of the COVID-19 Crisis**

**Piraeus, May 2020**

## **Background**

The COVID-19 outbreak in Europe has led governments to impose measures in order to deal with the pandemic crisis, such as restrictions in the movement of people and suspension of operation in specific fields of economic activity, which had a direct or indirect impact on household consumption and, thus on consumer price indices.

In particular, the situation has affected the collection of prices of goods and services consumed by households which are necessary for the compilation of the consumer price index (CPI) as well as the harmonised index of consumer prices (HICP).

Eurostat and the national statistical institutes (NSIs) in the EU are committed to continue the dissemination of HICP data and always in accordance with the relevant EU Regulations and the European Statistics Code of Practice. Member states follow a common harmonized methodological approach regarding the compilation of Harmonized Index of Consumer Prices (HICP) and ELSTAT applies the same rules as regards the compilation and dissemination of the national HCPI data.

## **General principles**

In line with the harmonized methodology developed and applied by the EU Member States concerning the collection of HICP data during the COVID-19 pandemic, this note presents the rules for data collection, which will apply for as long the restrictions in the movement of people and the suspension of operation in specific fields of economic activity are in force:

- As regards the outlets with an e-shop available, regardless of the physical stores remaining open to public or providing exclusively on-line sales services, the prices are collected via the corresponding webpages.
- As regards the outlets that remain open but do not have an e-shop or a website, the prices are collected either by telephone contact or via e-mail.
- As regards the outlets where prices could not be collected by either of above-mentioned ways, the prices are imputed following a case-by-case approach as listed below:

### **1. Imputation of missing prices for products available in the market**

In those cases where prices could not be collected, but the relevant products continue to be transacted in the market, the following method is implemented:

- The imputed price is estimated based on prices of similar products or of the nearest higher aggregate.

### **2. Imputation of missing prices for products non-available in the market**

In those cases where prices could not be collected since the relevant products are no longer transacted in the market, the following methods are implemented:

- Impute with all reliable price indices <sup>(1)</sup>.
- Carry forward the last available observed price.

### **3. Imputation of missing prices for products that follow seasonal patterns**

The following price imputation methods are implemented for products that follow a seasonal pattern, such as flight tickets, hotels, package holiday:

- Imputation with the annual rate of change of all reliable price indices <sup>(1)</sup>.
- Imputation with a seasonal factor.

Further details on the above imputation methods can be found in the methodological notes of Eurostat at the following link:

[METHODOLOGICAL GUIDANCE NOTE ON THE COMPILATION OF THE HICP IN THE CONTEXT OF THE COVID-19 CRISIS](#)

Detailed information regarding the degree of reliability of the sub-indices for each month, as well as the method of imputation of each sub-index, can be found at the following link:

[HICP COVID METADATA TABLE OF APRIL 2020](#)

[HICP COVID METADATA TABLE OF MAY 2020](#)

[HICP COVID METADATA TABLE OF JUNE 2020](#)

(1) A price index is regarded as *reliable* if the percentage of the prices that were collected versus those that were imputed exceeds 50%.