

# EUROPEAN COMMISSION EUROSTAT

Directorate C: Macro-economic statistics

Unit C-4: Price statistics. Purchasing Power Parities. Housing statistics

# **HICP Compliance Monitoring Report**

**Slovakia** 

## 1. Introduction

In May 2017 Eurostat reviewed the compilation of the harmonised index of consumer prices (HICP) for Slovakia. The review was done against the existing legal framework, established HICP recommendations and other guidelines and good practices in the field of consumer price indices (CPI).

The current report is based on:

- A document with the inventory of the sources and methods used for the Slovakian HICP. The document was provided to Eurostat in January 2017.
- The metadata of the Slovakian HICP in Eurostat's dissemination database.
- The discussion at the compliance monitoring visit that took place on 24 May 2017 at the Statistical Office of the Slovak Republic (SO SR) in Bratislava.
- The report on the previous compliance monitoring exercise.

For all main methodological topics related to the HICP this report briefly summarises the Slovakian practice followed by Eurostat's appraisal of compliance and, if applicable, recommendations and requirements for improvement. The report concludes with Eurostat's overall assessment of compliance of the Slovakian HICP.

# 2. Coverage and classification

The definition of the economic territory is identical to the definition of economic territory given by the European System of Accounts (ESA). No parts of the country are excluded.

All monetary consumption expenditure by private households on the economic territory of Slovakia as accounted for in the national accounts is covered, including expenditure incurred by individuals living in institutional households and foreign tourists within Slovakia. It could however not yet be fully clarified in how far expenditures for purchases made over the internet are taken into consideration.

All groups and classes of household final monetary consumption expenditure, except those mentioned below, broken down by the European Classification of Individual Consumption by Purpose (ECOICOP), which account for more than one part in a thousand of the total, are included in the HICP.

While hospital services are covered in the national CPI, they are currently not covered in the HICP. Their weight is likely to be below one part in a thousand because basic hospital services are free. The national CPI covers fees for over-standard services during the hospital stay, which include e.g. improved room standards. These fees are excluded from the HICP because they include also services not directly related to the medical treatment.

Expenditures on public city transport are so far included as passenger transport by road. While the expenditure on combined passenger transport services, which is only relevant for the two biggest cities that offer different means of city transport, is not known, Eurostat welcomes the plans of SO SR to review the coverage of transport services with the aim to separately cover these services.

The 5-digit level of ECOICOP has been implemented with the publication of the January 2016 HICP. The same classification has been implemented also in the national CPI.

The classification of certain representative items into the ECOICOP sub-classes (e.g. other services in respect of personal transport equipment and social protection services) needs further investigation by SO SR.

### Compliance

The coverage of household final monetary consumption expenditure and the classification used for the Slovakian HICP are generally in line with the legal requirements.

#### **Recommendations**

SO SR should investigate the estimation of the expenditures for purchases made over the internet and their coverage according to the existing HICP recommendations.

SO SR should estimate the weight of hospital services in the HICP with a view to including these services into the HICP in the same way as they are included in the national CPI.

The list of representative items should be reviewed with a view to correctly representing ECOICOP sub-classes.

# 3. Sampling and representativity

In total around 130 localities, including also small towns and some rural areas from all 38 regions are included in the geographic sample. Regional weights are not used in the compilation of the HICP.

Outlets are selected at regional level by price collectors using purposive sampling. The number of retail outlets in the sample surveyed by price collectors is around 13,000. Outlets in the sample range from large supermarkets to small local and specialised outlets. Market stalls and mail order are not part of the outlet sample.

Internet purchases are included in the HICP only for goods. Internet purchases of services are not included, while prices for some services such as passenger transport by air and accommodation services are surveyed via the internet.

The weight for airfares is the lowest in Europe. The Slovak HICP only covers flights departing from Slovakian airports to European destinations. Neither connection flights nor flights departing from the Vienna airport are included in the index. The Vienna airport is frequently used by Slovakian passengers from Bratislava due to proximity, but can be at the same time a hub for connections for passengers from Kosice to other destinations. Further European destinations included in the sample such as London could serve as hubs for destinations outside Europe.

Consumption segments are not explicitly defined. The list of representative items is set up below the sub-class level (at 6-digit level) using purposive sampling. The concrete product offer is selected by the price collectors who attempt to identify the most sold products within the descriptions in the selected outlets. The list is reviewed once every year.

Consumer profiles are used for telecommunications as defined in the packages offered by operators.

For actual rentals, only dwellings rented out by the municipalities are included. Private landlords are not covered due to lack of reliable data.

It is not fully clear if insurances connected to the dwelling covered in the Slovak HICP include contracts typically taken out by landlords.

## Compliance

The sampling and representativity are generally in line with the legal requirements.

#### Recommendations

The SO SR should closely monitor and verify the representativity of the sample and the weight for airfares using different data sources.

The SO SR should verify if the insurances connected to the dwelling covered in the Slovak HICP are those typically taken out by tenants.

The SO SR should check regularly and adapt, if needed, the sample of outlets so that all outlet types are included and ensure the representativity of the outlet sample.

Internet purchases of services should be reviewed with the aim to correctly reflect the internet as retail channel in the sample of outlets.

The SO SR should continue investigating the data availability on dwellings rented out by private landlords.

# 4. Weights

The main source for weights for the 4-digit level of ECOICOP is the National Accounts. Below the 4-digit level Household Budget Survey (HBS) data and other external sources are used. The most recent survey that has been incorporated in the HICP was carried out in 2015.

The weights at the 4-digit level of ECOICOP are reviewed and updated annually and weights at the 5-digit level are recalculated each year on a pro rata basis using the structure of the most recent HBS. Weights are price-updated to the previous year's December at the 4-digit level.

Weights have been set to zero for a number of ECOICOP sub-classes such as bundled telecommunication services and hire of garages, parking spaces and personal transport equipment – and therefore indices are not calculated – on the basis of expenditures below one part of a thousand in residents' total expenditures according to the latest HBS. Eurostat welcomes the efforts of SO SR to review the weights at 5-digit ECOICOP level and the inclusion of new sub-classes as from 2018.

#### Compliance

The compilation of weights in the Slovak HICP is in line with the legal requirements.

#### Recommendation

SO SR should continue reviewing the expenditures and weights for further ECOICOP subclasses equally taking into account other sources that include also data on expenditures from e.g. tourists.

Price-updating of weights to the previous year's December should be carried out at the 5-digit level.

### 5. Price collection

Price collection is carried out by price collectors in retail outlets within 38 price collection regions using tablets or centrally by staff at the head office of SO SR. All price collectors are employees of the SO SR. Central price collection covers approximately 13 % of the representative items, partially relying on administrative sources (water, sewerage, heat energy, electricity, fuels and pharmaceuticals).

Prices for used cars are obtained from an external data source every second month with a time lag of one month. This is not in line with the legal requirements.

All other prices are collected every month with the exception of prices of seasonal products during their out-of-season period. Price collection for fresh fruit and vegetables is spread over 3 weeks across the price collection regions and prices are collected once per month at each collection point. Prices for fuels and airfares are obtained weekly.

For heat energy, maximum prices instead of real prices are communicated to SO SR by the regulatory office and enter monthly in the index calculation. The actual price is determined on the basis of the total costs of the providers after the end of the reference year and is only known 5 months later. Indices are not revised. The SO SR is currently undertaking a comparison of maximum and actual prices with the aim of estimating the impact of the current method.

Prices for airfares are collected in different advance periods before the date of the flight via the internet, though expenditures for internet bookings are not covered.

Prices for package holidays are collected from catalogues of travel agencies. Prices valid for internet and last minute bookings are not taken into account.

#### Compliance

The price collection is not fully in line with the legal requirements. For used cars indices are not produced and transmitted in monthly frequency as required by Article 6 of Regulation No 2016/792 and prices are not entered in the price index for the month in which they are observed as required by Article 2 of Regulation No 2601/2000.

#### **Recommendations**

SO SR should investigate a new data source so as to obtain prices for used cars in monthly frequency in a timely manner.

The SO SR should review and adapt, if necessary, the price collection for package holidays with a view to correctly represent the booking habits of consumers.

## Requirements

The treatment of used cars shall be brought in line with the legal requirements.

## 6. Discounts

The legal requirements for price reductions are applied in the Slovakian HICP. Discounts available to all consumers with no special conditions attached (non-discriminatory) are taken into account.

#### Compliance

The treatment of discounts is in line with the legal requirements.

# 7. Replacement and quality adjustment

Missing prices are carried forward for at most two consecutive months before they are replaced within the product range according to the description and, if possible, the same brand.

Exception to this rule is seaside package holidays that are only collected during the summer season and the last price is carried forward until the beginning of the next season. (See also point 8.)

Quality adjustments are made at the head office of SO SR. In most cases bridged overlap or direct comparison is used. The calculation software allows for the application of explicit quality adjustment methods but such methods are rarely used.

Option pricing is only applied for new cars, where it is applied on a rather ad hoc basis. For minor changes in models, direct price comparison is carried out in most cases. For used cars, the quality adjustment is carried out by the external data provider, who takes into account technical specifications of the car and the mileage.

The bridged overlap approach is not the most appropriate approach to quality adjustment of products if it is applied by default. The bridged overlap approach is applied to nearly 0.5 % of the observed prices.

The SO SR has run a project aiming to apply explicit adjustment methods. However, it is deemed that relevant information to run the calculations cannot be obtained.

#### **Compliance**

The application of quality adjustment methods is in line with the legal requirements.

#### Recommendations

SO SR should carry out a suitability analysis for the methodology used for the imputation of missing prices.

The default application of bridged overlap should be reviewed. The implementation of explicit quality adjustment methods should be extended. SO SR should carry out research into sources and methods to collect relevant product information.

Quality adjustment for used cars should take into account depreciation.

# 8. Treatment of seasonal products

The standards of Regulation (EC) No 330/2009 on the treatment of seasonal products are applied to water melons, clothing and footwear. Other seasonal fresh fruits and vegetables are not included in the sample.

In the out-of-season months, all-seasonal estimation is implemented at the 4-digit ECOICOP level for all products treated as seasonal.

Further products that show seasonal availability patterns are included in the Slovakian HICP. One example is the seaside holidays which are only surveyed in the summer. When the prices for these products cannot be collected due to seasonal unavailability, the last observed price is carried forward. The legal requirements for the treatment of seasonal items are not implemented for these products.

## Compliance

The treatment of seasonal products is not fully in line with Regulation (EU) No 330/2009. Several products that show seasonal availability patterns are not treated according to the standards of the regulation or are excluded.

#### Recommendation(s)

The SO SR should examine the feasibility to implement counter-seasonal estimations for out-of-season periods for clothing and footwear.

## Requirements

The SO SR should verify if all seasonal fruits (e.g. strawberries) and vegetables accounting for more than 2 parts per thousand of the total consumption expenditure during their in-season periods are covered.

The SO SR should implement price estimation methods for the out-of-season periods according to the HICP requirements for all products with seasonal availability pattern.

#### 9. Index calculation

The Slovakian HICP is a Laspeyres-type index.

Dutot price index (ratio of arithmetic means) is used for the elementary aggregate formula. The price reference period in year *t* is the December of year *t*-1. The resulting indices are chained, using the December of year *t*-1 as the link month.

The SO SR is currently working on new index calculation software and investigating the possibility to calculate geometric means when the new software is implemented.

#### Compliance

The index calculation is in line with the legal requirements.

# 10. Administered prices and constant tax rates

Changes to the list of administered prices (AP) are introduced regularly to the beginning of the reference year. The list for the compilation of the HICP-AP is transmitted each year to Eurostat in line with the good practice established for the HICP.

The SO SR provides the HICP at constant tax rates (HICP-CT) to Eurostat following the methodology defined by Eurostat.

#### **Compliance**

The SO RS regularly transmits HICP-CT and provides information on the administration of prices in line with the legal requirements.

# 11. Follow-up from the previous compliance report

The previous compliance monitoring report was published in <u>March 2008</u>. The large majority of the recommendations made in that report have been followed up by the SO SR: the samples of outlets as well as of some particular product groups have been reviewed and weights are calculated on the basis of national accounts data.

A few issues such as the price collection for used cars, however, remain still open. Those issues are pointed out in the previous parts of this report.

#### 12. Overall assessment

The Slovakian HICP is compliant with most legal requirements. If the SO SR follows up on the recommendations given in points 2-5 and 7-9 the comparability of the Slovakian HICP will improve further. Notwithstanding these issues, Eurostat assesses the Slovakian HICP to be comparable to that of the other EU Member States.