European Commission

Remuneration and Pensions

Methodology Manual

Calculation of Extra-EU correction coefficients in accordance with the EU Staff Regulations

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Part 1 : Main Text

EUROSTAT

Preface

This document describes the calculation of correction coefficients applicable to the remuneration of staff working in Extra-EU duty stations. Separate manuals describe the calculation of Intra-EU correction coefficients, and the index to monitor temporal evolution of consumer prices in headquarters duty stations. Another manual describes the calculation of specific indicators in accordance with Article 65 of the Staff Regulations.

These adjustments directly determine the remuneration of EU staff and, by analogy, many other persons. They are therefore of great interest to many groups, including the Commission and other Institutions, staff representatives, the Member States, other international organisations.

Eurostat therefore considers it important to provide a comprehensive document, where people interested in this subject can find information on the legal background, on the basic principles and definitions and also on details of the practical procedures concerning this issue.

This document is based on the Staff Regulations of Officials of the European Communities[1] and other relevant elements of the legal framework. The Working Group on Articles 64 and 65 is a platform for the discussion of the methodology. It comprises Member States delegations and representatives of the Commission and it is chaired by Eurostat.

As the remuneration system for EU officials and the methodological details for the estimation of the index develop and evolve over time, this document has to be seen as a snapshot of the current state of the art. It replaces all previous versions of this manual.

[1] Council Regulation No 259/68 as modified most recently by Regulation (EU, Euratom) No 1023/2013 of the European Parliament and of the Council of 22 October 2013

History

Regulation 3019/87 amending the Staff Regulations introduced Article 101a, which specifies that, without prejudice to the other provisions of the Staff Regulations, Annex X lays down the special and exceptional provisions applicable to officials serving in a third country (i.e. a non-member state).

Articles 11, 12 and 13 of Annex X deal with the remuneration of officials posted in countries outside the European Union. Remuneration is payable in euros in Belgium but there is also provision for all or part of an official's remuneration to be paid in the currency of the country of employment. In that event, the portion paid in local currency is subject to a weighting (i.e. correction coefficient).

Until 2004, Article 13 of Annex X required the weightings for third countries to be determined every six months. Since 2004 the requirement is to determine them annually. Since 2013 this is to be done in parallel with the calculation of Intra-EU correction coefficients. Where there is a significant variation during intermediate months, an updated weighting is required.

Since Regulation 1023/2013 the figures are adopted on the basis of Eurostat report and published by the European Commission. Previously, the annual figures were adopted by ordinary legal procedure, and the interim monthly figures were adopted by Commission Decision.

Initial Extra-EU weightings were established using data supplied by the United Nations.

Between 1989 and 2009 practical work on place-to-place surveys to collect and process price data, organise family budget surveys and produce expenditure weights, time-to-time surveys to establish price indices where compilation of consumer price indices was not possible, and calculation of aggregate-level CCs calculation was contracted-out by Eurostat. Contracts were signed for varying durations with various contractors following usual public tendering process.

With effect from 2009, there has been close collaboration with other organisations under an international memorandum of agreement. UN-ICSC has supplied survey data for 2009 and 2010 (under UN methodology applicable 2005-10) and for 2010 onwards (under UN methodology applicable 2010-15 and latest methodology from 2016). CO.ISRP has supplied survey price data for the Extra-EU countries coordinated by OECD in the ECP programme, and ESTAT provides data for a further set of Extra-EU countries coordinated in the ECP program.

In 2009, the External Action Service was created. In most Extra-EU countries, the EU delegation took over many of the roles previously conducted by Member State embassies. The EEAS combined staff from various EU institutions (notably Commission DGs and Council) and approximately 1/3 staff were seconded from Member States.

The classification used since 1999 was based on the COICOP classification and comprised 84 basic headings. In 2004, the classification was revised and simplified to 57 basic headings (BHs with very low weights and those where direct compensation was given to staff (i.e. rents - healthcare – school fees) were excluded).

With effect from 2016, the number of Basic Headings was extended from 57 to 80 in order to harmonise with Intra-EU (and UN-ICSC) approaches. In particular, Extra-EU price surveys will take healthcare and education into account because it is increasingly clear that staff may be obliged to incur significant expenditures which exceed the reimbursement received.

With effect from 2018, in the light of the ever-closer collaboration between UNICSC and Eurostat, the consumption structures established by the UNICSC, from their most recent family budget survey in each location, were converted from their 83BH classification into the 80BH classification and the new regionalised expenditure structures were applied to Extra-EU calculation from July 2018 onwards. The new approach is described in the “Consumption structures” section of this manual.

Details of the calculation of Extra-EU coefficients were described in a handout produced for staff in 1994, and in reports to Council in 1995 and 2001. Comprehensive information was presented in the calls for tender for external contractors (1990, 1993, 1999, 2002, 2005, 2008), and in a detailed methodology manual adopted by the A64 Working Group (previous versions: document A64/08/15; A64/10/15; A64/11/28; A6465/14/60; A6465/14/60rev1 (July 2014); A6465/60rev2 (July 2016)).

Country coverage (the list of locations for which CC are produced and disseminated) is reviewed annually and reflects legislative and administrative decisions. Important recent changes have included:

- With effect from February 2020, United Kingdom (UK) withdrew from the EU and is added to the list of Extra-EU duty stations.

- With effect from February 2021, Qatar and São Tomé and Príncipe are added to the list of Extra-EU duty stations (new Delegations being opened).

- With effect from February 2021, 8 locations are now excluded from the list (Belize; Bosnia and Herzegovina (Banja Luka); Comoros; Indonesia (Banda Aceh); Samoa; Solomon Isles; Suriname; Vanuatu), in order to align the list of locations for which CC are produced with the official list of Extra-EU Delegations.

- With effect from July 2022 the new duty station in Greenland is added to the list of Extra-EU duty stations.

This document supersedes all previous versions.

Contents

Background

The adjustment of salaries of EU officials is determined by the following factors:

- Changes in the purchasing power of salaries of national civil servants in central government (Specific Indicator).
- Changes in the cost of living in Belgium and Luxembourg (JBLI: Joint Belgium Luxembourg Index).”
- Changes in the economic parities between Brussels and other duty stations (Correction Coefficients).

This manual describes the calculation of Correction Coefficients for Extra-EU duty stations.

Separate manuals describe the calculation of the Joint Index[2] and the calculation of Correction Coefficients for Intra-EU duty stations in accordance with Annex XI of the Staff Regulations[3].

Another manual describes the calculation of Specific Indicators and Control Indicators in accordance with Article 65 of the Staff Regulations[4].

1.1 Legal background

Extra-EU work is based on the same legal framework as Intra-EU work (i.e. Article 64 and Annex XI and Annex VII) but some specific rules apply in replacement or in addition (Annex X).

1.1.1 Article 64 of the Staff Regulations of officials of the European Communities

“An official's remuneration expressed in euros shall, after the compulsory deductions set out in these Staff Regulations or in any implementing regulations have been made, be weighted at a rate above, below or equal to 100 %, depending on living conditions in the various places of employment.

The correction coefficients shall be created or withdrawn as well as annually updated in accordance with Annex XI. With respect to the update, all values shall be understood as reference values. The Commission shall publish the updated values within two weeks after the update in the C series of the Official Journal of the European Union for information purposes.

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[2] Doc.A6465/14/58 rev (version July 2014 + subsequent revisions: latest version March 2020)
[3] Doc.A6465/14/59 rev (version July 2014 + subsequent revisions: latest version: March 2020)
[4] Doc.A6465/14/26 rev (version July 2014 + subsequent revisions: latest version: March 2020)

No correction coefficient shall be applicable in Belgium and Luxembourg, having regard to the special referential role of those places of employment as principal and original seats of most of the institutions.”

1.1.2 <u>*Annex X - Special and exceptional provisions applicable to officials serving in a third country*</u>

Article 11

"Remuneration, as also the allowances referred to in Article 10, shall be paid in euros in the European Union. They shall be subject to the weighting applicable to the remuneration of officials employed in Belgium.”

Article 12

"At the request of the official, the appointing authority may decide to pay all or part of his remuneration in the currency of the country of employment. In that event, it shall be subject to the weighting for the place of employment and shall be converted on the basis of the corresponding exchange rate.

In duly substantiated exceptional cases, the appointing authority may make all or part of this payment in a currency other than of the country of employment in such a way as to maintain purchasing power."

Article 13

“In order to ensure as far as possible that officials enjoy equivalent purchasing power irrespective of their place of employment, the weighting referred to in Article 12 shall be updated once a year in accordance with Annex XI. With respect to the update, all values shall be understood as reference values. The Commission shall publish the updated values within two weeks after the update in the C series of the Official Journal of the European Union for information purposes.

Where, however, in the case of a given country, the variation in the cost of living measured on the basis of the weighting and the corresponding exchange rate is found to have exceeded 5 % since the last update, an interim update of the weighting in accordance with the procedure laid down in the first paragraph shall take place.”

1.1.3 *Annex XI - Rules for implementing Articles 64 and 65 of the Staff Regulations*

Article 1

"1. Report from the Statistical Office of the European Union (Eurostat)

For the purposes of the update provided for in Article 65(1) of the Staff Regulations and in Article 13 of Annex X, Eurostat shall draw up every year before the end of October a report on changes in the cost of living in Belgium and Luxembourg, the economic parities between Brussels and certain places in the Member States and in third countries where necessary, and changes in the purchasing power of salaries in national civil services in central government."

[...]

3. Changes in the cost of living outside Brussels

[...]

(b) The economic parities shall refer to the month of June in each year. "

Article 3

"[...]

6. The institutions shall make the corresponding positive or negative update to the remuneration and pensions of the officials, former officials and other persons concerned with retroactive effect for the period between the effective date and the date of entry into force of the next update.

If that retroactive update necessitates the recovery of sums overpaid, such recovery may be spread over a period of not more than 12 months from the date of entry into force of the next annual update."

Article 5

"[...]

2. The change in the cost of living for Belgium and Luxembourg shall be measured by the Joint Index for the period from June to December of the previous calendar year.

3. For each place for which a correction coefficient has been set (other than Belgium and Luxembourg), an estimate for December of the economic parties mentioned in Article 1(3) shall be calculated […]"

- NB. For Extra-EU staff this is modified by Annex X Article 13.

Article 6

“The sensitivity threshold for the six-month period mentioned in Article 5(2) of this Annex shall be the percentage corresponding to 6 % for a 12-month period.”

- NB. For Extra-EU staff this is modified by Annex X Article 13.

Article 9

“1. The appropriate authorities of the Member States concerned, the administration of an institution of the European Union or the representatives of officials of the Union in a given place of employment can request the creation of a correction coefficient specific to that place.

[…]

2. The Commission shall decide, by means of delegated acts in accordance with Articles 111 and 112 of the Staff Regulations, to withdraw the application of a correction coefficient specific to a certain place. In that case the decision shall be based on one of the following:

(a) a request by the appropriate authorities of the Member State concerned, the administration of an institution of the Union or the representatives of officials of the Union in a given place of employment showing that the cost of living in that place is no longer significantly different (less than 2 %) from that in the capital of the Member State concerned. Such convergence should be sustainable and validated by Eurostat,

(b) the fact that there are no longer any officials and temporary staff of the Union employed in that place”.

Article 12

"It shall be the task of Eurostat to monitor the quality of basic data and statistical methods used to work out the factors taken into account for the adjustment of remuneration. In particular, it shall make any assessments or carry out any studies required for such monitoring."

Article 13

“In March each year Eurostat shall convene a meeting of a working group composed of experts from the national statistical institutes or other appropriate authorities in the Member States, to be known as the ‘Working Group on Article 64 and 65 of the Staff Regulations’.

At that meeting, the statistical methodology and its implementation concerning specific and control indicators, the joint index and economic parities shall be examined.

The information required to produce a forecast of changes in purchasing power for the purposes of the intermediate update of remuneration shall also be provided, together with the data on working hours in central government departments."

1.1.4 *Annex VII – Remuneration and reimbursement of expenses*

Article 17

"1. Payment shall be made to each official and the place and in the currency of the country where he carries out his duties or, at the request of the official, in euros in a bank within the European Union.

2. Under the conditions laid down in rules fixed by the appointing authorities of each institution by common consent after consulting the Staff Regulations Committee, officials may apply for special regular transfer of part of their remuneration. […]"

- NB. For Extra-EU staff this is modified by Annex X Article 12.

1.2 Administrative background

The European Commission "HR key figures card" for 2020 shows that the total number of Commission staff working in Extra-EU locations is currently 4,188. This includes officials, temporary agents, contract agents and local staff. Local staff are recruited under separate terms and conditions.

A strict mobility policy is applied by the European External Action Service, with staff rotation after a specified number of years work in a given location. Approximately one-third of EEAS staff are based in Brussels. Under the Lisbon Treaty the seconded diplomatic staff of the Member States who are appointed as Temporary Agents represent approximately one-third of the total EEAS staff. Local staff represent around 50% of the total Extra-EU staff working in Delegations.

There are currently 142 Extra-EU duty stations for which correction coefficients are calculated. This comprises Delegations (typically in capital cities) plus Offices to international organisations, which are sometimes located in the same place. Some duty stations are actually situated Intra-EU, e.g. diplomatic missions to OECD and UNESCO in Paris; COE in Strasbourg: IAEA and OSCE in Vienna; FAO and Holy See (Vatican) in Rome. In a small number of countries there can be an additional duty station outside the capital city (e.g. Switzerland-Bern & Switzerland-Geneva; USA-Washington DC & USA-New York; China-Beijing & China-Hong Kong).

In accordance with Annex X Article 12, Extra-EU correction coefficients are applied only at the request of **officials, temporary staff and contract staff** of the European Union serving in third countries. If no request is made (normally because the correction coefficient is below 100[5]) the salary is paid in euro without application of the correction coefficient fixed for the duty-station.

Local staff engaged in places outside the European Union, according to local practice for manual or service duties, in the interests of the service, assigned to a post not included in the list of posts appended to the section of the budget relating to each institution, are paid from the total appropriations for the purpose and are not eligible for the application of Extra-EU Correction Coefficient.

Thus duty stations can be classified into two groups:

(1) high-cost countries (correction coefficient >100);

(2) low-cost countries (correction coefficient <100).

Given that, as explained above, correction coefficients are generally applied only in high-cost countries, Eurostat concentrates its effort especially in these latter countries, so the precision of the results can vary depending on the actual level of the correction coefficient.

In ***<u>Annex 1</u>*** is given a list of **current duty stations outside the European Union for which a CC is calculated**

In ***<u>Annex 2</u>*** is given a list of **UN-ICSC current duty stations**.

In ***<u>Annex 3</u>*** are given lists of **ECP participating countries coordinated by Eurostat and by OECD**.

5 A correction coefficient of 100 for a given duty station means that the general cost-of-living for an European civil servant in that duty station is at the same level as in Brussels.

The system for the calculation of correction coefficients in Extra-EU duty stations

1.3 Introduction

The objective of the correction coefficients is to compare the relative costs of living of European officials in Brussels (reference city) and in each duty station outside the EU.

The method used is to compare the price of a "basket" of goods and services purchased by the average official in Brussels with the price of the same basket in each of the other places of employment. The average of all the price ratios is called the "global parity". Parities are always calculated as bilateral parities between Brussels and a specific Extra-EU duty station (not multilateral parities).

The relation between the global parity and the exchange rate used to pay the remuneration is called a correction coefficient, which operates as a percentage adjustment to salaries to take account of the price differences between Brussels and a specific duty station.

The gathering of statistical data is organized by Eurostat in close cooperation with other international organisations (UN-ICSC and CO-ISRP), and consists of three separate operations:

(1) Price level surveys ("place-to-place" (P2P)), which allow price comparison between Brussels and any other duty station for a range of consumer goods and services (purchasing power parities at basic heading level: see next page for a definition of basic parities).

(2) Family budget surveys, which enable the establishment of consumption structures of international officials. These are used as weighting factors to aggregate basic parities (see next page for a definition of basic parities).

(3) Monthly consumer price indices (CPI) for the updating of the parities.

The following table schematizes the different kind of surveys.

Periodic price surveys in Brussels Periodic price surveys in duty stations	**Price level**

Periodic family budget surveys in Brussels Periodic family budget surveys in duty stations	**Expenditure weights**

Continuous monitoring of prices in Brussels (Joint Index) Continuous monitoring of CPI in duty stations (CPI)	**Price trend**

1.4 From price surveys to correction coefficients

CHART 1

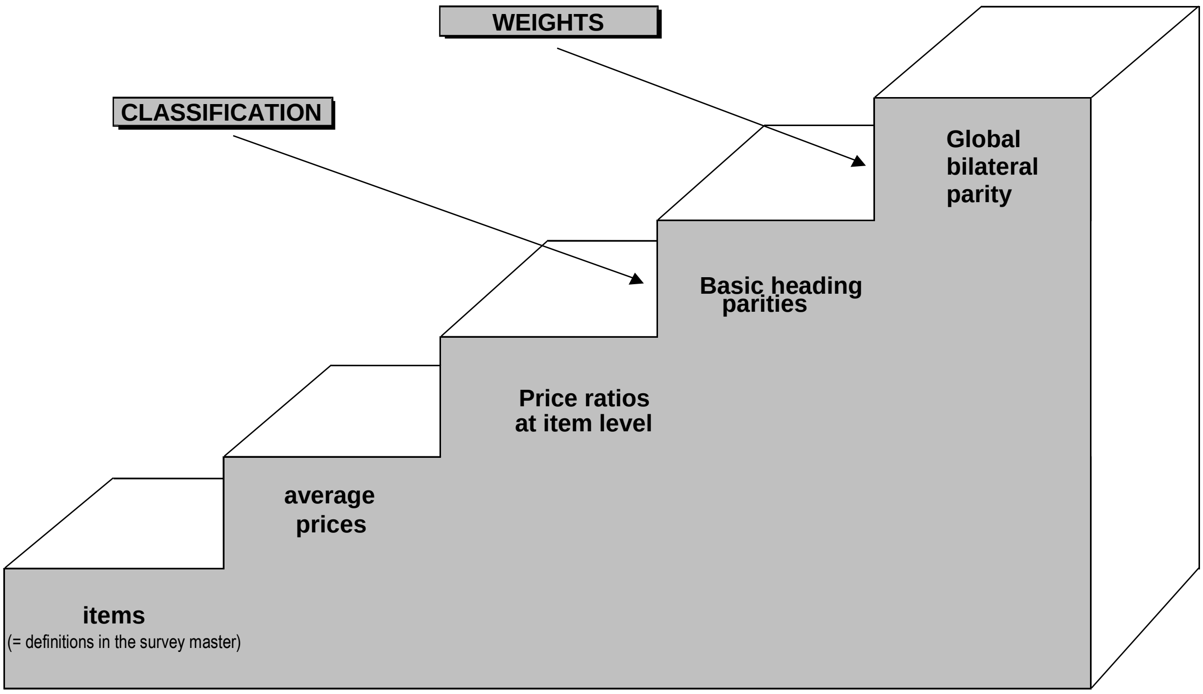

Chart 1 just shows the static (spatial) aspect of the correction coefficients methodology and schematises the different steps to follow in order to build up a global parity starting from the results of price level surveys, i.e. the price comparison at a fixed time between two places. In reality there is also a dynamic (in time) aspect of price changes in each place. Both aspects are illustrated in flowcharts in ***Annex 12***.

Although for each duty station just a single overall correction coefficient is estimated, its calculation uses procedures which imply the manipulation of a large amount of data.

Basically the overall correction coefficient calculation has the following features:

The total range of goods and services constituting the consumption of the average EU official is divided into 80 basic headings and 12 Groups (see list attached, ***Annex 4*** and ***Annex 5***).

From 2010, price data is obtained primarily through collaboration with other international organisations. For some locations price data is available from the European Comparison Programme (ECP) coordinated by Eurostat, or the Joint Eurostat-OECD comparison programme. For most locations, price data is obtained from P2P surveys coordinated by the United Nations International Civil Service Commission, which use a methodology that is increasingly harmonised with the work of the ECP. For a small number of locations, direct surveys are organised.

Survey item definitions are grouped to represent each basic heading. Average prices, obtained from the surveys, are established for each item.

For each item *i* the average price in duty station *X* is then divided by the corresponding average price in Brussels. The result is the price ratio for item *i*.

Each basic heading *j* is covered by at least 1 item. The geometric (unweighted) mean of the price ratios for all the items in the basic heading *j* gives the basic heading parity *j*.

The Fisher index formula is used to calculate a type of weighted average of all the basic heading parities into a single global parity.

The global parity, when divided by the exchange rate, gives the correction coefficient.

In the flowchart **(*Annex 12*)** are also mentioned two "tools" needed for these calculations:

(1) The **classification** determines the number of basic headings for which parities are calculated. This number was 173 until 1999, was reduced to 84 from the year 2000, was further reduced to 57 from the year 2005, and has now been increased to 80 from the year 2016 (harmonised with Intra-EU).

(2) The **expenditure weights** derived from Family Budget Surveys (see ***chapter 7***) are conducted roughly every 5 to 7 years among European and international civil servants. The resulting structures reflect the consumption expenditures of the average EU official in Brussels and in each Extra-EU duty station. These structures are used in aggregating the basic parities into a single overall parity or PPP.

1.5 Correction coefficients calculation: the Fisher index

Using the 80 basic parities and the specific weights the overall parity is calculated in two ways:

(1) The first uses the consumption pattern for the reference city (Brussels) (this is a type of Laspeyres index);

(2) The second uses the consumption pattern for the duty station (this is a type of Paasche index).

In accordance with standard practice for international comparisons both types of index are calculated and the geometric mean of the results (a Fisher index) is the one actually used.

First step is the calculation of the basic parities, which are obtained as the geometric mean of the price ratios (in national currency) for all the common items between place X and Brussels (B):

$$_{X}PPP_{B}^{j} = \sqrt[k]{\prod_{i=1}^{k} \frac{P_{iX}}{P_{iB}}}$$

where:

j	=	Basic heading 1 to 80
k	=	Number of items priced both in Brussels and in place X ($0 < k \leq i$)[6]
Pi_X	=	Price of item i in place X
Pi_B	=	Price of item i in Brussels

A first possible aggregation of these basic parities can be obtained using the Brussels pattern of consumption in the following formula:

$$_{X}PPP_{B}^{L} = \frac{\sum_{j=1}^{80} PPP_{j} \times W_{Bj}}{\sum_{j=1}^{80} W_{Bj}}$$

where:

$PPP\,j$	=	Parity for basic heading j for place X (relative to Brussels)
W_{Bj}	=	Weight of heading j in the consumption structure for Brussels
L	=	Laspeyres-type index

Another aggregation can be obtained using place X consumption structure:

$$_{X}PPP_{B}^{P} = \frac{\sum_{j=1}^{80} W_{Xj}}{\sum_{j=1}^{80} \left(\frac{1}{PPP_{j}} W_{Xj} \right)}$$

where:

$PPP\,j$	=	Parity for basic heading j for place X (relative to Brussels)
W_{Xj}	=	Weight of heading j in the consumption structure for place X
P	=	Paasche-type index

6 $0 < k \leq i$ because it can happen that not all the existing items corresponding to a given basic heading can be priced both in Brussels and in place *X*, but to calculate parity a minimum of 1 item for which prices are available in both Brussels and place *X*.

The geometric mean of the two aggregated indices gives a Fisher type overall parity

$$ {}_X PPP_B^F = \sqrt{\left({}_X PPP_B^L \times {}_X PPP_B^P \right)} $$

where:

F = Fisher-type index

Finally, the ratio between the Fisher overall parity and the exchange rate between Brussels and place *X* gives the Correction Coefficient.

$$ {}_X CC_B = \frac{{}_X PPP_B^F}{T_{X/B}} $$

where:

$T_{X/B}$ = exchange rate: 1 euro = xx local currency

The COICOP classification in 80 basic headings

1.6 Definition

The classification used is the international Classification of Individual Consumption by Purpose (COICOP), which is a standard adopted for national accounts, price statistics and household expenditure statistics. It is established by successive breakdowns of the aggregates.

Total household final consumption is first broken down into twelve groups, such as: Food, Drink, Clothing, Transport, etc. (see ***Annex 5***).

Within each major group, a more detailed sub-group, or "basic heading" is defined. For example, within the Food group (group 1) there are 11 sub-groups for meat, fish, fruit, etc.

Lastly, within each basic heading corresponding to the COICOP classification, in collaboration with the UN, Eurostat specifies particular items, chosen for representativity of the basic heading to which they relate.

The basic headings have a dual role:

(1) First of all, they constitute the most detailed level for which realistic expenditure data can be obtained by the Family Budget Surveys (see ***chapter 7***) regularly conducted among the staff serving in the different EU duty stations.

(2) Secondly, they match homogeneous groups of products from which a number of products are selected for price surveys.

The exhaustive classification for the correction coefficients calculation comprises 80 basic headings. A complete list is attached in ***Annex 4***.

The classification is designed for correction coefficients in general, but for Extra-EU comparisons it excludes some of the COICOP basic headings, i.e. rents for these items direct compensation is given to staff.

Differences between the Allowance for living conditions and the Correction Coefficient

1.7 Definition

Allowances for Living Conditions (LCA)[7] are fixed, according to the official's place of employment, as a percentage of a reference amount. This reference amount shall comprise the total basic salary, plus the expatriation allowance, household allowance and dependent child allowance, less the compulsory deductions.

The calculation of the Allowance for Living Conditions is done by EEAS. Eurostat is not involved in the determination of the Allowance for Living Conditions. The Extra-EU methodology and the Correction Coefficients that are established by Eurostat are not linked to the estimations or calculation of the Allowances for Living Conditions.

1.8 Estimation and application

Where an official is employed in a country in which living conditions can be deemed equivalent to those normally obtaining in the European Union, no such allowance shall be payable.

In the case of other places of employment the parameters taken into account for fixing the Allowance for living conditions shall be the following:

(1) Health and hospital environment,
(2) Security,
(3) Climate,

To which three parameters shall be applied a weighting of 1:

(1) Degree of isolation,
(2) Other local conditions,

To which two parameters shall be applied a weighting of 0.5.

Each parameter shall have the following value:

(1) 0: where conditions are normal but not equivalent to those normally obtaining in the European Union,

(2) 2: where conditions are difficult compared with those normally obtaining in the European Union,

(3) 4: where conditions are very difficult compared with those normally obtaining in the European Union.

[7] The LCA is commonly known by its French acronym ICV (*indemnité de conditions de vie*).

The allowance is fixed as a percentage of the reference amount referred to in the first subparagraph, in accordance with the following scale:

(1) 10% where the value equals 0,
(2) 15% where the value is greater than 0 but not greater than 2,
(3) 20% where the value is greater than 2 but not greater than 5,
(4) 25% where the value is greater than 5 but not greater than 7,
(5) 30% where the value is greater than 7 but not greater than 9,
(6) 35% where the value is greater than 9, but not greater than 11,
(7) 40% where the value is greater than 11.

The Allowance for living conditions fixed for each place of employment is reviewed and, where appropriate, adjusted each year by the appointing authority after the opinion of the Staff Committee has been obtained.

Differences between Extra-EU and Intra-EU work.

Whilst the basic concept is the same, and there is increasing degree of harmonisation, there are still some important differences between the work done to establish correction coefficients for Extra-EU purposes and the work which is done to establish correction coefficients for Intra-EU purposes.

1.9 Administrative responsibility:

Administrative responsibility for both Intra-EU and Extra-EU work lies with European Commission Directorate-General (DG HR), who ensure appropriate liaison for Extra-EU purposes with the European External Action Service (EEAS).

There are currently 142 Extra-EU duty stations for which correction coefficients are calculated (see ***Chapter 1*** and ***Annex 1***). This is approximately 5 times the number of Intra-EU locations.

There are currently around 4,000 staff working in Extra-EU duty stations (see ***Chapter 1***) of which around 50% are local employees.

Whilst the number of staff in individual Extra-EU Delegations may be similar to the numbers working in individual Intra-EU Representations, the number is generally larger in other Intra-EU duty stations (e.g. staff concentrations in Research Centres and in EU Agencies).

1.10 Legal framework:

Extra-EU work is based on the same legal framework as Intra-EU work (i.e. Article 64 and Annex XI) but some specific rules apply in replacement or in addition (Annex X). Please see ***Chapter 1*** for legal texts.

Extra-EU staff may choose whether to receive some or all of their **remuneration in local currency** (in which case the CC is applied) or to have it paid in Euros in Brussels (i.e. CC=100). There is less flexibility for Intra-EU staff: payment is automatically made in local currency with application of the CC except where it can be shown that Intra-EU staff can justify special regular transfer of part of their remuneration in another country.

Both Extra-EU CCs and Intra-EU CCs are produced for July. However there is different treatment of **interim fluctuations**. Extra-EU, where in the case of a given country the monthly variation in the cost of living measured on the basis of the weighting and the corresponding exchange rate is found to have exceeded + or -5% since the last adjustment, in accordance with Art 13 of Annex X to the Staff Regulations, there is an automatic intermediate update of the CC values : the Commission shall publish the updated values within two weeks after the update in the C series of the Official Journal of the European Union for information purposes.

1.11 Survey data to calculate initial parities:

Since 2010, following the signature of a Memorandum of Understanding with UN-ICSC and CO-ISRP in July 2009, the price data in the Extra-EU duty stations are obtained directly from surveys conducted by UN-ICSC (see ***Annex 2*** for list) and from CO-ISRP or from ESTAT-ECP (see ***Annex 3*** for list).

The UN-ICSC survey list contains 320 products and was developed in collaboration between UN-ICSC and Eurostat. The UN-ICSC price data for certain items is not taken into account because they are separately reimbursed by the Commission (this notably concerns housing and related costs). For practical reasons it is impossible for UN-ICSC to cover all duty stations simultaneously, instead surveys are organised to ensure each location is visited at least once during a five year period. Please see ***Chapter 8*** for more details.

By contrast Intra-EU survey price data are collected in collaboration with Member State NSIs, and then Eurostat does final calculations. The Intra-EU surveys are conducted simultaneously in all locations. They are based on a list with approximately 3000 products. The list is divided into six (i.e. two surveys each year). More than 12000 price observations are typically collected in each location (average 10 per item definition unless a monopoly supplier).

1.12 Temporal updating:

Intra-EU parities are updated using fresh survey data, and in between times with detailed official HICPs established by Member State NSIs using common methodology.

Extra-EU, the survey-based parities are subsequently updated using temporal indices from various sources (generally official national consumer price indices, which do not all follow a harmonised methodology). Please see ***Chapter 9*** for more details. The economic cycle is typically following a different rhythm in Extra-EU countries to that which applies Intra-EU. The inflation level in several Extra-EU countries can be very high in comparison to Intra-EU levels.

The exchange rate for certain Extra-EU countries can also be extremely volatile in comparison to Intra-EU movements.

1.13 Other differences:

There is a mandatory mobility policy for Extra-EU staff, so opportunities to become familiar with retail conditions may be reduced by comparison with Intra-EU. Whilst similar mobility requirement may apply for staff in Intra-EU Representations, jobs in JRC and Agencies may be more specialised and mobility may be less common.

Extra-EU staff may receive additional allowances, such as the ICV (see ***Chapter 4***). There is a higher maximum education allowance for Extra-EU staff (6x the standard amount). Accommodation is provided for Extra-EU staff.

A summary comparison is included in ***Annex 13*** .

Comparison of UN and Extra-EU methodologies:

Whilst the basic concept is the same, and there is an increasing degree of harmonisation especially with effect from 2016, there are also still some important differences between the work done to establish correction coefficients for Extra-EU purposes and the work which is done by the UN-ICSC. These can be summarised as follows:

1.14 Approach Extra-EU methodology to establishing CC:

1-From 2010 the list of items is harmonised with UN-ICSC and includes 320 definitions.

2-Item prices are collected in the city of reference, Brussels (=100), in Euro €. These come from the Intra-EU European Comparison Programme plus a top-up survey.

3-Item prices in the duty stations are collected in local currency. These come from the UN-ICSC (except for locations coordinated by OECD and duty stations coordinated by ESTAT-ECP) – see ***Chapter 5*** and ***Chapter 8***.

4-Price ratios are computed by dividing [3] by [2].

5-Specific Eurostat weights are established, using ESTAT FBS, in both places (Brussels and duty stations) – see ***Chapter 7***. Where response sample is low, data may be aggregated to allow robust results. With effect from 2018, data was combined with UN-ICSC.

6-Specific Eurostat weights [5] are used to aggregate price ratios [4] using Fisher formula, which is the Geometric average of the Laspeyres Index (for Brussels used as reference) and Paasche index (for the duty station), to produce "baseline" PPP at global level which is then divided by the exchange rate to Euro to establish "baseline" CC at global level.

7-"Baseline" PPP are then updated over time using temporal indices from various sources – see ***Chapter 9***.

1.15 Approach UN-ICSC methodology to establishing PAI (Post Adjustment Index):

1-The list of product is increasingly harmonised with ECP (intra-EU) and includes 320 definitions. UN-ICSC surveys also collect data for rents, pension scheme contributions and certain other items in addition, but these are not used for Art.64 purposes.

2-Item prices are collected in the city of reference, New York (=100), in US Dollar $.

3-Item prices in the duty stations are collected in local currency and then converted in US dollar $.

4-Price ratios are computed by dividing [3] by [2].

5-Specific UN-ICSC weights are established, using FBS, in both places (New-York and duty stations).

6-Specific UN-ICSC weights [5] are used to aggregate price ratios [4] using Walsh formula, which is a multilateral index of comparison of prices among duty stations, to produce "baseline" PAI at global level.

7-"baseline" PPP are then updated over time using temporal indices from various sources.

NB. Whilst A64 methodology focuses purely on the bilateral comparison between the duty station and Brussels, UN-ICSC methodology includes an additional component to reflect "out-of-area" consumption in other locations.

A summary comparison is included in ***Annex 14*** .

Consumption structures

1.16 Introduction

The calculation of the correction coefficients requires the aggregation of the 80 basic parities using consumption weights. With the methodology in use, each global parity (or PPP) is calculated as Fisher parity (geometric mean of Laspeyres and Paasche parities), thus consumption weights are needed not only for Brussels but for all the duty stations outside the EU.

For each place, the weights are estimated for each of the 80 basic and are expressed as percentages of total expenditure, according to its relative importance in the consumption basket. The weights should reflect the expenditure pattern of the average official of the European Communities. To use, say, the weighting pattern of the average national household, could give a different and quite inappropriate result in the calculation of the correction coefficients, although the information required to calculate such weights would often be simpler to obtain.

To estimate expenditure patterns for the officials of the European Communities, Eurostat carries out regularly (roughly each 5 to 7 years) family budget surveys (FBS) in the different duty stations among the staff serving at that time. The purpose of these FBS is to determine the relative amounts of expenditure on different items of consumption. To obtain the data, respondents are asked to state their actual expenditure on the various items. The overall relative amounts are then calculated on the basis of replies received.

Although the principles above are applicable to all the FBS conducted among international officials, two different situations are distinguished:

1.17 Family budget surveys in Brussels

For being the centre of the bilateral comparisons and due to the large number of staff on duty, family budget surveys in Brussels are special in the sense that the questionnaire is designed on the assumption of large samples which permits to have highly reliable weights. Consumption expenditure structures for Brussels derived from recent FBS have been as follows:

FBS conducted	Used with effect from
1995	1996
2000	2001
2005	2006
2009	2010
2017	2020

1.18 Family budget surveys in duty stations outside the EU

Extra-EU duty stations typically have a very limited number of staff. Information from persons in broadly similar situation (e.g. expatriate staff of other international organisations, Member State diplomatic missions, multinational companies) may be collected in parallel; however the number of responses is still likely to be small. Therefore, since 2001 it was decided to pool together all the questionnaires from these places. In 2008, a potential methodology for the calculation of regional consumption expenditure weights was approved (e.g. by continent), however low response rates mean that calculations have so far only been done at a global level.

Until 1999, specific FBS for each duty station were conducted at the same time as the place-to-place survey, meaning that in principle the survey will be repeated after 5 to 7 years. More recently, surveys were launched online, independently of price survey timings. 2013 FBSs were launched in all the duty stations simultaneously, however response rates were low. Consumption expenditure structures for Extra-EU duty stations derived from recent FBS have been as follows:

FBS conducted	Used with effect from
1989-1998	1990
1999	2001
2004/2005	2006
2009/2010	2010
2022	-

The latest version of the Extra-EU FBS questionnaire reflects agreement between the signatories of the Memorandum of Understanding (Eurostat, UN-ICSC and CO-ISRP) to harmonise data collection about consumption expenditure of international officials. The questionnaire for surveys from 2016 is included in ***Annex 10***.

1.19 Replacement of common global weights with UN regional weights

In the light of the ever-closer collaboration between UNICSC and Eurostat, notably including harmonisation of family budget survey questionnaires, and due to low EU staff numbers in individual locations and low EU participation rate in previous surveys, it was agreed to integrate data available from the UNICSC in place of the common Extra-EU weights.

Consumption structures resulting from the UNICSC 2010-2016 cycle were converted from their 83BH classification into the ESTAT 80BH classification, and used to establish regional average expenditure patterns, calculated as a weighted arithmetic average using the number of UN staff in each location as weights.

These new derived UN regionalised expenditure structures are used for all the duty stations, except for locations coordinated by Eurostat and by OECD in the ECP, with effect from July 2018.

The UN regional weights are presented in ***Annex 11***.

Price level surveys (place-to-place)

1.20 Introduction

Within each basic heading corresponding to the COICOP classification, particular products are specified, chosen for representativity of the basic heading to which they relate (see section 3).

It is important that the list of item definitions used as the basis for price collection is regularly reviewed.

Since August 2009, closer collaboration with UN-ICSC and CO-ISRP has been pursued. For duty stations in countries coordinated by ESTAT/OECD within the Joint Comparison Programme[8], price data will be drawn from those surveys. For remaining duty stations, price data will be obtained from UN-ICSC surveys. The UN-ICSC works on a five year cycle but if in a given duty station, because market prices, exchange rates or political stability are quite volatile, the UN-ICSC reserves the right to increase the frequency at which surveys can be performed. The current UN list comprises about 320 definitions. Several price quotations are expected for each definition (around 5). The UN-ICSC works on a five year cycle, thus the current list applies for surveys 2010-15. An updated list of item definitions applies with effect from 2016.

For Eurostat purposes, ideally the surveyors conducting price level surveys should be familiar with both the Brussels market situation and the local markets in the duty station, and will visit the retail outlets typically frequented by EU officials and their families, or other similar persons (e.g. expatriate staff of international organisations and multinational companies; local professionals (accountants, lawyers, bankers, doctors, engineers, university lecturers, etc.) in order to collect prices. In some cases the assistance of the national statistical office may be sought.

In practice, the surveys are conducted by UN consultants. It usually happens that some articles are not available, or cannot be found by the surveyors and, consequently, no comparisons are possible (there are many reasons for variations in the availability of goods and services around the world). However it is almost always possible to find sufficient articles to make a valid overall comparison of price levels, and clearly the non-inclusion of prices for a handful of definitions is unlikely to have a significant impact on the overall correction coefficient.

1.21 Surveys

With effect from 2010, the collection and validation of price data is the responsibility either of UN-ICSC or CO-ISRP or ESTAT-ECP, depending on the duty station concerned[9].

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[8] See ***Chapter 5*** and ***Annex 1*** (list of duty stations), ***Annex 2*** (UN-ICSC country coverage) and ***Annex 3*** (ISRP/OECD and ESTAT-ECP country overage). Coordinator for UK following 2020 Brexit remains to be decided.

[9] See ***Chapter 5*** and ***Annex 1***, ***Annex 2*** and ***Annex 3***.

Annex 6 reproduces the UN-ICSC instructions to price surveyors.

1.22 Product list

The full range of goods and services which comprise the total expenditure of an average EU official is divided into 80 specific parts called “basic headings” (such as meat, footwear, water supply, train fares), corresponding to the three digit level of the COICOP classification. Within each of these basic headings, particular items are selected and specified in enough detail to allow prices in a reasonably narrow range to be collected.

The number of items per basic heading varies according to the relative importance of the basic heading. Moreover this number has to take into account the level of **homogeneity** of items. A small number of items may be sufficient for certain basic headings which include homogenous goods with similar retail conditions. But for others which include items of differing natures and with differing price levels, a larger number of definitions will be needed in order to ensure a good **representativity** and consequently a well-balanced purchasing power parity.

The item list contains around 320 definitions for the surveys conducted by the UN-ICSC. It is revised periodically by UN-ICSC in cooperation with Eurostat. Significant harmonisation efforts have been made for 2016. For all P2P surveys, the master list to use will be the latest one approved by Eurostat/UN.

1.23 Integration of Healthcare in the methodology

Prior to 2016, healthcare was only included in a limited way as it was assumed that specific arrangements in Annex X would result in reimbursement of all costs for Extra-EU staff. There is increasing evidence that this is not the case, notably in certain high-cost locations where the "level coefficients" set by the Joint Sickness Insurance Scheme restrict the amount reimbursed, even if the cost of supplementary health insurance is borne by the employer.

The differences for the healthcare are noticeable in the number of items, 17 in 2010 to be compared with 23 in 2015. The main changes are with the introduction of new definitions such as: Digital thermometer, disposable contact lens, blood pressure monitor, paediatrician’s fee, cardiologist, dental filling composite, dental prophylaxis, x-ray and laboratory test, and the suppression of lip balm and non-waterproof adhesive strip elastic stretch.

The new version of the healthcare section of the item list is reproduced below.

Healthcare 23 products as in 2015 items list
TETRACYCLINE, PROPRIETARY - tablets->Base
PROPRANOLOL, PROPRIETARY - tablets->Base
CHOLESTEROL LOWERING MEDICATION - tablets->Base
ALENDRONIC ACID/ ALENDRONATE - tablets->Base
CELECOXIB - tablets->Base
FUROSEMIDE - tablets->Base
FEXOFENADINE - tablets->Base
ASPIRIN - tablets->Base
ACETAMINOPHEN - tablets->Base
LOPERAMIDE HYDROCHLORIDE - tablets->Base
CIMETIDINE, NON-PRESCRIPTION - tablets->Base
MULTIPLE VITAMINS, FOR ADULTS - tablets->Base
CONTACT LENS SOAKING SOLUTION - L->Base
DIGITAL THERMOMETER - piece->Base
DISPOSABLE CONTACT LENSES - piece->Base
BLOOD PRESSURE MONITOR - piece->Base
DOCTORS'S FEE - piece->Base
PEDIATRICIAN'S FEE - piece->Base
CARDIOLOGIST - piece->Base
DENTAL FILLING, COMPOSITE - piece->Base
DENTAL PROPHYLAXIS - piece->Base
X-RAY - piece->Base
LABORATORY TEST - piece->Base

1.24 Integration of Education in the methodology

Prior to 2016, education was only included in a limited way as it was assumed that specific arrangements in Annex X would result in reimbursement of all costs for Extra-EU staff. There is increasing evidence that this is not the case, notably in certain high-cost locations where the education allowance multiplying factor does not cover the tuition cost at schools suitable for expatriate children.

The differences for the education are also noticeable in the number of items, only 1 in 2010 to be compared with 3 in 2015. The new approach better reflects the expenses borne by the staff as the tuition fee items now cover grades 1 to 12 and not only childcare expenses for children between age 2 to 4.

The new version of the product list is reproduced below.

Education 3 items as in 2015 items list
TUITION FEES, GRADES 1 TO 6 - each
TUITION FEES, GRADES 7 TO 9 - each
TUITION FEES, GRADES 10 TO 12 - each

1.25 Comparability and representativity

In general, each item selected in the master list needs to satisfy three main criterias:

(1) Be representative of, and significant within, its basic heading;
(2) Be characteristic of the international staff consumption in Brussels and in the duty stations;
(3) Be as similar as possible: an item should have the same characteristics in each place; this feature is also called "comparability".

Basically there are two types of definitions:

(1) Those in which brand and model are specified;
(2) Generic ones in which a number of technical characteristics are specified, but not the brand.

In the first case it is easy to obtain an excellent comparability if the product selected for pricing in the shop is the same as the one described in the master list. For many basic headings this kind of definition is quite rare, because it tends to conflict with the representativity criteria. However for certain item definitions like cars, clothes, computers and other electronic goods, examples are more frequent where some brand or model specifications are provided in the definition. In a sense this is a compromise between the two types of definitions, which in principle gives a quite good comparability.

In the case of a generic definition, it is more difficult to ensure a fair comparison. Great emphasis is placed on quality, which includes intrinsic features of the products (e.g. freshness of fruit, characteristics of electrical appliances) and extrinsic factors (e.g. shop features, packaging, service and conditions of sale). If none of the products for sale coincides perfectly with the definition, the collector should price the nearest equivalent (the most similar product) provided that the differences are insignificant or can be related to the price, e.g. as small weight differences can. The price collector must always report all such deviations. A different model number, or weight, or compositions of a textile fabric, or types of packaging are examples.

With effect from 2010 the UN-ICSC implemented a new approach to cost-of-living measurement for products with rapidly changing specifications, such as electronics and high-technology products. Among the various alternative approaches proposed the “Real-Time Price Comparisons” (RTPC) approach is considered to be the most cost-effective solution to this problem. The main features of the approach include more frequent data collections in New York, only for a selected subset of items, and the use of multiple rebasing factors to calculate component-level Post Adjustment Indexes, which are then aggregated to obtain the overall PAI using the appropriate expenditure weights. This new approach required broader specifications for the affected items, the use of the Internet for price data collection for these items, and modifications of the usual survey procedures and guidelines.

The list of items considered suitable for the new "RTPC" approach, includes cars, bicycles and motorized scooters, cellular phones, color televisions, DVD and music players, digital cameras, digital video cameras including memory cards, laptop computers and colour printers.

These items were selected on the basis of the rapidity of change in their specifications and the degree of difficulty in matching them across duty stations

1.26 Selection of outlets

For each of the duty stations outside the EU for which a correction coefficient exists, a list of outlets from previous surveys exists as well. In choosing the list of retail outlets to visit, the purchasing habits of international expatriate must be borne in mind. For this reason, the staff of the EU and UN delegations are occasionally contacted for their opinions on the proposed shops list (although suggestions are not considered prescriptive). The target range is medium quality standard for the items on sale suitable for consumption by expatriates (i.e. shop quality is only one of the factors taken into account). As a rule of thumb, attention should be focused on medium quality outlets, to try to ensure that the resulting price level is representative (i.e. gives a good average price).

The list of retail outlets should be carefully planned in order to ensure a representative sample. Even rough estimates are valuable. This has two aspects:

(1) Geographical location (i.e. reflecting the areas frequented by expatriates)

(2) Consumption habits (e.g. if expatriates buy 2/3 of clothing items in department stores rather than small boutiques, then department stores are where the surveying effort should be concentrated).

If surveys have previously been conducted in the duty station, there will already be a lot of lessons which can be learned studying reports on previous surveys. This may make the survey more efficient and more effective.

(1) For example, the order of visiting retail outlets could be planned in order to ensure maximum coverage of the products.

(2) If some retailers adopted a uniform pricing policy in all their branches, there is no need to visit more than one this time (simply record the different addresses). In other cases there is centrally regulated pricing (e.g. tobacco, petrol).

(3) Alternatively, certain outlets could be planned to be surveyed by telephone this time. Likewise, catalogue prices could be sought for certain products. Trade magazines might also be an efficient survey method (e.g. for car prices). In such cases, the standard pricing rules must nevertheless be followed.

1.27 Quality

In order to obtain a good quality of the price level surveys, efforts are concentrated on the following points:

(1) Comparability;

(2) Representativity;

(3) Coverage.

Comparability – Has already been discussed (see paragraph 8.4). However it has to be stressed again that the strict interpretation of definitions is essential to ensure a fair comparison, although it is recognised that outside the EU flexible interpretation may be necessary during surveys. This means that the role of data processing decisions is extremely important. Consequently it means also that price collectors must provide adequate explanatory comments.

Representativity - A central tenet of PPP theory is the pricing of an equi-representative basket of products (i.e. one which reflects purchasing habits in both locations). In practice, this is difficult to achieve because knowledge of the item basket available in the duty station could not be taken into account when designing the survey questionnaire in Brussels. It is therefore important to try and counter this bias by retaining prices for those products satisfying the definition which are locally representative (i.e. commonly available / most frequently sold). Note however, that an attempt should always be made to find and retain prices for items priced in Brussels, whether they are representative in the duty station or not (this is the essence of a Laspeyres-type index).

Coverage - Prices should be obtained for enough definitions to cover each basic heading, particularly those with high expenditure weights (whether in Brussels or in the duty station or in both). UN / Eurostat ask for at least 5 prices from at least 3 outlets (and more where there is wide price dispersion). Consistency is also important (e.g. if prices can be collected for cars, they can probably be collected for petrol too). Within basic headings, a broad enough sample is necessary to ensure good coverage for each definition.

1.28 Processing the data received from UN-ICSC for A64 purposes

As described above, item definitions are increasingly harmonised between Eurostat and UN-ICSC. A detailed study has been done to ensure broad consistency in outlet selection between New York and Brussels. Nevertheless, as the information compiled by UN-ICSC is established with primary reference to New York, it has to be re-processed for use in the calculation of Extra-EU price parities by reference to Brussels.

Annex 7 describes some special cases in the treatment of P2P surveys.

Annex 8 includes a standardised set of quality indicators to help in reviewing P2P surveys.

Annex 9 describes standard automatic filters and checks used in the processing of P2P surveys.

1.29 Description of automatic rules for estimating Basic Heading ratios for P2P surveys

The aggregation from BH PPP to an overall PPP is done using FBS weights. This process requires the matrix of BH PPPs to be complete.

Despite every effort being made, it can happen that surveyors will be unable to collect price data for one or more product definitions, or that for one reason or another the data which has been collected will be deleted during the post-fieldwork validation process. If for a given country, there are no average prices for any of the product definitions within a BH which were priced in Brussels, then the PPP for that BH will have to be imputed.

A theoretically neat solution is to require such imputation to be done using the PPP from the next COICOP level of aggregation (e.g. BH 'Wine' from Group 'Alcohol'). In practice, this means to estimate the PPP using the set of PPPs from comparable BH within the Group (e.g. Group 'Alcohol' contains the other BH 'Spirits' and BH 'Beer' as well as the BH 'Wine'). Strictly, this should be done by computing separate Laspeyres and Paasche weighted average PPPs, and taking the Fisher (geometric mean) of these aggregates. In practice, a simple geometric mean of the relevant PPPs may be a sufficiently close approximation.

In all cases where an imputation is required, the solution adopted should be documented.

Price trend surveys

1.30 Introduction :

Once calculated at the date of the price level survey, parities are updated using temporal indices which measure the trend of the cost of living for officials expatriated in the various duty stations, relative to Brussels.

Different solutions are possible to establish these monthly updating indices, including existing indices produced by national statistical offices; indices produced by other international organisations..

1.31 Current and future data sources

Most countries in which there is an EU Delegation have their own consumer price indices, whose quality is generally considered to have continued to improve over time. Whilst these indices are primarily produced to meet national needs, and may not directly reflect the specific trends in prices of the goods and services consumed by expatriates, they are nevertheless considered to offer a sufficiently reliable basis for temporal updating, also at levels below the overall index – particularly when there is a relatively short delay between updating "Place-to-Place" surveys. Such national indices are already being used for the United Nations system for some years.

Consequently, with effect from 2010, the following sources are used (percentages show situation at 2020):

(1) 62**%** - National CPIs compiled by UN-ICSC, with extrapolation/interpolation as necessary according to publication availability.

(2) 7**%** - National CPIs compiled by Eurostat or by OECD for duty stations in countries participating in the Joint Comparison Programme for PPPs (coordinated either by Eurostat or by OECD).

(3) 22**%** - National CPIs compiled directly by Eurostat from national CPI website (where not available from UN-ICSC).

(4) 3**%** - In a very limited number of duty stations where UN, ECP, NSI, CB CPIs are not available, then other sources are used and inflation data are crosschecked (IMF, Mundi, trading economics, CIA world fact book…).

(5) 6% - no data is compiled for places where decision is taken not to publish CC (e.g. warzones).

From 2010, where UN-ICSC is the source, the indices are compiled at the level of the 12 main COICOP groups. The group index is then applied to each basic heading within that group. Where ESTAT/OECD is the source, more detailed national CPI sub-indices are typically available (including HICP in some cases).

1.32 Organisation of the data collection

With effect from August 2009 correction coefficients, updating is to be done using consumer price indices compiled by the UN-ICSC for its own work to establish UN Post Adjustment Indices. These are compiled primarily from national websites.

ICSC does not make any adjustments to the data published by the national statistical sources. If CPIs are reported with a structure that does not coincide with COICOP, only the highest levels of the available CPI series are taken by the ICSC and mapped onto the appropriate basic headings in the UN classification (this could mean applying the same index to more than one heading, and at the extreme, applying the same index to all basic headings if only the total CPI is available).

Eurostat uses the same source data and takes a similar approach: the first task is to produce a harmonised format at the level of the 12 main COICOP groups. The index at 12-group level is then applied to all underlying basic heading. If the national index is only available at a level more aggregated than the 12 groups, the same index is applied to more than one group.

A time lag of 4 months is built into the UN system, to allow for delays in national index availability. Where there is a gap of more than 4 months, the data is extrapolated (i.e. projected forwards). Where there are gaps inside the time series, these are interpolated using the available starting and ending data points.

Only in duty stations where CPI information is not available does the UN-ICSC use projection factors based on successive place-to-place surveys.

Every four months, the UN-ICSC reviews the availability of CPI data for all duty stations. If a country has improved the level of detail of the reporting of its CPI, then the UN may switch to the more detailed structure. However, certain factors may prevent this from happening, including:

(1) When more detailed CPI series are not published regularly enough to be useable for the monthly updating of UN PAIs. In this case, UN will continue to use only the general CPI, which is mapped to all the UN basic headings;

(2) When more detailed series are made available with a longer time lag than the general CPI, where again the general CPI will continue to be preferred; and

(3) When the country begins producing detailed CPI series between one UN place-to-place survey and another. In this case, the detailed series will only start to be used after the new place-to-place survey is conducted at the duty station, so as to keep consistent over time the updating process for that duty station.

In effect, an explicit decision is made to trade off timeliness for precision.

1.33 Interpolation and Extrapolation

In order to produce the necessary time series of updated parities for dissemination, a complete time series of temporal indices is required. Consequently, interpolation and extrapolation may be required (see ***Chapter 10***).

Disseminating results

1.34 Producing the results package

At six monthly intervals, Eurostat finalises the so called “Results Package”, comprising the overall PPP, exchange rates and correction coefficients. Transmission is typically in April (CC for the 6 months August to January) and September (CC for the 5 months February to June). Figures for July are published separately, in the Eurostat Annual Report.

These data are updated by temporal indices (see ***Chapter 9***).

1.35 Interpolation

In the case of interpolation, temporal price data are missing for 1 or several observation points (months) between an initial and a final data point. In this case the interpolation is the arithmetic mean between the value of the month before and the month after the missing value.

In case of missing values for several months within an observation period, this means the difference between the initial and the end point is equally distributed over the intermediate months (i.e. linear).

1.36 Extrapolation

The extrapolation method to be used will depend on the duty stations and the results. Typically, either the inflation rate of the previous period (6 month) or the arithmetic average inflation of the whole observation period (up to 12 months) serves as the base of extrapolating data into the future. On one hand the extrapolation based on the latest inflation data seems to be the most appropriate method, on the other hand, there might be special reasons (example: devaluation) for finding extreme values for a specific month. In that case, it is better to consider the inflation over the longer period.

From the "a posteriori" observation of prices (i.e. next available CPIs) it will be realised how close or far extrapolated inflation was from reality. In such cases the new price data is taken into the database to have the correct base for future calculations, even if it isn't possible to correct the past (as the correction coefficients are already transmitted for publication).

1.37 Introduction of new spatial price survey results

Validated results from the latest place-to-place surveys are introduced by Eurostat as they become available.

1.38 Volatility of Extra-EU correction coefficients

There can be various reasons for a change in the PPP snapshot at two separate points in time. Indeed, the point of the EU methodology is to adjust salaries in local currency to maintain purchasing power relative to Brussels.

However, it is recognised that excessive volatility can be problematic, depending on the frequency, magnitude and direction of change.

1. For staff it can be more risky to enter into long-term commitments such as the purchase of larger items, which means recourse has to be made to alternative but often more expensive shorter term solutions such as leasing arrangements. Short-term financial planning is generally made more difficult and additional costs can be incurred such as bank and credit card charges.

2. For employers it can be more difficult to attract and retain staff potentially leading to lower quality of service and generating additional costs in terms of higher salaries, higher (more frequent) recruitment costs, higher training costs.

A number of technical solutions have been researched by Eurostat over time, including price data improvement (survey sources, frequency, content, etc.); weights data improvement (electronic surveys, regional structures, international collaboration); methodological review (test calculations regarding representativity asterisks, multilateral transitivity, combining price survey samples). The UN-ICSC take “out-of-area expenditure” and prices into account for their system, but this is not possible under current Article 64 methodology.

Administrative solutions could also be envisaged. For example, the CO-ISRP apply upper/lower boundaries to restrict the magnitude of any change, but this is not possible under current Article 64 methodology. Separate compensation can also be considered (e.g. reimbursement of representation costs under Annex VII, living conditions allowance under Annex X).

In order to capture rapid price inflation/deflation relative to Brussels or significant currency movement relative to the Euro, the Staff Regulations already foresee the application of new Extra-EU correction coefficients between the annual July updating, where there is a variation of more than 5% from the previous figure.

1.39 Smoothing the impact of new survey results

The 2009 meeting of the Article 64 Working Group approved the principle of smoothing PPPs. The following rule is now applied in producing the results package: if the global PPP from a new place-to-place survey is different from the global PPP of the old survey updated to the same date, then the impact is smoothed (i.e. delayed); the balance is spread over the available period (e.g. between 1 to 2% per month). The normal available period is adjusted as followed:

When global PPP from New P2P is different from global PPP of old survey updated	
AbsRatio PPPNew/PPPOld	**Smoothing period**
X <=5%	**Calculated ratio take effect immediately**
5% < X <= 12%	**Calculated ratio is smoothed effect over 6 months**
12% < X <= 24%	**Calculated ratio is smoothed effect over 12 months**
24% < X <= 36%	**Calculated ratio is smoothed effect over 18 months**
X > 36%	**Calculated ratio is smoothed effect over 24 months**

The smoothing factor is calculated as follows:

$$i = \left(\frac{FV}{PV}\right)^{\frac{1}{n}}$$

where:

FV = future value (i.e. index value at end time t_n)
PV = present value (i.e. index value at start time t_0)
n = number of intervening time periods

1.40 The process to adopt Extra-EU correction coefficients

Prior to 2013, Extra-EU CC for January and July each year were adopted by means of a Commission decision and Council Regulation respectively.

In accordance with the Staff Regulation as amended by 2013/1023:

1. Extra-EU CCs for January and July each year are subject to a regular and automatic update.

2. Those bi-annual updates are published by the Commission in the Official Journal of the European Union for information purposes.

Intermediate modification of CCs between August and June, which vary by more than 5% from the July value are still applicable. This information will be communicated to staff by an inter-institutional administrative notice and is typically accompanied by publication in the Official Journal.

1.41 Publication of results

Results are published on the Eurostat website as follows:

Eurostat website < http://ec.europa.eu/eurostat >.

Please click on "data" and then follow the path :

.. "Economy and finance"
.. .. "Prices"
.. .. .. "Correction coefficients"
.. .. "Correction coefficients outside the European Union (duty stations) - Brussels - 100 (data refer to 1st July) (prc_colc_ext)"

The latest approved methodology is described in the online manual (click on the "**M**" symbol).

The current publication policy was agreed by the Article 64 Working Group in 1998. It applies to both Intra-EU and Extra-EU results:

(a) Eurostat will use all the significant digits available in all intermediate calculations.

(b) Parities used for the calculation of correction coefficients will be presented with 4 significant digits.

(c) exchange rates used for the calculation of the correction coefficient will be presented with 6 significant digits;

(d) Correction coefficients will be presented in reports or web site with one decimal place.

1.42 Interpreting the movement

Due to the complex interaction of calculation components it can sometimes be difficult to interpret the 'evolution' of the CC between two moments in time. Some possible reasons for differences in the apparent 'evolution' and the movement of local consumer price indices are set out in ***Annex 15***.

1.43 Further information about Extra-EU correction coefficients

Full information about correction coefficients is published on the Eurostat website as follows:

Eurostat website < http://ec.europa.eu/eurostat >.

Please select "About Eurostat" and then click "Policies"
Bottom left side of the screen, select "Civil Servants Remunerations"
Top left side of the screen, select "Correction coefficients"

Alternatively, the following link can be directly typed in the address bar of an Internet browser.

http://ec.europa.eu/eurostat/web/civil-servants-remuneration/correction-coefficients

eurostat

Your key to European statistics

CORRECTION COEFFICIENTS

Correction coefficients are percentages applied to remuneration of expatriate officials to adjust for differences in price level of consumer goods and services in the duty station (Intra-EU or Extra-EU) by reference to base city (Brussels).

$$\text{Salary in Brussels (in euros)} \times \text{Correction coefficient} \left(= \frac{\text{Economic parity}}{\text{Exchange rate}}\right) \times \text{Exchange rate (=1 for euro-countries)} = \text{Salary in duty station (in euros for euro-countries)}$$

Methodology

For Intra-EU duty stations, average prices are taken from the annual surveys conducted under the European Comparison Programme to establish multilateral purchasing power parities for national accounts purposes under the 2007 PPP Regulation. These prices are used to establish bilateral parities with Brussels for Article 64 purposes. The rolling cycle of surveys covers the full basket of consumer goods and services in three years and then repeats. In between surveys of the same type, prices are updated using detailed indices. Specific additional annual price data collections are done for estate agency rents, education (school fees) and hospital care. Periodic surveys of household consumption expenditure are coordinated amongst expatriate international officials.

For Extra-EU duty stations, average prices are taken from the non-EU countries participating in the European Comparison Programme (9 coordinated by Eurostat and 7 coordinated by OECD), and from the annual surveys conducted by the United Nations International Civil Service Commission (these cover 200 duty stations at least once during a cycle of five years). This work is done in accordance with an International Memorandum of Understanding signed in 2009. Over time, the Extra-EU item definitions have been increasingly harmonised with the Intra-EU ones.

SEE ALSO

Statistics Explained - *Your guide to EU statistics*

Intra-EU correction coefficients for Article 64 purposes DOC A6465/14/59rev

Further information about estate agency rent surveys is available here

Extra-EU correction coefficients for Article 64 purposes DOC A6465/14/60rev

Consumer price inflation in Brussels and Luxembourg DOC A6465/14/58rev

Compendium of HICP reference documents - 2013 edition

Appendices

Annex 1 : Current duty stations outside the European Union

Annex 2 : UN-ICSC current duty stations

Annex 3 : ECP participating countries coordinated by Eurostat and by OECD

Annex 4 : The COICOP classification in 80 Basic Headings

Annex 5 : The COICOP classification in 12 GROUPS

Annex 6 : UN-ICSC Instruction to Price surveyors

Annex 7 : Treatment of "Place-To-Place" surveys

Annex 8 : Quality indicators to help review surveys with effect from 2013

Annex 9 : Automatic filters and checks in the electronic database

Annex 10 : Family Budget Survey, online questionnaire

Annex 11 : Places with UN regional and ISRP Extra-EU weights

Annex 12 : Diagram of calculation steps establishing and updating a correction coefficient for a duty station

Annex 13 : Summary comparison Intra-EU and Extra-EU methodology

Annex 14 : Summary comparison Extra-EU and UN-ICSC methodology

Annex 15 : Some possible reasons for apparent differences in evolution of PPP over time and local consumer price index movement

< See separate document Part 2 : Appendices >