UNITED NATIONS POST ADJUSTMENT SYSTEM

Methodology for Compilation of the
Post Adjustment Index
and
Operational rules for Determination of the
Post Adjustment Multiplier

International Civil Service Commission

November 2026

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and
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FOREWORD

This booklet has been prepared as a general source of information on the main features of the post adjustment system and how it operates. It covers both the methodology for compiling the post adjustment index and the operational rules for determining the post adjustment multiplier, which in turn determines the post adjustment part of the remuneration of United Nations common system staff in the Professional and higher categories. This booklet provides updated information to that contained in earlier editions, particularly regarding operational rules, which have been extensively revised by the ICSC since 2020, as reflected in its Annual Reports, circulars and periodic memoranda. As the ICSC is currently launching the 2026 round of surveys, with active participation from organizations and staff federations, a subsequent edition of the booklet will incorporate further updates to better reflect the applicable provisions under the 2026 round of surveys.

This booklet neither forms part of the authoritative texts of staff rules and regulations of the employing organizations, which govern the employment contracts of individual staff, nor provides all the details on the statistical methodology, procedures and guidelines for the collection or processing of cost-of-living information, or on the latest revisions of the operational rules. Nothing contained in or omitted from this booklet can therefore be taken to replace, alter or interpret the staff rules and regulations of the employing organizations or the decisions of the Commission regarding the post adjustment system's methodology.

The compilation of post adjustment indices is one of the Commission's main responsibilities. To obtain the inputs for these calculations, the Cost-of-Living Division of the Commission's secretariat organizes periodic cost-of-living surveys. The design, administration and analysis of the surveys, as well as the roles played by the various stakeholders, are described in the booklet. Post adjustment depends, to a great extent on data collected from staff, which are used to compute post adjustment indices. Therefore, a good understanding of what post adjustment is, and what it does, is key to enlisting their active participation in the process. The more complete and accurate the information provided by staff, the more accurate the post adjustment index will be. The short time required to complete the questionnaire during periodic surveys will, therefore, be time well spent.

I hope that this booklet will serve as a useful resource to administrations, staff and other users of the ICSC cost-of-living data. Comments and queries are welcome and should be addressed to the Chief of the Cost-of-Living Division of the ICSC.



Larbi Djacta
Chairman
International Civil Service Commission

November 2026

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LIST OF ABBREVIATIONS

ACPAQ	Advisory Committee on Post Adjustment Questions
CC	Correction Coefficients
COLA	Cost-of-Living Allowance
COLI	Cost-of-Living Index
CPI	Consumer Price Index
ECP	European Comparison Programme
Eurostat	The Statistical Office of the European Union
FBS	Family Budget Survey
HICP	Harmonized Index of Consumer Prices
ICP	International Comparison Programme
ICSC	International Civil Service Commission
ISRP	International Service for Remunerations and Pensions
LSC	Local Survey Committee
MI	Medical Insurance
NGO	Non-Governmental Organization
NSI	National Statistical Institute
OA	Out-of-area
PAI	Post Adjustment Index
PAM	Post Adjustment Multiplier
PC	Pension Contribution
RTPC	Real-Time Price Comparisons
UNSD	United Nations Statistics Division

I. INTRODUCTION

The post adjustment system (PAS) is an integral part of the set of rules and procedures governing the remuneration of officials of the United Nations (UN) common system which is established by the General Assembly on the recommendation of International Civil Service Commission (ICSC). It rests on two pillars:

a. A statistical methodology for calculating the post adjustment index (PAI); and

b. A set of operational rules that are set by the ICSC to convert the PAI into post adjustment multipliers that determine salary levels.

This document is a synopsis of the PAS, providing details on both the Commission-approved statistical methodology for compilation of the PAI, and the operational rules for determination of the post adjustment multiplier (PAM).

Overview of the document

The document is divided into two main parts: Part I describes the purpose and role of the post adjustment system within the broader UN compensation system, as well as the institutional arrangements with respect to its governance. Part II describes how the post adjustment system works. It is subdivided into five sections. Section A highlights the roles of key stakeholders in the operation of the post adjustment system. It also highlights the limitations of the PAI, as it is applied to the salary setting of UN common system Professional staff. What post adjustment does and does not do are clearly specified. Section B presents the classification of duty stations into two groups for the purpose of post adjustment. Section C describes the methodology for calculating the PAI, describing the features of each of its components, and describing how they are aggregated to yield the index. Section D describes the updating mechanism of the PAI. Section E provides an overview of the operational rules governing the establishment and updating of the post adjustment multipliers (PAMs) over time. The main part of the document is supported by annexes providing detailed information on the organization of cost-of-living (COL) surveys, highlighting the roles of key players in the overall survey process, the preparatory activities for impending surveys, the collection, processing and analysis of survey data, and the dissemination of the survey results to all stakeholders. A brief overview of the rental subsidy scheme is also provided in an annex. Finally, a separate annex is dedicated to the Frequently Asked Questions (FAQ) on the PAS.

II. WHAT IS THE POST ADJUSTMENT STSTEM?

A. Definition and Purpose

The overall goal of the post adjustment system is to equalize the purchasing power of the remuneration of UN officials serving in various locations around the world (about 200 duty stations) with the remuneration of their counterparts in New York, which is the base of the system. It is designed to:

a. Reflect the international character of the UN staff population; and

b. Be robust enough to be applicable to duty stations with widely varying levels of general economic development, stability of economic indicators such as inflation and exchange rates of local currencies (relative to the US dollar); as well as the number, composition, and turnover of staff.

The net remuneration of Professional staff in the UN common salary system is made up of two elements:

- **Net Base Salary**, which represents the minimum ("floor") salary level paid in the UN system. It is set by the General Assembly with reference to salary levels of the US Federal civil service (the comparator); and

- **Post Adjustment**, which is a **variable element** designed specifically to deal with the relative difference in the costs of living[1] between a duty station and the base city, New York. Post adjustment is expressed in multiplier points or percentage of the net base salary paid on the top of the net base salary.

Both base salary and post adjustment are expressed in United States dollars[2], and the two add up to yield the net remuneration, before any deductions. If the PAI at a given location is equal to or is lower than the base index of 100, the post adjustment is set at zero; in other words, net remuneration in such cases is the same as net base salary. There is no negative post adjustment.

[1] *Post adjustment does not take into account hardship or hazardous conditions, which are dealt with by separate compensation elements.*

[2] *Although set in US dollars, they may be paid wholly or partly in local currency depending on the type of duty station (see section B of Part III).*

Linkages to other elements of compensation

As net remuneration is comprised of net base salary and post adjustment, a change in post adjustment may also trigger a change in other entitlements that are also based on net remuneration. These entitlements include: Rental Subsidy (see Annex VIII); Assignment Grant; Special Post Allowance; Commutation of Accrued Annual Leave; Pensionable Remuneration[3]; and Mobility, Hardship and Non-Removal allowances[4].

UN/US net remuneration margin

As already mentioned, net base salary of UN professional staff is set in reference to salary levels in the comparator civil service. Its evolution is subject to the net remuneration margin management mechanism, which determines the net remuneration of New York, the base of the system. Currently, the framework for margin management indicates that net remuneration of New York should be within 10 and 20 per cent higher than that of the comparator, with a desirable midpoint of 15 per cent. Procedures are applied by the ICSC through the operation of the post adjustment system, with the objective to keep the margin both within the 110-120 percent range, and close to the desirable midpoint 115 over a period of time.

The margin management mechanism makes reference to two parameters on which the Commission reports annually to the General Assembly:

a. The calendar margin which is expressed as an average ratio, over a 12-month period, of the United Nations net remuneration (net base salary plus applicable post adjustment) for grades P-1 to D-2 in New York, over the salaries (net of income tax) of equivalently graded jobs in the US federal civil service in Washington, D.C. An adjustment to account for the difference in the cost of living between New York and Washington, D.C. is included in the calculation of the calendar margin.

b. The annual level of the margin for the current and nine preceding years.

As part of an effort to keep the margin around the desirable mid-point of 115, the GA, in its resolution 70/244, approved the following modification of the margin management mechanism:

Action is taken by the Commission whenever the calendar margin breaches one of the two pre-defined trigger levels as follows:

---

[3] Pensionable Remuneration is linked only to New York's post adjustment.

[4] The average movement of net remuneration in 8 headquarters duty stations is used as one of the reference indicators for the bi-annual adjustment of mobility, hardship and non-removal allowances.

- When the calendar margin is projected to fall below 113 per cent, the lower threshold, the Commission would act through the post adjustment system, to grant a real salary increase in New York in order to bring the margin to 113. The resulting increase in salaries in New York would be considered a gain in purchasing power (because it is not triggered by the evolution in the cost of living) for New York, which is extrapolated to all duty stations worldwide by commensurately increasing their PAIs. This may translate to an increase in salary at the next review date if the increased PAIs exceed the prevailing pay index.
- In case of upward movement that would take the margin above 117 per cent, the upper threshold, the Commission is empowered by the General Assembly to take immediate action to freeze salaries of staff in New York until it is brought back within the specified range.
- If the calculated margin falls within the specified margin range of 113-117, the margin management mechanism would have no impact on UN salaries, which would then depend solely on the evolution of cost of living at the various duty stations. The impact of the mechanism for managing the margin on the evolution of UN common system salaries is also explained in the Annex IX dedicated to the Frequently Asked Questions.

B. Governance of the post adjustment system

B-1. Division of responsibilities between the UN General Assembly *(GA)* and ICSC
(Articles 10 and 11 of the ICSC Statutes)

The statute of the International Civil Service Commission (ICSC/1/Rev.1), in its Articles 10 and 11 specifies the division of responsibilities between the General Assembly and the Commission. The Articles are as follows:

> ***Article 10***
>
> The Commission shall make recommendations to the General Assembly on:
>
> a. The broad principles for the determination of the conditions of service of the staff;
>
> b. The scales of salaries and post adjustments for staff in the Professional and higher categories;

c. Allowances and benefits of staff which are determined by the General Assembly;[5]

d. Staff assessment.

Article 11

The Commission shall establish:

a. The methods by which the principles for determining conditions of service should be applied;

b. Rates of allowances and benefits, other than pensions and those referred to in article 10 (c), the conditions of entitlement thereto and standards of travel;

c. The classification of duty stations for the purpose of applying post adjustments.

Article 10 stipulates the areas and cases on which the General Assembly decides upon the recommendations of the Commission, whereas Article 11 stipulates the areas and cases on which the Commission can decide by itself, since this decision-making power has been delegated to it by the General Assembly through the adoption of the Commission's statute. For instance, the General Assembly decides the amounts per post adjustment index point while the Commission establishes how many such points should be assigned to a particular location under the post adjustment system.

Post Adjustment classification versus Post Adjustment Multiplier

Originally, two separate scales were established by the General Assembly for the determination of net remuneration of UN common system professional staff: one relating to base/floor salary and the other, the amount applicable per post adjustment multiplier. As part of the comprehensive review of the post adjustment system in 1990s, the use of separate post adjustment scales was abolished and the current system was instituted whereby both scales are established by a single decision of the General Assembly, which sets the value of the post adjustment multiplier (PAM) point at 1% of the base/floor salary scale (one post adjustment multiplier point equals one per cent of base salary). The Commission continues to determine the number of these multiplier points to be assigned to the different duty stations via the calculation of PAIs based on COL surveys, and the application of the operational rules governing the post adjustment system, designed to convert the PAIs into post adjustment multiplier points.

[5] Such allowances include: dependency allowances and language incentives for staff in the Professional and higher categories, education grant, home leave, repatriation grant and termination indemnity, etc.

B-2. Responsibilities delegated to the ICSC Chairman

While the Chairman of the Commission normally has the delegated power to promulgate the post adjustment multiplier of all duty stations, the promulgation of the post adjustment multiplier of New York, the base of the post adjustment system, is done in conjunction with collective deliberations of the whole Commission about the margin of net remuneration with the existing comparator civil service, since the net remuneration of United Nations common system Professional staff in New York is one of the key variables considered in its calculation.

III. HOW DOES THE POST ADJUSTMENT SYSTEM WORK?

A. Operation of the post adjustment system

A unique feature of the post adjustment system is that it operates for both the base of the system (New York) and for the rest of the covered duty stations around the world, but in a different manner. The differences are explained below.

A-1. New York

Although New York, as the base of the system, serves as a point of reference for measuring COL differentials between duty stations, **the net remuneration for New York also includes a post adjustment element to compensate for COL increases over time in New York**. The post adjustment for New York is derived from regular updating of the relevant components of the PAI (see Section D), using:

a. Inflation as measured by CPI data published by the United States Bureau of Labour Statistics (BLS) for the in-area (excluding housing) component; and

b. Other updating mechanisms for the other components, namely: housing, medical insurance, pension contribution and out-of-area expenditures, as explained further in Section D.

Since the promulgation of the post adjustment of New York is subject to the mechanism for management of the margin, one can infer that it is the responsibility of the Commission, as a whole. On the other hand, the approval and promulgation of the other duty stations is delegated to the ICSC Chairman.

It is worth noting that the evolution of salaries of United Nations common system Professional staff is not rigidly linked to that of salaries of the comparator, since the net remuneration in New York can evolve in accordance with the local cost of living, as measured by movements in the various components of the PAI, as long as the specified margin range is not breached. In other words, salaries on either side could increase at different rates at different times. For instance, they could be frozen on one side while increasing on the other, as was the case in 2009-2010 when salary increases were granted for United Nations common system Professional staff, while salaries of staff of the comparator were frozen. A few years later, in 2014-2015, the opposite situation occurred when salaries of United Nations common system Professional staff in New York were frozen, while salaries of staff of the comparator civil service increased.

A-2. Other duty stations

The determination of post adjustment for other duty stations is based on periodic comparisons of COL data between these locations and New York. These data are collected through COL surveys conducted at least once every five years (in North America, European Union and some countries in the Asia-pacific region), or at shorter intervals (usually one to three years) at other locations, depending on local conditions, which may include rapidly fluctuating prices, currency devaluation, or lack of reliable consumer price indices, etc.

The following major elements are measured when establishing the post adjustment index for a given duty station:

- Relative differences in price levels between the duty station and New York;
- Inflation with respect to purchases made outside the country of the duty station;
- Local inflation at the duty station;
- Exchange rate parities between the local currency of a duty station and United States dollar.

Details on how these elements are integrated to produce the PAI are provided in Section C

A-3. What Post Adjustment does and does NOT do

The PAI, the first of the two pillars of the PAS, is a measure of cost of living that is based on standard statistical methods and procedures. It is designed to fulfil a very specific purpose, that is, to ensure, to the extent possible, that UN common system Professional staff members serving in any location around the world earn a salary with the **same purchasing power as that of their counterparts serving in New York** (see Section II-A for more details on the purpose of the post adjustment system). Post adjustment does not cover other elements of compensation

designed to provide incentives for serving in field locations (for instance, the mobility and hardship scheme). As a measure of price differences between locations, the PAI can be considered as approximating a comparison of the multitude of retail transactions made each month by UN common system Professional staff serving in the various locations, to those of their counterparts in New York.

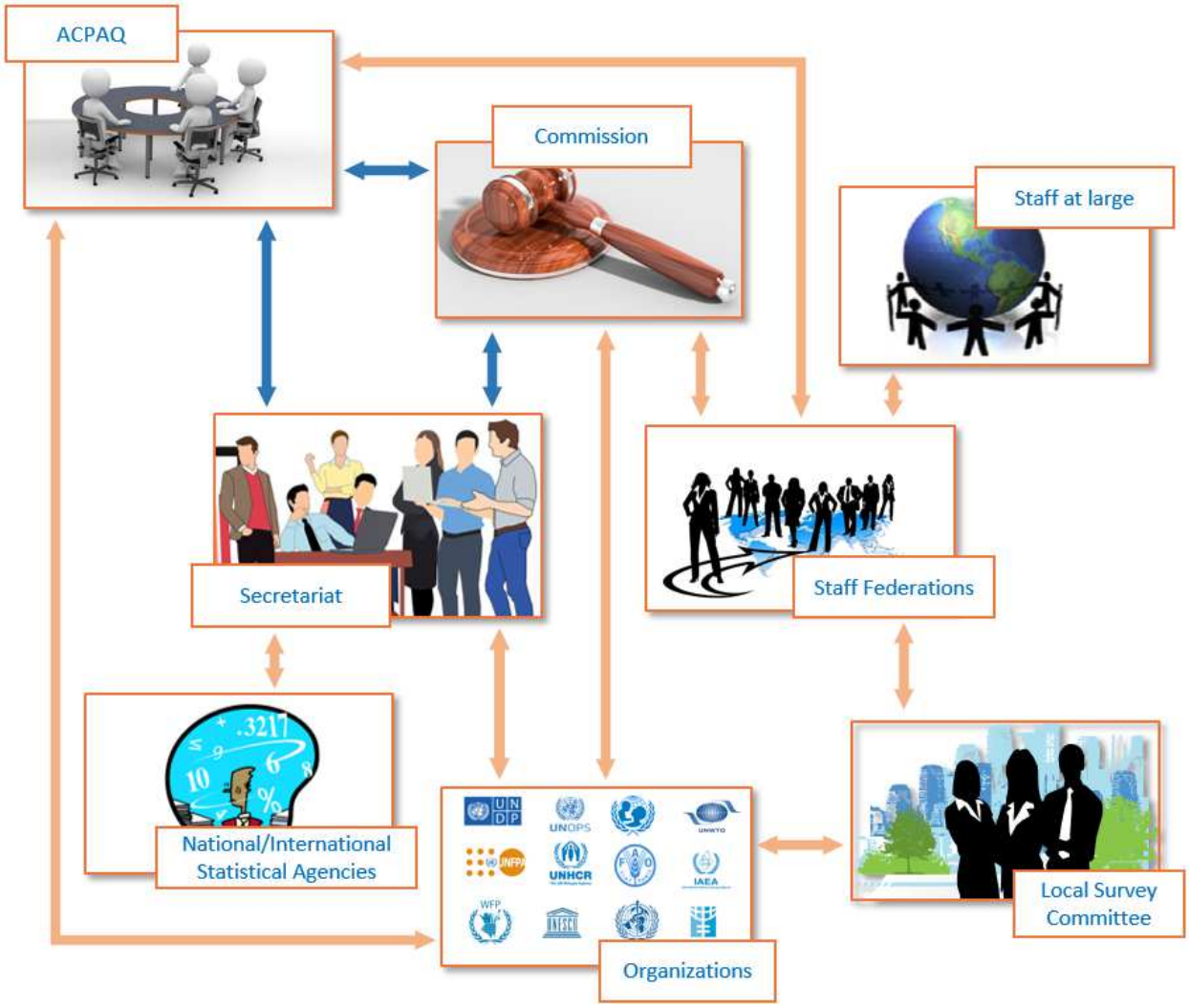
It is important to note that, like any statistical process or operation, the PAI has its limitations: Firstly, since it is essentially based on retail prices for a UN-specific market basket of goods and services purchased both inside and outside of the countries of the duty stations of assignment, and expenditure patterns reported by staff serving in various countries, it does not purport to reflect the cost of living experienced by other categories of expatriates who may be serving under different arrangements. Secondly, it does not purport to fully reflect the cost of living as may be measured by other national or international agencies, on the basis of a different methodology and target population. Lastly, it is not designed to reflect fully the evolution of cost of living specific to a given duty station taken in isolation, but rather, that evolution relative to that of New York. Thus, it is possible for the index to decline for the duty station even if its cost of living is increasing, as long as such increases are surpassed by those in New York.

In the same vein, the degree of precision of the PAI, as for any other statistical construct, is subject to limitations associated with the underlying statistical theory and practical constraints or choices inherent in the data used in the compilation of the index. However, as a general measure of the impact of differences in retail prices, exchange rate fluctuations, and local inflation, on the purchasing power of salaries of UN common system Professional staff, the PAI is compiled in a manner that is consistent with best practices in the field of COL measurement, in particular, and international statistics, in general.

A-4. Roles of key stakeholders

The operation of the post adjustment system is a complex undertaking involving many stakeholders. Active collaboration between the ICSC and these stakeholders is therefore critical to the development and successful application of the methodology underpinning the post adjustment system, including the design and efficient execution of the ICSC's programme of COL surveys. The following is a list of the major stakeholders in the operation of the post adjustment system (as depicted in the Figure 1 below), as well as a summary of their respective roles. More details are provided in Annex IV.

Figure 1: Major stakeholders of the PAS



The ICSC

Under its statute, the ICSC is mandated to manage the post adjustment system and, in particular, establish PAMs for all duty stations (Article 11(c)). The ICSC secretariat is responsible for calculating PAIs (from which PAMs are derived), and the general day-to-day management of the system. The secretariat is involved in every aspect of the process for the determination of post adjustment indices and corresponding post adjustment multipliers, from the preparatory phase of COL surveys to price data collection, processing and analysis, culminating in the dissemination of the survey results to all stakeholders.

The Advisory Committee on Post Adjustment Questions (ACPAQ)

The ICSC is supported by a subsidiary body, the Advisory Committee on Post Adjustment Questions (ACPAQ), a panel of experts in the field of price indices, in particular, and international comparison of cost of living, in general. ACPAQ advises the ICSC secretariat on various aspects of the methodology underpinning the post adjustment system, including COL measurements and calculations of related indices, and the development of general statistical methodology and procedures. Its members meet at least once a year to review the methodological research and development undertaken by the secretariat and to make recommendations to the Commission for approval.

Members of ACPAQ are appointed by the Chairman of the ICSC, after consultations with the executive heads of organizations of the United Nations common system, and with due regard to geographical representation. Current members of ACPAQ are its Chairman, Mr. Boguslaw Winid (Poland), who is also Vice-Chairman of the ICSC, Ms. Corrine Becker Vermeulen (Switzerland), Ms. Suzanne Wong (Singapore), Mr. Abimbola Sylvester Young (Sierra Leone), Mr. Pedro Luis do Nascimento Silva (Brazil), and Mr. Andrey A. Tatarinov (Russian Federation). A summary profile of ACPAQ members is provided in Annex I.

Organizations and staff

At the duty station level, post adjustment matters are coordinated by the lead agency - generally the agency with the largest number of staff in the duty station, in close collaboration with organizations and staff federations at the duty station. The lead agency liaises with ICSC and coordinates COL surveys and other data collection activities required for post adjustment calculations.

Partner organizations

At the international level, ICSC is engaged in cooperative relationships with other agencies involved in COL measurement for the remuneration of expatriate officials. For instance, the statistical office of the European Union (Eurostat) and the International Service for Remunerations and Pensions (ISRP) of the Coordinated Organizations (attached for administrative purposes to the Organization for Economic Cooperation and Development (OECD)), operate similar salary adjustment systems for expatriate officials of their respective organizations.

A memorandum of understanding (MOU) signed by the ICSC, Eurostat, and ISRP, in 2009, provided a legislative mandate for the three agencies to exchange statistical information under the usual confidentiality restrictions. As a result of the MOU, Eurostat now uses ICSC COL data for establishing correction coefficients for its extra-EU duty stations. On the other hand, ICSC

used statistical information (price data and metadata) compiled through the European Comparison Programme (ECP), instead of collecting price data itself, in PAI calculations for five ECP covered headquarters duty stations (London, Madrid, Paris, Rome, and Vienna) as part of the baseline surveys for the 2016 round. Furthermore, the ICSC is actively working with Eurostat and ISRP on the modalities for acquiring or developing a price database for New York based on ECP survey methodology. A successful outcome of this effort would allow the extension of the use of ECP data in PAI calculations for all covered group I[6] duty stations, in the future. Furthermore, although not directly spelled out in the MOU, ISRP continues, as has been the practice since 1995, to provide market rent data to ICSC that are used for the calculation of the rent index for all group I duty stations. The close cooperation between the three organizations goes beyond sharing of statistical information to include the harmonization of methodologies, survey instruments and procedures, in order to increase synergies and avoid duplication of efforts.

B. Types of duty stations

For purposes of post adjustment, the Commission has classified duty stations into two groups: group I and group II, taking into consideration criteria, related to the relative strength and convertibility of the local currency ("hard currency" versus "soft currency") and general stability of local economic conditions. The category of group I duty stations includes member states of the European Union and headquarters duty stations (so classified for post adjustment purposes) and other developed countries in Europe, North America, and some parts of Asia. All other duty stations are classified as group II. Currently, the ICSC secretariat publishes post adjustment related statistics for 48 group I duty stations and 167 group II duty stations. The list of group I duty stations is provided in Annex II.

Figure 2 below depicts the distribution of duty stations into group I and group II, while Table 2 shows the distribution of duty stations by type and geographical region.

[6] See Section III.B on the types of duty stations

Figure 2: Distribution of duty stations by type

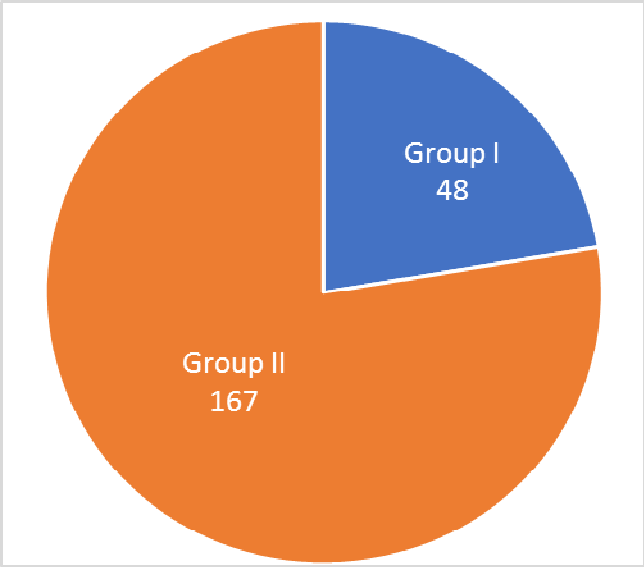


Table 1: Classification of duty stations by type and geographical region

Geographical Region*	Group I	Group II	Total
Europe/North America	43	24	67
Latin America/Caribbean	1	40	41
Africa	0	55	55
Asia and Pacific	**4**	**36**	**40**
West Asia	**0**	**12**	**12**
Total number of duty stations	**48**	**167**	**215**

* *Geographical breakdown reflects the five UN regional Commissions*

There are some differences between group I and group II duty stations with respect to the methodology of COL measurement and the determination of the PAMs of duty stations. The key differences between the two groups of duty stations are highlighted in table 2 below:

Table 2: Key differences between group I and group II duty stations

	Group I	Group II
Frequency of surveys	Once every 4 to 5 years	Once every 2 to 3 years
Source of price data	ICSC price surveys*	ICSC price surveys
Source of rent data	External data: ISRP market rent surveys	Staff reported data from COL surveys
Housing index structure	Seven sub-components: each having a separate weight and index	A more simplified structure based on one component calculated as the sum of all housing related costs
Treatment of expenditures on durable goods	Expenditures on durable goods (furniture, household appliances, video and audio equipment, etc.) are treated as In-area expenditures	Expenditures on durable goods are de facto considered as Out-of-area expenditures
Currency of salary	Salary is paid in local currency	Salary is paid in US dollars
Operational objective of salary setting	Operational objective: stabilize take-home pay in local currency	Operational objective: stabilize take-home pay in US dollars

* *For the 2016 round of surveys, the Commission approved the use of ECP price data for covered Headquarters duty stations (London, Madrid, Paris, Rome, and Vienna) in lieu of ICSC price surveys.*

C. The calculation of the PAI

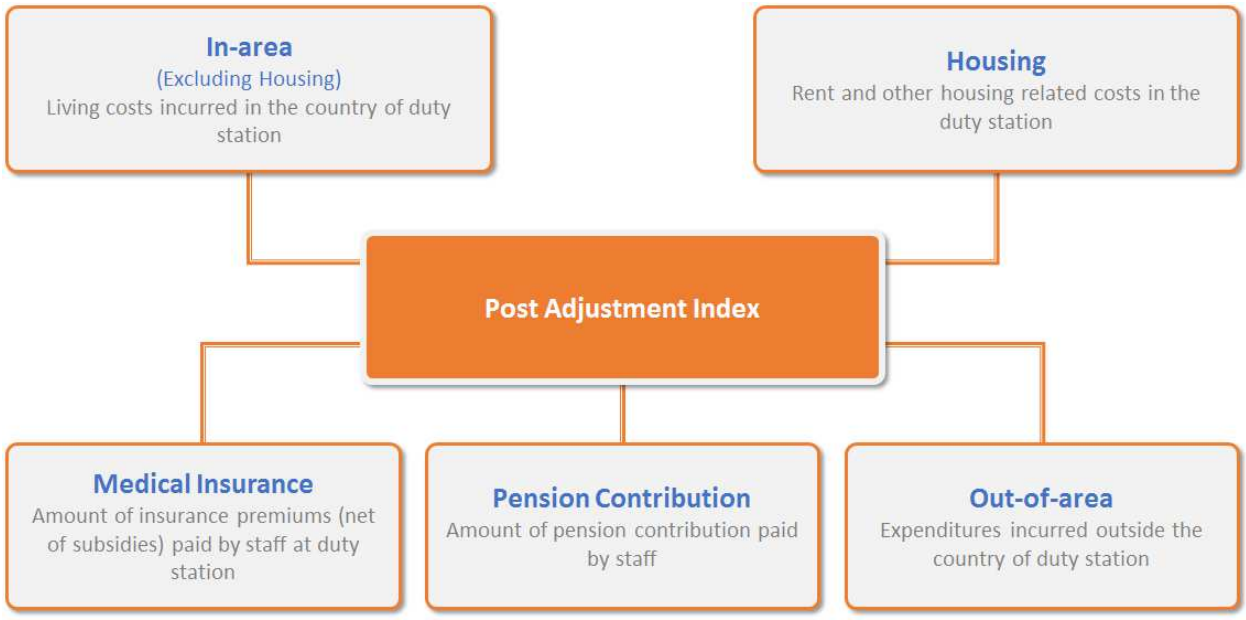
The post adjustment index (PAI) is a statistical index designed to measure the cost of living as experienced by Professional staff at a given duty station relative to the base city, New York. Its parameters and data elements are defined by a methodology that is designed to address the needs of the UN common system compensation system. The methodology is based on the theory and practice of index numbers, and implemented on the basis of decisions of the ICSC and the United Nations General Assembly, as recommended by ACPAQ.

The PAI is established on the basis of simultaneous spatial and temporal comparisons of COL data (price, expenditure and administrative data) collected through COL surveys conducted at duty stations around the world, with similar data collected in New York. Between COL surveys, the PAI is updated through time-to-time adjustments reflecting movements in local prices as measured by consumer price indices (CPIs), changes in local currency exchange rates relative to the US dollar as well as other indicators related to the evolution of housing costs, medical insurance premiums, pension contributions, and out-of-area expenditures, that is, expenditures incurred by staff outside the country of the duty station of assignment.

C-1. The PAI structure

There are five major components of the PAI (as presented in figure 3 below): In-area (excluding Housing); Housing; Pension Contribution; Medical Insurance; and Out-of-area. At any point in time, the PAI is calculated by aggregating indices associated with these five components, using weights that reflect their relative importance within the PAI structure. The weights are expressed both as proportion of expenditures and as US dollar nominal expenditures for an average staff member at the duty station. For the pension contribution component, the weight is a fixed percentage of the relevant point of the pensionable remuneration scale, whereas for the other components, it is determined at the time of a COL survey on the basis of expenditure data collected from the staff.

Figure 3: Major components of the PAI

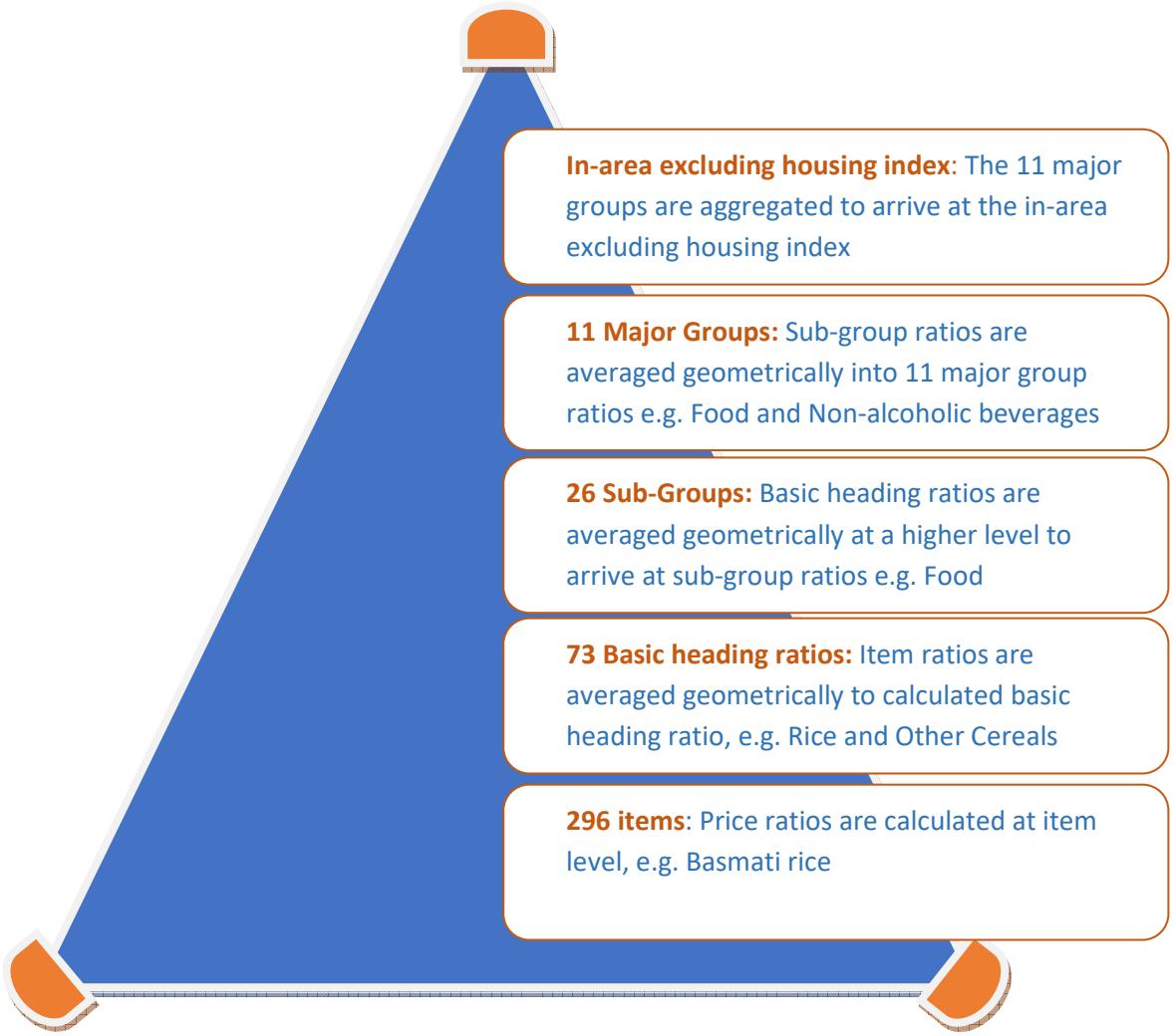


C-2. The in-area (excluding housing) component

The in-area (excluding housing) component (IA-H) relates to living costs incurred in the country of the duty station. It is structured into a hierarchy of sub-components according to the Classification of Individual Consumption According to Purpose (COICOP)[7], which is an international standard of classification of individual consumption categories. Expenditure items are grouped into basic headings which are aggregated into sub-groups that are further aggregated into major groups (as depicted in figure 4 below).

[7] *COICOP is an international statistical standard developed by the United Nations Statistics Division (UNSD), in collaboration with other international organizations and national statistical offices, to classify individual consumption expenditures. It is generally used for defining the internal structure of Consumer Price Indices (CPIs). COICOP is available at https://unstats.un.org/unsd/cr/registry/regcst.asp?Cl=5*

Figure 4: Structure of the In-area (excluding housing) component



Basic headings constitute the most detailed level for which an index can realistically be calculated based on COL survey data. As such, they are the lowest level elements of the PAI structure associated with a weight (the relative importance of the expenditures they represent). In the current PAI structure, only the IA-H and housing components (which together form the so-called "In-area" component of the PAI) have basic headings. The overall PAI structure is based on a set of 80 basic headings[8], aggregated into 32 subgroups, which are, in turn, aggregated into 12 major groups, one of which corresponds to the housing component[9]. The determination of the internal weights within this structure of the PAI is an important part of the post adjustment methodology, which is described in the next section.

[8] *The IA-H structure is based on 73 basic headings, aggregated into 26 subgroups which are further aggregated into 11 major groups.*
[9] *The Housing component is based on 7 basic headings, each representing its own subgroup (that is a total of 7 subgroups), and further aggregated into one major group.*

In-area (excluding housing) weights

The weights associated with the IA-H component and its various sub-components are derived from data provided by staff through the staff expenditures questionnaire during the COL surveys. Their determination entails the following steps:

a. Calculate the total IA-H weight (in US dollars) directly at the component level, as the residual after the weights associated with the other four major components of the PAI namely, housing, pension contribution, medical insurance and out-of-area, are deducted from the monthly net remuneration of a staff member at the level of P4, Step VI, in receipt of spouse or single-parent allowance D.C.;

b. Calculate a set of weights (in percentage) referred to as "common expenditure weights" (at the basic heading level, and further aggregated at the sub-group and group levels respectively) based on the pooled data provided by staff at headquarters duty stations and Washington, D.C., through the staff expenditures questionnaire, during the COL surveys conducted at these duty stations, at the beginning of each survey round. The same set of common expenditure weights is used for all duty stations around the world;

c. Calculate the weights (in US dollars) for all the 11 major groups of the IA-H component by prorating the total IA-H weight in proportion to the common expenditures weights. While this step is relatively straightforward for group I duty stations, in the case of group II duty stations, common weights need to be adapted to account for the modifications in the basic heading structure caused by the introduction of the so-called "dollar driven expenditures" and the "60 per cent rule". More details on this aspect are provided in subsection C7 about the determination of the out-of-area weight.

Common expenditure weights

Common expenditure weights are a cornerstone of the post adjustment methodology and their introduction in the PAI calculation which dated back to the 1990 round of surveys aimed at addressing issues such as the low response rates in staff expenditure surveys, the significant differences in expenditure patterns of duty stations, especially in field duty stations and some group I duty stations (mainly for the housing component), relative to New York, and the reduced reliability of survey results for small duty stations, etc. The approach worked well for both group I and group II duty stations as it improved the stability of the post adjustment index without undermining uniqueness of each duty station. Annex V provides details about the estimation of common expenditure weights.

In-area (excluding housing) index

The IA-H index is calculated as a weighted geometric average of price relativities between the duty station and New York, of a fixed basket of about 300 goods and services (or items). It is aggregated in a hierarchical way starting at the basic heading level up to the subgroup and major group levels. At the basic heading level, the set of common expenditure weights is used for the aggregation of the basic heading ratios in a manner similar to that of a typical CPI, which is based on the same international classification of expenditure categories and data-collection procedures. However, while a CPI is a temporal measure (that is, it measures change in the level of prices of a common basket of goods and services over different points in time); the in-area (excluding housing) index is a spatial measure (that is, it measures the differences in price between locations, while simultaneously reflecting changes in prices over time for each location). Furthermore, the reference population for the in-area (excluding housing) (internationally recruited staff) is different from that of the CPI (national population of a country).

The IA-H index is determined through the following sequence of steps:

a. **Item level**: the average price for each item collected at a duty station is first converted into US dollars using the prevailing United Nations operational exchange rate after adjusting for any difference in size/quantities. The average price for each item (based on price quotations recorded from the approved list of outlets at the duty station) is then divided by the average price of that item in New York to obtain a ratio of the duty station's price to the New York price;

b. **Basic heading level**: item ratios are averaged geometrically (unweighted) to compute basic headings ratios;

c. **Sub-group level**: basic heading ratios are aggregated geometrically using their respective common expenditure to produce sub-group indices (e.g. cereals, dairy products, meat, fish and seafood, fruits and vegetables etc.);

d. **Major group level**: sub-groups indices are aggregated geometrically using their respective common expenditure weights (basically the sum of the weights of their respective basic headings) to produce group indices (expenditure categories such as food, housing, transport and communication, recreation etc.

e. **Major component level**: The indices of the major groups of expenditures are weighted geometrically, using their respective common expenditure weights (basically the sum of the weights of their respective subgroups) to produce the IA-H index for the duty station.

C-3. Domestic services

The domestic services subcomponent refers to staff monthly expenditures to cover wages, social insurance and transportation costs, paid in cash, for domestic service help at the duty station namely, maid, babysitter/child-minder, cook and other domestic services. These expenditures are derived from data reported by staff in the housing and domestic services section of the staff expenditures survey questionnaire.

The treatment of expenditures on domestic services in the calculation of the weights and corresponding sub-indices within this sub-component of the PAI depends on the type of the duty station (group I or group II). While domestic services are considered as part of the housing component for field duty stations, it is rather treated as a separate basic heading within the in-area (excluding housing) component (as per COICOP)[10], for group I duty stations.

Domestic services weight

For group I duty stations, the weight for the domestic services basic heading is determined by prorating the total IA-H weight (see subsection C2 above) using the common weights.

For group II duty stations, domestic service costs are added to other housing costs to determine the overall housing weight (see subsection C4 below). Therefore, domestic service costs are not reflected in the weight of the corresponding basic heading in the IA-H component, which is consequently set to zero.

Domestic services index

For group I duty stations the domestic services index is calculated on the basis of a comparison of reported wages for a full-time maid, babysitter/childminder, cook and other domestic services, paid monthly as well as for a part-time maid, babysitter/childminder, cook and other domestic services, paid hourly, with the same domestic services costs in New York. The calculation of the domestic services index entails the three following steps:

- Cost relativities are first calculated for each category of domestic service (maid, babysitter, cook, and other domestic services) within each type of employment (full- time vs part-time);
- For each type of employment, cost relativities are arithmetically aggregated, using quantity weights (instead of the expenditure weights), that is, the number of domestic

[10] The basic heading "domestic services" is part of the major group "Furniture and household equipment" in the in-area (excluding housing) component of the PAI.

workers for each category of domestic service in the duty station, to produce the domestic services sub-index;

- The final domestic services index is calculated as an arithmetic weighted average of the two sub-indices computed in the previous step, using their corresponding weights.

Table 3 below summarizes the calculations of the domestic services index for a given duty station (duty station G).

Table 3: Calculation of the domestic services index for duty station G

	Cost (US$)		Duty station G Weights	G/ New York
	New York	Duty station G		
Full-Time (monthly wage)				
Maid	1,422.50	2,181.87	16	1.534
Babysitter/childminder	3,044.19	2,693.23	84	0.885
Cook	-	4,072	3	-
Other	1,625.00	1,851.79	20	1.140
Index				**1.014**
Part-Time (hourly wage)				
Maid	35.67	27.96	1302	0.784
Babysitter/childminder	24.88	23.74	373	0.954
Cook	41.8	27.38	42	0.655
Other	29.24	24.2	102	0.828
Index				**0.818**
Total Index				**0.830**

As the table shows, costs relativities (column 5) are aggregated using the quantity weights (column 4) to produce the two sub-indices (1.014, and 0.818) for full-time and part-time employment respectively. The final domestic services index (0.830) is then calculated as a weighted average of the two sub-indices using their corresponding total weights, that is 123 (=16 + 84 + 3 + 20) and 1819 (= 1302 + 373 +42+ 102).

For group II duty stations, there is no domestic services index per se, since all domestic services costs are directly added to other housing costs to determine the overall housing weight and its corresponding index.

C-4. The housing component:

The housing component relates to rent and housing-related costs, including expenditures on repairs, facilities, utilities (water supply, electricity, gas and fuel), domestic services (only for

group II duty stations), etc. Most of the relevant data on this component are usually collected from staff through the 'housing and domestic services costs' section of the staff expenditures survey questionnaire, and by the survey coordinator. However, for group I duty stations, additional data on rent is also collected from an external source.

Housing weight

The housing weight is duty station-specific and is derived from staff reported data in the housing section of the staff expenditure survey questionnaire, and also, from the Coordinator's Report. The determination of the housing weight also, depends on the type of duty station, since the structure of the housing component differs between group I and group II.

- For group I duty stations, a separate weight is calculated for each of the seven basic headings of the housing component (Rental for housing; Maintenance and repair of the dwelling; Water supply; Electricity; Gas; Heating, including hot water; and Other housing costs[11].), using staff reported costs from both renters and homeowners, except for rental for housing for which gross rents from renters are imputed for homeowners. The overall housing weight is obtained by adding up the weights of these sub-components.

- For group II duty stations, the housing component has only one basic heading whose weight is calculated by adding the costs for utilities, facilities, maintenance and other costs, and domestic services costs, to the rental component

Housing index (Group I)

All subcomponent indices of the housing structure, that is those related to the seven basic headings (Rental for housing; Maintenance and repair of the dwelling; Water supply; Electricity; Gas; Heating, including hot water; and Other housing costs), are based on price data collected for relevant items, except for "Other housing costs" which are derived from staff reported information in the housing section of the staff expenditures survey questionnaire.

ISRP market rent data

For Group I duty stations, data on rent and other housing costs collected from staff and the survey coordinator are used to derive the weight of the housing component, while market rent data obtained from the ISRP are used for the calculation of the rent index. Average monthly rents (excluding charges and utilities), for six dwelling classes (studio, 1-bedroom flat, 2-bedroom flat, 3-bedroom flat, non-detached house, and detached house) of good quality

[11] This basic heading includes such items as key money, taxes specific to the duty station, radio & TV license, garage costs, refuse collection and other unclassified housing costs.

unfurnished accommodation located in neighbourhoods described as residential areas favoured by expatriates, are provided to ISRP by licensed real estate agents at the duty stations. Annex VI provides details about ISRP rent data collection methodology.

Rent index

The methodology for calculating the rent index, which is the most important sub-component of the housing index, is based on the use of market rent data collected by ISRP. For each duty station, current and historical data covering the most recent six years (2011 to 2016), for all six dwelling classes, is obtained from ISRP and updated to 2016, using appropriate CPI subseries.

A moving average model is applied to the historical rent data to calculate an average rent for each dwelling class, using longevity (length of occupancy) weights based on staff responses from COL surveys. The rationale behind the approach is to account for the fact that most of the staff in the duty station have not just moved into their dwelling the year of the survey but have lived in the dwelling for some time and, as such their rent may have changed since the original lease began.

A size adjustment factor is then used to equalize average rent levels per unit area between the duty station and New York, for each dwelling class (since the total living space in square meters, for a given dwelling class, is not necessarily the same across duty stations). The factor, which is the ratio between the mid-point of the size range of the dwelling class in New York relative to that of the duty station, is applied to the calculated moving average rent for the dwelling class, to yield the final average rent for the class.

Rent parities relative to New York are then computed as ratios of final average rents at the two duty stations, and then aggregated via a 'Fisher- type' formula using quantity weights (staff residential patterns) based on staff reported data from the baseline surveys.

The rent index is calculated through the following sequence of steps:

a. Average rents for 2011 through 2016 are updated to 2016 using appropriate CPI subseries;
b. Six-year moving averages rents are calculated using longevity weights based on staff responses from the 2016 baseline surveys;
c. Moving average rents are adjusted using appropriate size adjustments factors;
d. Laspeyres-type and Paasche-type indices, averaging rents relativities across dwelling classes, are calculated using quantity weights based on staff reported data;
e. A geometric average of the two above mentioned indices is calculated to obtain the Fisher-type index, which produces the final rent index.

Housing index

The overall housing index is calculated through the aggregation of the sub-indices/relativities for its seven basic headings, using their respective weights derived from the housing section of the staff expenditures questionnaire. The relativity of each basic heading is based on price comparisons of its items between the duty station and New York.

The housing subcomponents indices are calculated by using information from different sources as presented in table 4 below:

Table 4: Sources for the calculation of indices in the housing component

BH	Housing component	Source of information for index
28	Rental for housing	ISRP rent survey
29	Maintenance and repair of the dwelling	Housing section from staff survey
30	Water supply	survey coordinator
31	Electricity	survey coordinator
32	Gas	survey coordinator
33	Heating, including hot water	survey coordinator
34	Other housing costs	Housing section from staff survey

An example of calculation of rental index is also provided in Annex VI.

Housing index (group II)

The housing costs considered in the calculation of the housing index for group II duty stations include the followings:

- Rent and apportioned charges;
- Utilities (electricity, gas, water, heating, garbage collection, etc.);
- Facilities (refrigerator, stove, washing machine, dryer, kitchen cabinets, etc.);
- Other housing costs (key-money, maintenance and repairs of dwellings, and other costs); and
- Domestic services (maid, cook, babysitter/child minder, guard, gardener, etc.).

On the basis of survey data, average housing costs are calculated for various dwelling classes, defined by type (apartment or house) and size (number of bedrooms)[12]. These costs are compared with staff reported costs for similar dwellings in New York, to establish cost

[12] *The number of bedrooms for apartments and houses ranges from 0 (studio) to 4, and from 1 to 5, respectively.*

relativities by dwelling class. The housing index is calculated by aggregating these relativities arithmetically, using quantity weights, that is, the number of staff in each dwelling class, as the weight for that class[13].

C-5. The medical insurance component

This component relates to the amount of insurance premiums, net of subsidies, paid by staff members at a duty station. Both weight and index associated with this component are based on cost comparisons between the duty station and New York. The weight is calculated as the average of the medical insurance premiums, expressed in US dollars using the prevailing UN operational exchange rate, paid for all insurance plans available at the duty station, weighted by the number of staff members enrolled in each plan. This average premium is compared with the average premium paid by staff in New York to obtain the medical insurance index. Since expenditure in this component is usually made in local currency for group I duty stations, the MI index is affected by changes in the exchange rates of local currencies relative to the US Dollar. For group II duty stations, the expenditure is incurred in US Dollars and so the index is not affected by changes in the exchange rate.

The medical insurance premiums for all duty stations are provided by organizations and updated annually by the ICSC secretariat. Table 5 below presents calculations of the MI index for a given duty station (duty station A).

[13] *Average gross rental costs are used to impute rents for homeowners in each dwelling class, which means that both renters and home owners contribute to these weights.*

Table 5: Calculation of the Medical insurance for duty station A

Duty station Name:	A
P-4, step VI salary:	$8,896
New York Average Premium	$638.4958
Duty station Average Premium:	$341.5241
Medical Insurance Index:	**0.5348 (= 314.5241/638.4958)**

Organization	Medical Plan	No of Staff	Rate (%)	Premium ($)	Weighted Premium ($) (3) x (5)
ECLAC	UN Worldwide *	5	3.83	341	1704
ILO	ILO *(Plan)*	4	4.29	382	1527
UN	UN Worldwide *	1	3.83	341	341
UNAIDS	WHO *(SHIF)*	1	3.42	304	304
UNDP	UN Worldwide *	2	3.83	341	681
UNESCO	UNESCO *(MBF)*	1	5.485	488	488
UNICEF	UN Worldwide *	3	3.83	341	1022
WHO	WHO *(SHIF)*	7	3.42	304	2130
Weighted Average Premium					**341.5241**

** All excluding Europe, Chile, Mexico*

As the table shows, the MI index (0.5348) is calculated as the ratio of the average premium for duty station A (341.5241) to the average premium for New York (638.4958).

C-6. The pension contribution component

This component relates to the amount of pension contributions paid by staff. The pension contribution (PC) weight within the PAI is calculated as 7.9 per cent[14] of the pensionable remuneration (PR) of the staff (see PR scales in Annex III). It is the same for all duty stations, since at any point in time staff members at equal grade and step have the same pensionable remuneration. The PC weight is fixed at the beginning of each new survey. It is then reviewed annually to reflect possible changes in the pensionable remuneration scale of the UN common salary system.

The PC index on the other hand, is essentially a time-to-time index which represents the movement of the PC from the beginning of the new survey round (which usually starts with the

[14] *This is equal to one-third of the total contribution (staff and organization) of 23.7% of the pensionable remuneration for any given grade and step. The organization contributes for the remaining balance (two-third) that is, 15.8% of the applicable pensionable remuneration.*

price data collection in New York) to the time of the survey in the duty station, and evolves in accordance with reviews of the pensionable remuneration scale, which is triggered by movements of net remuneration in New York. Table 6 below, presents the evolution of pension contribution index from June 2010 to June 2016 for a P4 Step VI staff member.

Table 6: Evolution of pension contribution, June 2010 to June 2016 (P4 Step VI)

Date	Pensionable Remuneration (US$)	Salary Scale (US$)	Pension Contribution			
			%	Annual (US$)	Monthly (Weight US$)	Index
June 2010	153,476	98,019	7.9	12,124.64	1,010.39	100.00
Sept 2011	157,663	105,507	7.9	12,455.38	1,037.95	102.73
March 2013	160,711	98,104	7.9	12,696.17	1,058.01	104.71
May 2016	160,711	98,462	7.9	12,696.17	1,058.01	104.71
June 2016 *	160,711	98,462	7.9	12,696.17	1,058.01	100.00

** The index for June 2016 was rebased to 100 (June 2016=100) at the beginning of the new round of COL surveys.*

As the table shows, the PC index on a given review date, is calculated as the percentage ratio of the monthly amount for that date to the monthly amount of the previous revision date. For instance, the PC index for September 2013 is obtained as (102.73 = (1037.95/1010.39) x 100).

It is also important to note that at the beginning of each round of surveys (June 2010 and June 2016) the PC index is set equal to 100.

C-7. The out-of-area component

The out-of-area (OA) component is a unique feature of the post adjustment index designed to reflect the fact that a portion of the remuneration of international staff is normally spent outside the country of the duty station of assignment. Such expenditures include:

a. Expenditures on items that staff import directly because of limitations of the local market or out of personal choice;
b. Cost of private travel outside the country of the duty station (home leave, vacations, etc.);
c. Fees for education and support of dependents living abroad;
d. Costs for the maintenance of a dwelling in the home country; and
e. Other financial commitments outside the country of the duty station (so-called non-consumption commitments (NCCs)), such as mortgages, homeowner's insurance, property taxes, national insurance, savings, personal loans, life insurance and income tax, etc.

Information on such expenditures is obtained from staff reported data in the 'household expenditure' section of the staff expenditures survey questionnaire, during COL surveys.

For Group II duty stations, in addition to traditional out-of-area expenditures listed above, expenditures on certain items are considered to be made in United States (US) dollars (so-called dollar-driven items) and are treated *a priori* as out-of-area expenditures. Dollar-driven expenditures are accounted for in two parts:

- A fixed amount in US dollars, currently set at 15 per cent of net remuneration for a P-4 step VI New York staff in receipt of spouse/single-parent allowance at the beginning of a survey round. For the 2016 round of surveys, this amounts to $1,694.20. This amount is associated with remittances to family members abroad, vacation and home leave, and some other out-of-area commitments. Before being applied to a specific duty station, it is adjusted according to the movement of the PAI for New York from the beginning of the survey round to the date of the survey at the duty station;

- A percentage amount associated with purchases of durable goods (such as furniture, household appliances, glassware, tableware and utensils, vehicles, sports equipment, photographic, video and audio equipment, etc.), and derived from common weights of the corresponding expenditure items. This part is calculated at the time of the survey and it varies according to the total expenditure amount for the in-area excluding housing component.

Moreover, certain categories of expenditures are considered as out-of-area expenditures if a major proportion of the basic heading-level expenditures are incurred outside the country of duty station. In this case, all expenditures for that basic heading are added to the out-of-area weight. Currently, the threshold for identifying the "major" proportion is set at 60 per cent. This is known as the "60 per cent rule". Generally, such items include:

- Food items (canned food and preserves, packed cereals, other processed food items, etc.);
- Alcoholic beverages and tobacco;
- Clothing and footwear;
- Household textiles;
- Medical and pharmaceutical products;
- Books and other education expenses not covered by the education grant;
- Spare parts and accessories of personal transportation; and
- Personal care products.

The out-of-area weight

For both group I and group II duty stations, the estimation of the actual OA weight is based on information on out-of-area expenditures reported by staff in the 'household expenditure' section of the staff expenditures survey questionnaire, during COL surveys. A "democratic" approach is used to calculate the actual OA percentage weight as the average of respondents' individual OA shares, rather than as the share of averaged individual OA expenditures. This is to ensure that individual OA shares of staff at lower grades count as much as those of staff at higher grades. A similar approach is also followed in the estimation of common weights.

While for group I duty stations, the actual OA weight is determined solely on the basis of traditional out-of-area expenditures as reported by staff, additional criteria such as the 60 percent rule, and expenditures on dollar-driven expenditures are used in the determination of the actual OA weight for group II duty stations.

The final OA weight to be used in the PAI is calculated through the following sequence of two steps:

- The actual OA weight is estimated on the basis of information on out-of-area expenditures reported by staff, as well as the two above-mentioned criteria (for group II);
- The actual OA weight is then applied to a harmonized system of bands which assigns a unique reference weight to all values of actual OA weight falling within a specified band.

The harmonized specification of the OA weight, which is used for all duty stations, regardless of their category (group I or group II), is shown in table 7 below:

Table 7: The harmonized specification of the OA weight

Actual OA weight	Assigned OA weight
Less than 15	10
From 15 to less than 25	20
From 25 to less than 35	30
From 35 to less than 45	40
From 45 to less than 55	50
From 55 to less than 65	60
From 65 to less than 75	70
More than 75	80

The out-of-area index

The OA index reflects price movements and exchange rate fluctuations in a selected basket of 26 countries with the objective of providing an estimate of inflation in United States dollars for expenditures made by UN common system Professional staff outside the country of their duty station of assignment. It is estimated by a weighted average of US dollar-based inflation rates of the selected 26 countries. The same index is used in PAI calculations for all duty stations, irrespective of location.

The countries in the OA basket, and their relative weights within the basket, are determined on the basis of staff reported data in an OA survey conducted before each round of surveys (the last OA survey was conducted in 2012). The OA survey elicits information on the proportions of OA expenditures incurred by the whole UN common system staff population in various countries. More specifically, staff members are requested to identify up to five countries where they regularly incur OA expenditures, and the corresponding percentage of annual net pay spent in each country.

The selection of the countries to be included in the list is based on the following two criteria:

f. Achieve the seventy-fifth percentile rank in terms of total OA expenditures in the country; and
g. Availability of up-to-date consumer price indices (CPIs).

Table 8 below, presents the list of the 26 countries and their relative weights and ranks. The weight for each country represents the proportion of total OA expenditures in that county in relation to the total OA expenditures across the entire system.

Table 8: OA weights and ranks for the 26 countries in the current list

Country	Weight	Ranks
France	21.51	1
United States	17.99	2
United Kingdom	8.76	3
Canada	6.44	4
Kenya	4.35	5
Italy	4.09	6
Australia	3.34	7
Germany	3.17	8
Spain	2.74	9
Switzerland	2.73	10
India	2.7	11
Belgium	2.44	12

Country	Weight	Ranks
South Africa	2.38	13
Philippines	2.13	15
Japan	1.59	16
Netherlands	1.58	17
Thailand	1.53	18
Senegal	1.44	20
Austria	1.38	21
China	1.36	22
Ghana	1.23	23
Denmark	1.14	25
Brazil	1.12	26
Russia	1.03	28
Nigeria	1.01	29
Sweden	0.83	35
Total	**100**	

As the table shows, France is the most important destination for OA expenditures with a weight of about 22 percent, meaning that about 22 percent of the total dollar amount of OA expenditures (across all duty stations), is spent in France. The United States and the United Kingdom are the second and third most important destinations, with weights of about 18% and 9 percent, respectively.

The final out-of-area index to be used in the PAI is calculated through the following two steps:

- A dollar-based index referred to as "monthly out-of-area index" is calculated as a weighted average of the basket of CPIs and exchange rates of the 26 countries, for a given month.
- A moving average index is calculated by averaging the "monthly out-of-area index" over a 9-month period ending in the current month. This index is the one used as the final current month OA index.

C-8. Calculation of the PAI

The compilation of the PAI entails two major steps: Firstly, a cost-of-living index (COLI) for the duty station relative to New York at the start of the new survey round (currently, June 2016), is calculated based on data from the COL surveys. Secondly, the calculated COLI is converted into a PAI by rebasing it to the base date of the post adjustment system which is currently November 1997. This is done by multiplying the COLI by a rebasing factor (RF).

The Cost-of-living index

The COLI is calculated using a modified Walsh formula, aggregating its five major component indices as follows:

- Each component index is calculated and weighted appropriately as described in subsections C2-C7 above;
- The COLI is computed as the arithmetic average of the five weighted component indices.

Methodological note: The original formula used for the PAI was a Fisher-type index, but it was replaced by the modified-Walsh formula, dating back to the 1990 round of surveys, on the basis of many considerations, including the following:

- The Fisher formula's requirement of duty station's specific weights was not consistent with the use of common weights;
- The non-transitivity and non-additivity (the overall index could fall outside the range of values of its subcomponents) of the Fisher formula.

More details about the modified Walsh formula are provided in Annex VII.

The Rebasing Factor

The primary purpose of the Rebasing Factor is to rebase the calculated COLI to the base date of the system, that is when the PAI for New York was 100 (currently, November 1997). Since the COLI is assessed with respect to New York at the time of price data collection in New York (currently, June 2016), the Rebasing Factor essentially rebases the COLI from June 2016 to November 1997.

The PAI is therefore calculated by multiplying the COLI by the Rebasing Factor.

$$\text{PAI} = \text{COLI} \times \text{REBASING FACTOR}$$

It should be noted that the COLI for New York in June 2016 would be 100 and hence the PAI for New York would then clearly be equal to the Rebasing Factor. This is why the Rebasing Factor is defined as the PAI of New York at the time of price data collection in New York (at the start of the survey round). In this context, it can be seen as a mechanism for extrapolating pay levels in New York to other duty stations according to the cost-of-living relativity with New York.

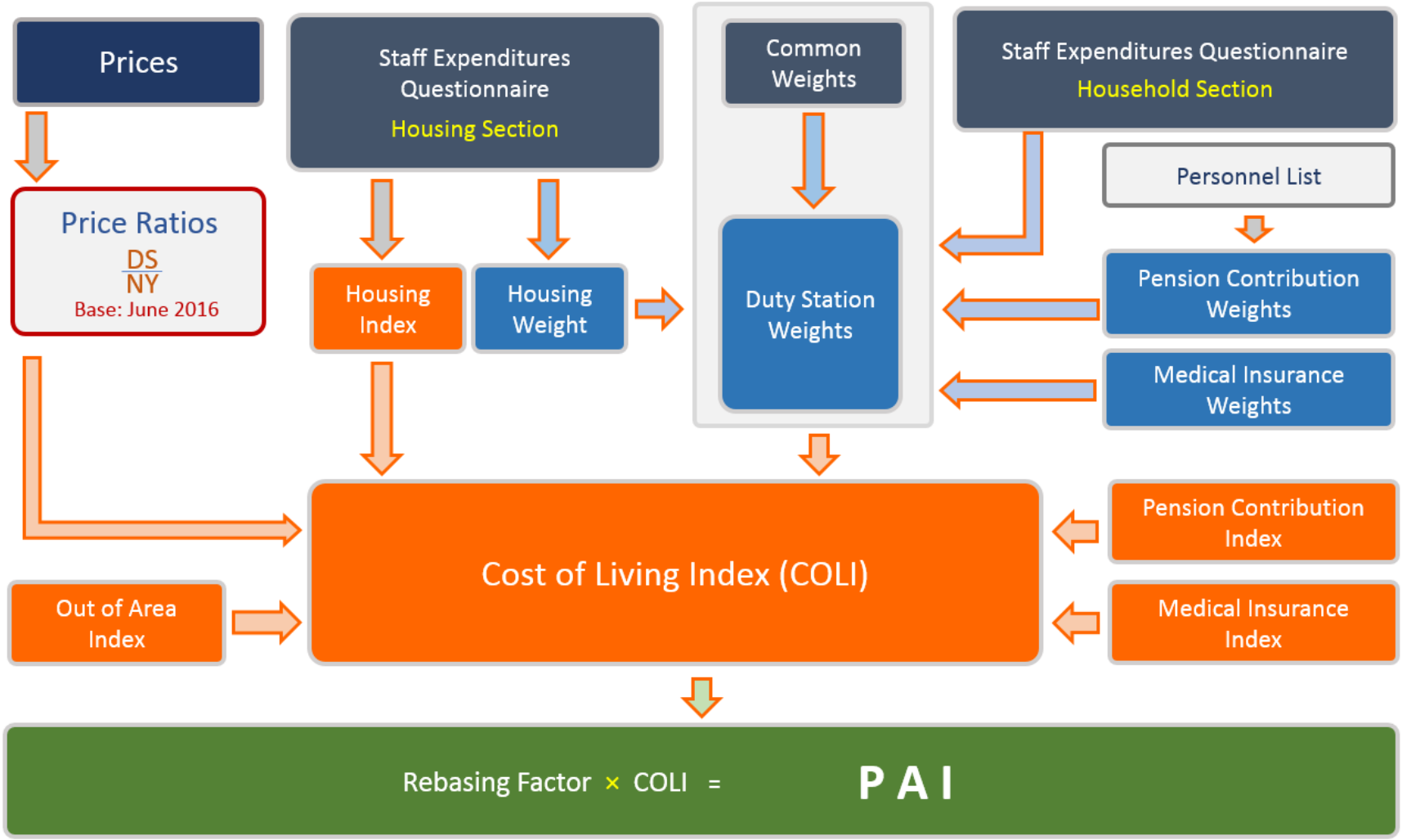
Once set at the start of a new survey round, the Rebasing Factor changes, even within the same survey round, whenever the net remuneration in New York changes for reasons other than the normal evolution of cost of living; for instance, due to the outcome of the mechanism for the management of the margin (see Section II.A) or a "consolidation"[15], when the reduction in the post adjustment to compensate for an increase in the base salary (on a no gain-no loss basis), is also applied to the Rebasing Factor. Table 9 below shows the evolution of the Rebasing Factor from June 2010 to January 2018. Figure 5 below depicts the inputs and processes that go into the calculation of the PAI.

Table 9: Evolution of the Rebasing Factor

Date	Margin Mechanism	Consolidation	Change in Base/floor Salary	Rebasing Factor	Comments
June 2010				162.9400	
January 2011		Yes	1.37%	160.7379	No gain-no loss
January 2012		Yes	0.13%	160.5293	No gain-no loss
January 2014		Yes	0.19%	160.2249	No gain-no loss
February 2014	Yes		-1.96%	157.1454	Salary freeze in New York
January 2015		Yes	1.01%	155.5741	No gain-no loss
February 2015	Yes		-1.08%	153.9119	Salary freeze in New York
January 2016		Yes	1.08%	152.2674	No gain-no loss
January 2017		Yes	1.02%	150.7300	No gain-no loss
February 2017	Yes		2.04%	153.8079	Salary increase in New York
January 2018		Yes	0.97%	152.3303	No gain-no loss

[15] *Consolidation is an accounting procedure used to implement increases in the base salary scale in line with salary increases in the US civil service. It follows the principle of no gain-no loss, that is PAM is decreased at the same rate as the base salary is increased, so that there is no impact on the net remuneration.*

Figure 5: Construction of the Post Adjustment Index



D. Updating the PAI over time

Purchasing power parity (PPP) between a duty station and New York is guaranteed to be correct when COL surveys are conducted, since the survey PAI provides a snapshot (at survey date) of the COL relativity between the two duty stations. Between surveys, PPP is approximated by a mechanism for updating, on a monthly basis, the PAI components with indicators reflecting the macro-economic circumstances of the respective duty stations. This mechanism is designed to capture local inflation, as measured by the local CPIs published by the respective national or international statistical offices, and to account for changes in exchange rates and other indices related to the evolution of housing costs, medical insurance premiums, pension contributions, and out-of-area expenditures.

The procedure for this monthly updating of the PAI entails the updating of each of its component indices, as described in the following section. The updated component indices are then aggregated exactly in the same way as for the COLI

The in-area (excluding housing) component

The IA-H component of the PAI is adjusted by using the local consumer price index (CPI), published by the national statistical office, but expressed in US Dollar terms and re-weighted (to the extent possible) to reflect the expenditure pattern of United Nations staff. When CPI data are available, but not for the period for which they are required for updating, they are projected using the movement of the past available CPIs. When no CPI data is available, the review is made on the basis of projections derived from inter-survey movements. The component is updated simultaneously for movement in the corresponding local CPI series and for changes in exchange rate. Within each of the 11 major groups of the IA-H component, basic heading price ratios are adjusted by appropriate corresponding inflation factors (from disaggregated CPI series, if available), expressed in US dollars to account for changes in exchange rate.

The housing component

For group I duty stations the rent sub-component of the housing index is updated by projection factors based on historical ISRP market rent data collected on an annual basis. The other six sub-components (see table 4 above) are updated using local CPIs.

For group II duty stations, the rent sub-component is updated by projection factors that are calculated by the ICSC on the basis of data from two consecutive COL surveys. The other housing subcomponents are updated using appropriate local CPI series.

The medical insurance component

The medical insurance index is revised to reflect changes in insurance premium paid by staff since the last COL survey.

The pension contribution component

The changes in the actual amount of pension contribution paid by staff since the last place-to-place survey, is used to update the pension contribution index. Since the pensionable remuneration is linked to net remuneration in New York, the index evolves at exactly the same rate and on the same date as movements in the net remuneration in New York.

The out-of-area component

The OA component is updated on the basis of the changes in the CPIs and exchange rates of the 26 countries that make up the OA basket.

Table 10 below summarizes the updating mechanisms for the five major components of the PAI.

Table 10. Updating mechanism for PAI components

PAI component	Evolution of component
In-Area (excluding Housing)	Each BH ratio is matched to an appropriate disaggregated CPI series. Basic heading ratios are updated every month by calculating the ratio between the current month's and the benchmark value of each appropriate series. The IA-H component is updated by aggregating the sub-component indices in an analogous manner as COLI.
Housing	**Group I**: this component of the PAI comprises 7 basic headings. The rental for housing and its matching "inflation" series is calculated based on the historical series of ISRP market rent data. The other 6 basic headings are mapped to disaggregated CPI series. **Group II**: the rental for housing is updated on the basis of two consecutive COL surveys. The other housing elements are updated using appropriate CPI series
Medical Insurance	The MI index evolves on the basis of annual updates of the average medical premiums paid by staff in the duty station.
Pension Contribution	The PC index evolves at the same rate as the net remuneration in New York.
Out-of-Area	The OA index is a weighted average of US dollar-based inflation rates of 26 countries. It is updated based on the changes in the basket of the 26 CPIs and exchange rates.

E. Operational rules for determining post adjustment multipliers

The second pillar of the PAS entails the determination of PAMs that reflect salary levels of United Nations common system Professional staff. These multipliers are derived from the PAIs calculated from data collected through COL surveys, and a set of operational rules and procedures approved over the years by the Commission. These rules and procedures are based on practical or financial considerations aimed at an optimal trade-off between accuracy of the PAI and stability of remuneration.

E-1. The post adjustment multiplier

The post adjustment multiplier (PAM) determines the post adjustment amount that is added to the base salary as compensation for the cost of living at the various duty stations. One point of the PAM corresponds to one percent of the staff member's net base salary.

In principle, the PAM is obtained by subtracting 100 from the PAI. However, the determination of the actual multiplier is subject to the operational rules and procedures governing the post adjustment system. Consequently, the PAM is not always the same as the PAI minus 100.

E-2. Updating the PAM over time

The procedures for reviewing the PAMs differ between group I and group II duty stations, because of differences in the operational objectives of salary setting.

Group I duty stations

For group I duty stations, salaries are set in local currency, and the operational objective is to stabilize the net-take-home pay (NTP = net base salary plus post adjustment minus pension contribution), in local currency. Consequently, PAMs are adjusted on a monthly basis, to account for exchange rate fluctuations of the local currency relative to the US dollar while at the same time the PAI is adjusted monthly to account for local inflation, exchange rate fluctuations; and movements in the other components of the PAI (housing, medical insurance, pension contribution, and out-of-area). PAIs are also reviewed annually to account for both inflation and exchange rate fluctuations, as well as movements in the other four components of the PAI. Moreover, PAMs are reviewed when new COL survey results become available. In this case, the survey results supersede all existing indices and multipliers.

Monthly review (0.5% rule)

The purpose of this adjustment is to stabilize NTP in local currency by restricting its exchange-rate driven fluctuations to within plus or minus 0.5 per cent of the established NTP from one month to the next. This is the so-called 0.5 per cent rule. Under this rule, NTP in local currency is maintained within a range of plus or minus 0.5 per cent of an established pay level until the next review date, that is, either a full 5 per cent increase in the COL index has been measured (5 per cent rule) or a 12-month period has elapsed (12-month review) whichever comes first.

For New York and Washington, D.C., where salaries are paid in US dollars and for which there is therefore, no exchange-rate issue, the salary levels established at the last review date remain constant until the next review date, at which time a new salary level is determined using an updated PAI that fully reflects the COL increase since the last review.

For other group I duty stations, constraining the NTP by the 0.5% rule may lead to a divergence of pay indices (PAM+100) from PAIs, especially for duty stations with strong local currencies relative to the US dollar and low inflation. In these cases, the PAM may be volatile as a result of the currency appreciation while the PAI remains steady.

A modified version of the rule is applied to group I stations where the local currency of the duty station is neither any of the currencies of headquarters duty stations (that is, the US dollar, Swiss Franc, Euro, or British Pound), nor pegged, in a fixed or otherwise strict manner, to them; and where the share of in-area expenditures incurred in non-local currencies by reference to the benchmark net take-home pay (NTP) based on the results of the latest cost-of-living survey is at least 15 per cent. For such duty stations, the monthly multiplier between reviews is obtained by keeping two separate shares of benchmark NTPs, expressed in US dollar and in local currency, stable, with a maximum fluctuation of plus or minus 0.5 per cent, with the share of the NTP expressed in local currency adjusted for changes in the exchange rates only, whereas the share of NTP expressed in US dollars is insulated from local currency fluctuations.

12-month review

PAMs are reviewed at least once on an annual basis (12-month rule) to account for local inflation, and movements in such components as housing, medical insurance, pension contribution, and out-of-area. Starting with the 2016 round, annual reviews of PAMs for all duty stations are synchronized with New York, meaning that these reviews are conducted at the same time as the review of the PAM for New York. At the point of the review the updated PAI, as described in section D, is compared to the prevailing pay index (PAM+100):

- If the updated PAI is greater than the prevailing pay index, then salaries increase as the

pay index is set equal to the new PAI, meaning that the new PAM is equal to the updated PAI -100.

- If the updated PAI is less than the current pay index, then there is no change in the salaries, meaning that prevailing PAM remains in effect although higher than the prevailing PAI. Consequently, a gap is created or widened between the PAM and the updated PAI, which may even grow, especially, for duty stations experiencing low inflation and relative weakening of their local currency relative to the US dollar, as their PAM is virtually protected by the 0.5% rule until the next 12-month review.

The statutory date of review for group I duty stations has been set by the Commission in February of each year.

As a safeguard for excessive widening of negative PAI-to-pay index gaps, a price survey might be conducted within 6 months after the gap was assessed beyond either 5% or a duty station-specific threshold (defined by adding 3% to the lowest level of the gap since the introduction of the results of the latest cost-of-living survey) in two consecutive reviews, unless the survey was to be conducted 18 months or less before the first survey at the duty station under the next round of surveys.

5 per cent rule

Besides the regular monthly and annual reviews of PAMs described above, another review of PAMs may also be conducted within the 12-month review period, if the COLI updated for inflation only, increases by more than 5 percent (5 percent rule). In this case the review is similar to the 12-month review (although conducted earlier) and accounts for local inflation and movements in the other four components of the PAI. Such adjustments may lead to a real increase in NTP, in order to keep pace with galloping inflation, unless they are constrained by margin management considerations.

Group II duty stations

For group II duty stations, salaries are set in US dollars, and the operational objective is to stabilize NTP in US dollars. Since group II duty stations are typically characterized by less stable economic circumstances (compared to group I duty stations), salary reviews are conducted three times a year (March, July, and November), on the basis of the movements in local prices and the exchange rate of the local currency relative to the US dollar, as well as the other components of the PAI (medical insurance, pension contribution, and out-of-area). PAMs are also reviewed when new COL survey results become available, independent of the scheduled review cycle.

Abrupt and substantial devaluations of the local currency can also trigger more frequent reviews (sometimes even monthly reviews) reviews of PAMs in addition to those four-month cycle reviews. Between reviews, exchange rate changes and CPI movements do not normally affect the PAMs, as these remain unchanged between reviews for field duty stations.

Four-month review

PAMs for Group II duty stations are reviewed on a four-month cycle to account for local inflation and movements in the exchange rate of the local currencies relative to the US dollar, as well as any movements in the other four components of the PAI. The new multipliers resulting from these four-monthly reviews are implemented effective the first of March, July and November, respectively.

During the four-month review (FMR) , the various components of the PAI are updated normally, as described in section D. The IA-H component of the PAI is normally updated on the basis of the latest available CPIs. If a CPI is more than two months old, it is projected up to the second month prior to the review month.

As a measure designed to protect the salaries of staff against reductions due to inflationary factors (that is, factors such as local inflation as measured by the relevant CPIs, for the IA-H component; as well as inflation in other PAI components), other than exchange rate changes, the four-month review process isolates the effect on the PAI due to the inflationary factors, from that due to exchange rate fluctuations. If the effect of inflationary factors alone produces an updated PAI that exceeds the current pay index, then both the inflationary factors and the exchange rate changes are applied. Otherwise, only the exchange rate changes are applied.

An important feature of the FMR, is the recent introduction of a **"system of caps-and-delays"** to PAM decreases, so that a first occurrence of a PAM's decrease lower than -3 points, would be limited to -3 points only. This capping cannot be extended to the following FMR, except when a new cost-of-living survey is implemented in between the two FMRs, since the implementation of survey results resets the trajectory of the PAM based on fresh cost-of-living data. However, if at an FMR no capping is applied then, capping becomes possible again at the following FMR.

The 10-point rule

In case of an abrupt and substantial devaluation of the local currency, which results in the reduction of the PAM by 10 points or more, during the four-month review, the PAM of the duty

station is frozen for four months, during which a new out-of-cycle COL survey must be conducted. The results of the survey would supersede the results of the four-month review. If a survey is not completed within the specified time frame, except for reasons of *force majeure* beyond the control of the duty station, then the PAM would be reduced by 10 points at the next FMRs until reaching, and without breaching, the value of the PAI minus 100.

The 10-point rule (TPR) was recently modified to address not only abrupt and substantial devaluations of the local currency occurring at one FMR, but also steady devaluations that would progressively decrease the PAM over time. Operationally, the new TPR considers not only the potential, calculated PAM change at any FMR, but also the implemented PAM changes of the prior two FMRs. When the accumulated change of the PAM originating from **two** or **three** consecutive FMRs would breach the threshold of 10 PAM points then, instead of implementing the change, the PAM would be frozen and a new COL survey would be conducted and implemented within four months.

E-3. Factors influencing evolution of net take-home pay

The NTP is one of the key variables of the salary setting methodology, used for ensuring stability in the salaries of UN Professional staff. It is defined as:

NTP = Net Remuneration - Pension Contribution

where, Net remuneration = net base/floor salary + post adjustment.

The operational objective is to stabilize over time the NTP, in local currency for group I duty stations, and in US Dollars for group II duty stations. The evolution of NTP is a result of the combined evolution of its three components, namely, the net base/floor salary, the post adjustment, and the pension contribution.

Base salary

Base salary increases in two cases:

a. **Annual reviews**: ICSC reviews annually the level of the base/floor salary scale by reference to salary movements in the comparator (the US Federal civil service). These annual reviews usually result in the General Assembly increasing the base/floor salary scale, but this is promulgated on a "no loss/no gain" basis, that is, the increase in the base/floor salary scale is offset by a commensurate reduction in the post adjustment amount so that the net remuneration remains the same. As a result of these increases in base/floor salary scale, PAIs and PAMs of all duty stations are recalculated, since the

purpose of changes in the base/floor scale is not to give a general salary increase applicable at all duty stations but rather to ensure that movements of the base/floor salary scale keep up with salary movements in the comparator civil service;

b. **Periodic reviews**: On very rare occasions, real increases in base/floor salary scale are decided by the General Assembly (for instance, in 2003), within the framework of margin management, to reflect net movements (gross minus taxes) in the salaries of the comparator civil service.

Post adjustment

Post adjustment for a given duty station varies according to the following scenarios:

- Monthly adjustments for exchange rate only, according to the 0.5% rule, for group I duty stations;
- Annual consolidation of post adjustment in conjunction with revision of base/floor salary scale;
- Annual reviews, according to the 12-month review rule, to account for local inflation, movements in other components of the PAI, namely, housing, medical insurance, pension contribution, and out-of-area, in addition to exchange rates;
- Periodic reviews, according to 5% rule, to account for local inflation, and movements in other components of the PAI, in addition to exchange rates;
- Reviews related to the implementation of new survey results.

Pension contribution

Movements in pension contribution are linked to:

- Periodic adjustments of the pensionable remuneration scale associated with increases of net remuneration in New York. In this case, the same percentage increase of the net remuneration is applied for the pensionable remuneration.
- Occasional (very rare) revisions of the staff contribution rate (currently set at 7.9% of the pensionable remuneration) to the staff Pension Fund;
- Occasional (very rare) general revisions of pensionable remuneration scale.

E-4. Implementation of cost-of-living survey results

PAIs and PAMs for both group I and group II duty stations are automatically reviewed when new COL survey results become available. The survey results are usually implemented with effect from the first of the month following completion of analysis of the data by the ICSC. Before being implemented, survey results are first updated from the survey date to the

implementation date, to account for movements in local prices, exchange rate of the local currency relative to the US$, as well as pension contribution, medical insurance, and out-of-area indices. There is therefore no retro-active application of the results to the survey date. In implementing COL survey results, the revised PAM should correspond directly with the applicable PAI when the latter is higher than the existing pay index (= existing PAM+100). In this case, the new PAM is set equal to PAI minus 100. In cases where the PAI resulting from the COL survey is lower than the existing pay index, the existing PAM remains unchanged provided the difference does not exceed 3 per cent. If the difference exceeds 3 per cent, then the "Gap Closure Measure", an operational rule established by the commission to protect staff salaries against sharp decreases because of low survey results, is triggered.

Gap closure measure

The gap closure measure (GCM) is designed to mitigate the impact of the implementation of negative survey results leading to a post adjustment index that is lower than the prevailing pay index by more than 3 per cent. It is applicable to all duty stations regardless of type (Group I or Group II). The GCM is applied as follows (see also figure 6 below):

a. ***No change zone***: If the PAI resulting from the COL survey is lower than the existing pay index (multiplier + 100) by 3 per cent or less, the existing PAM is maintained until the PAI catches up with the pay index;

b. ***Augmentation factor (3%)***: If the PAI resulting from the COL survey is less than the existing pay index by more than 3 per cent, a revised PAM equal to the survey-post adjustment index (PAI), increased by 3 percent, minus 100, is promulgated for the duty station. This revised PAM is applicable for all staff members in the duty station, that is, both existing staff and newcomers;

c. ***Personal Transitional Allowance (PTA)***: Existing staff members, already at the duty station before the implementation date of the survey results, receive the revised PAM plus a personal transition allowance (PTA), which is equivalent, in multiplier points, to the full gap between the new benchmark NTP and the prevailing NTP at the time of implementation of survey results. The PTA is calculated every month to ensure that the Net Take-Home Pay (NTP) for existing staff does not decrease but also does not exceed its initial maximum setting in the first month of application;

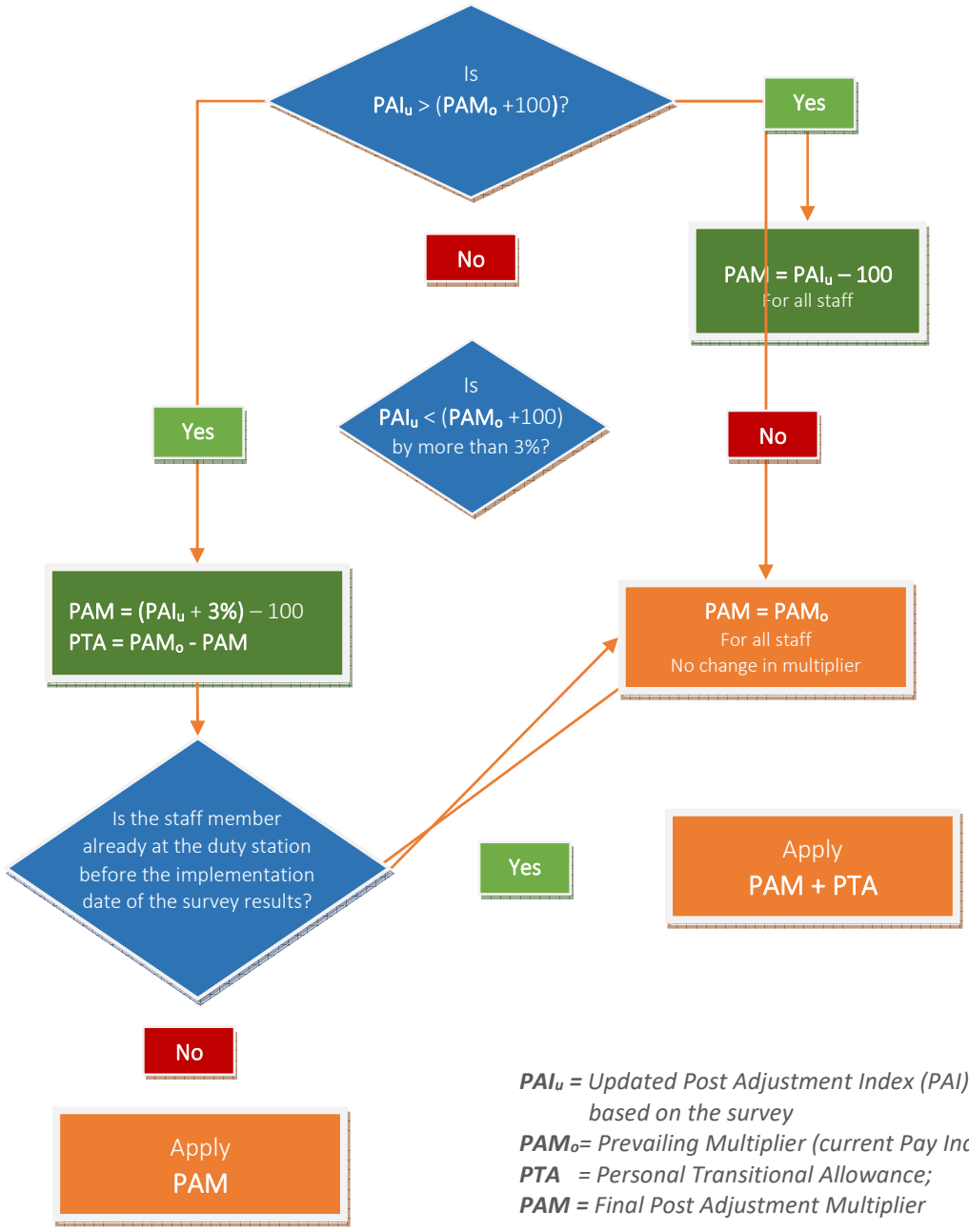
d. ***Grace period (3 months)***: The PTA is paid in full for the first three months and then, after the grace period, the NTP for existing staff is gradually reduced;

e. ***Adjustment factor (4%)***: After the 3-month grace period, the target NTP for existing staff is gradually reduced by 4% every three months, with the PTA adjusted monthly

to reflect the difference between the NTP for existing staff and that for newcomers. This monthly adjustment process will continue until the NTP for existing staff coincides with the statutory one;

f. ***Maximum duration (24 months)***: PTAs cannot exceed the maximum duration of 24 months, meaning that they will be fully phased out after two full years of implementation.

Figure 6: Application of the gap closure measure



PAIu = *Updated Post Adjustment Index (PAI) based on the survey*
PAMo*= Prevailing Multiplier (current Pay Index -100)*
PTA *= Personal Transitional Allowance;*
PAM = *Final Post Adjustment Multiplier*

Example of GCM implementation

The following example provides a step-by-step explanation of the implementation, as of 1 August 2025, of COL survey results under GCM, for duty station X. In this example, duty station X got a PTA gap of 22 points implemented in August 2025 (*prevailing multiplier in July 2025 was 60 but the implementation of a cost-of-living survey in August 2025 resulted in a multiplier of 38, hence the gap of 22 PTA points*). For simplicity, the example assumes that the multiplier remains the same as determined in August 2025, though in reality, the multiplier changes over time, making the initially projected duration of the PTA only an estimate.

It might be recalled that the size of the initial PTA (at implementation date) is determined by the gap between the survey PAI raised by 3% (augmentation factor) and the prevailing pay index (multiplier + 100). After the 3-month grace period, the PTA is gradually reduced by decreasing the NTP by the adjustment factor (4%) based on the interval period. Under these assumptions, the PTA phases out after October 2026 with four PTA revisions lasting for 15 months.

Step 1: Applicable PAM for August 2025

- New PAM applicable to all staff = 38;
- Existing staff receive a PTA = (difference between existing PAM and new PAM)

  PTA = 60 - 28= 22 multiplier points.

  Net Base Salary = $93882 per annum (or $7824 per month)

Step 2: First PTA adjustment in November 2025 (3 months after August 2025)

- November target NTP for existing staff= 96% of October target NTP = 0.96* $11,827 = $11,354;
- Pension contribution (PC) = 7.9% of Pensionable Remuneration = 0.079*$219,034/12= $1,442
- Net Remuneration = Target NTP for existing staff + PC = $11,354 + $ 1,442 = $12,796.
- Adjusted Net Remuneration: $12,796/1.06 = $12,072
- Shadow PAM (= the abstract PAM that would yield the adjusted Net Remuneration): (12,072/7824) -1 = 0.543 (or 54.3%)
- New PTA = Shadow PAM – New PAM = 0.543-0.38 = 0.163 (or 16.3%)

Step 3: Second PTA adjustment in February 2026 (3 months after November 2025)

- New target NTP (February 2026) for existing staff= 96% of November target NTP = 0.96* $11,354 = $10,899;
- Net Remuneration = Target NTP for existing staff + PC = $10,899 + $ 1,442 = $12,341.

- Adjusted Net Remuneration: $12,341/1.06 = $11,642
- Shadow PAM = (11,642/7824) -1 = 0.4880 (or 48.8%)
- New PTA = Shadow PAM – New PAM = 0.488-0.38 = 0.108 (or 10.8%)

Step 4: Third PTA adjustment in May 2026 (3 months after February 2025)

- New target NTP (May 2026) for existing staff= 96% of February target NTP = 0.96* $10,899 = $10,464;
- Net Remuneration = Target NTP for existing staff + PC = $10,464 + $ 1,442 = $11,906.
- Adjusted Net Remuneration: $12,341/1.06 = $11,232
- Shadow PAM = (11,232/7824) -1 = 0.4357 (or 43.6%)
- New PTA = Shadow PAM – New PAM = 0.436-0.38 = 0.056 (or 5.6%)

Step 5: Fourth PTA adjustment in August 2026 (3 months after May 2025)

- New target NTP (August 2026) for existing staff= 96% of May target NTP = 0.96* $10,464 = $10,045;
- Net Remuneration = Target NTP for existing staff + PC = $10,045 + $ 1,442 = $11,487.
- Adjusted Net Remuneration: $11,487/1.06 = $10,837
- Shadow PAM = (10,837/7824) -1 = 0.385 (or 38.5%)
- New PTA = Shadow PAM – New PAM = 0.385-0.38 = 0.005 (or 0.5%)

Step 6: Last PTA adjustment in November 2026 (3 months after August 2025)

- New target NTP (November 2026) for existing staff= 96% of August target NTP = 0.96* $10,045 = $9,643;
- Net Remuneration = Target NTP for existing staff + PC = $9,643 + $ 1,442 = $11,085.
- Adjusted Net Remuneration: $11,085/1.06 = $10,458
- Shadow PAM = (10,458/7824) -1 = 0.337 (or 33.7%)
- **PTA is phased out since Shadow PAM is lower than New PAM**

The results are summarized in table 11 below.

Table 11: Implementation of GCM

Month of application	Prevailing PAM	Implemented PAM	Net Base Salary (P4, step VI) (US$)	Pens. Rem. (P4, step VI) (US$)	NTP reduction for existing staff	Target NTP for existing staff	NTP for new staff	PTA
Aug-25	60	38	$93,882	$219,034	0%	$11,827	$10,002	22.0
Sep-25	60	38	$93,882	$219,034	0%	$11,827	$10,002	22.0
Oct-25	60	38	$93,882	$219,034	0%	$11,827	$10,002	22.0
Nov-25	60	38	$93,882	$219,034	**4%**	$11,354	$10,002	16.3
Dec-25	60	38	$93,882	$219,034	0%	$11,354	$10,002	16.3
Jan-26	60	38	$93,882	$219,034	0%	$11,354	$10,002	16.3
Feb-26	60	38	$93,882	$219,034	**4%**	$10,899	$10,002	10.8
Mar-26	60	38	$93,882	$219,034	0%	$10,899	$10,002	10.8
Apr-26	60	38	$93,882	$219,034	0%	$10,899	$10,002	10.8
May-26	60	38	$93,882	$219,034	**4%**	$10,463	$10,002	5.6
Jun-26	60	38	$93,882	$219,034	0%	$10,463	$10,002	5.6
Jul-26	60	38	$93,882	$219,034	0%	$10,463	$10,002	5.6
Aug-26	60	38	$93,882	$219,034	**4%**	$10,045	$10,002	0.5
Sep-26	60	38	$93,882	$219,034	0%	$10,045	$10,002	0.5
Oct-26	60	38	$93,882	$219,034	0%	$10,045	$10,002	0.5
Nov-26	60	38	$93,882	$219,034	**4%**	$9,643	$10,002	-

ANNEX I: SUMMARY PROFILE OF ACPAQ MEMBERS

The Advisory Committee on Post Adjustment Questions (ACPAQ) is chaired by the Vice-Chairman of the Commission, **Mr. Boguslaw Winid**, and it includes five other members, who are statisticians of recognized standing and ability, with expertise in comparative COL statistics. Members of the ACPAQ are appointed with due regard to equitable geographic distribution.

Ms. Corrine Becker Vermeulen *(Western European and Others Group)* is an IMF national expert in the field of price statistics and has worked on various aspects of consumer prices for the past 23 years of her career with the Swiss Federal Statistical Office. She is currently Head of the Prices Section in the Swiss Federal Statistical Office, where she oversees the scientific, administrative, and organizational aspects of the production and development of price statistics, including consumer, producer and import prices, construction prices, purchasing power parities, and prices of houses under construction. Prior to that, she was the Head of the Consumer Prices Unit of the Prices Section, where she focused on consumer prices, i.e., CPIs, rent statistics, and purchasing power parities. She is currently a member of the Conference of European Statisticians steering group on CPIs. Ms. Becker Vermeulen has a Master of Science degree in Political Economics from the University of Neuchâtel, and a bachelor's degree in economics from the Ecole Supérieure de Commerce, Neuchâtel.

Ms. Suzanne Wong *(Asia and the Pacific)* is an accomplished statistician, with 20 years of experience in the field of national accounts, including the International Comparison Program (ICP) with oversight responsibility for the compilation of national accounts estimates for the ICP and analysis of Singapore's purchasing power parities during the period 2010-2020. She is currently a Deputy Director in the Business Statistics Division of the Singapore Department of Statistics, with responsibilities for managing the whole data cycle of business statistics, from data collection to data compilation, analysis, and dissemination. Prior to that, she was Second Director Economic Statistics/Policy and Planning (2020-2021) and Deputy Director/Senior Assistant Director Economic Statistics, where she supervised, *inter alia*, the compilation and development work of the Gross Domestic Expenditure (GDE) section, including the research and implementation of relevant conceptual, data, methodological and process improvements; and the collection, processing & integration, compilation, analysis, and dissemination of business statistics for the Singapore services sector.

Mr. Abimbola Sylvester Young *(Africa)* retired from a long and distinguished career in the UN common system, having worked as Director of the ILO's Bureau of Statistics and, prior to that, as a senior statistician specializing on the statistics of conditions of work and life. He has authored numerous reports and academic and professional papers on statistical matters, and, most relevant in the ACPAQ context, was one of the main authors of *The Consumer Price index*

Manual: Theory and Practice, which was published by the ILO, in collaboration with the IMF, the OECD, Eurostat, the United Nations and the World Bank. Mr. Young has continuously served as senior advisor to national governments and international development banks on matters related to cost-of-living measurement, household income and expenditure surveys, labour force surveys, establishment surveys and economic aspects of population censuses. Mr. Young also served as short-term consultant to the ICSC on the comprehensive review of the methodology underpinning the Post Adjustment System.

Mr. Pedro Luis do Nascimento Silva *(Latin American and Caribbean Group)* is a retired Principal Researcher of the Brazilian National Statistics Office (IBGE), where he spent most of his career. His areas of expertise include sampling and survey methodology, analysis of complex survey data, household and business sample surveys, calibration estimation, variance estimation, small area estimation, sample surveys for policy evaluation and official statistics. He is currently Executive Secretary of SCIENCE and was a Professor at the National School of Statistical Sciences (ENCE). He is also currently an Associate Editor for the Brazilian Journal of Probability and Statistics and Associate Editor for Survey Methodology. He has been the President of the International Statistical Institute as well as President of the International Association of Survey Statisticians. Mr. Silva holds a PhD in Social Statistics from the University of Southampton, UK. He has co-authored two books, written a substantial number of papers for academic journals and is a three-time winner of the ISI Service Award of the International Statistical Institute.

Mr. Andrey A. Tatarinov *(Eastern Europe)* has deep and broad experience in the specific areas of economic statistics, national accounts, and the international comparison of cost of living. He is currently the Lead Expert in the Department of National Accounts at the Federal State Statistics Service (ROSSTAT) in Moscow, which he headed from September 2010 to September 2017 and where he was responsible for the development of indicators of the system of national accounts (SNA), and international comparisons of GDP and cost of living in different countries, as well as the purchasing power parity of national currencies. Mr. Tartarinov is an active member of several international permanent expert groups and task forces working on issues of economic statistics, including the UN Committee of Experts on Environmental-Economic Accounting (UNCEEA). He holds a Doctor of Science degree in Economics and Finance from Moscow University of Economics, Statistics, and Computer Science. He is the author or co-author of more than eighty (80) scientific publications, including eight (8) monographs and a textbook on the issues of macro-economic statistics and national accounts.

ANNEX II: CURRENT LIST OF GROUP I DUTY STATIONS

Table 12: List of group I duty stations

NORTH AMERICA
United States
New York
Washington D.C.
Miami
San Francisco
Canada
Montreal
Toronto
Ottawa

SOUTH AMERICA
French Guiana

ASIA/PACIFIC
Australia
China, Hong Kong
Japan
Hiroshima
Tokyo

EUROPE	
Austria	**Italy**
Belgium	Rome
Bulgaria	Brindisi
Cyprus	Luxembourg
Czech Republic	Malta
Denmark	Monaco
Finland	Netherlands
France	Norway
Paris	Poland
Lyon	**Portugal**
Germany	Guimaraes
Berlin	Lisbon
Bonn	Romania
Hamburg	Slovak Republic
Dresden	Slovenia
Munich	Spain
Gibraltar	Sweden
Greece	Switzerland
Hungary	United Kingdom
Iceland	
Ireland	

ANNEX III: PENSIONABLE REMUNERATION FOR STAFF IN THE PROFESSIONAL AND HIGHER CATEGORIES

(USD – Effective 1 February 2018)

Level	STEP												
	I	II	III	IV	V	VI	VII	VIII	IX	X	XI	XII	XIII
USG	311,276												
ASG	287,705												
D-2	233,802	239,233	244,671	250,109	255,540	260,976	266,410	271,845	277,278	282,711			
D-1	207,980	212,583	217,446	221,906	226,365	230,815	235,274	239,953	244,733	249,511	254,281	258,586	263,184
P-5	180,942	184,732	188,523	192,321	196,110	199,903	203,692	207,489	211,279	215,072	218,864	222,666	226,731
P-4	147,697	151,352	154,999	158,648	162,307	165,953	169,606	173,261	176,909	180,557	184,206	187,870	191,515
P-3	121,389	124,491	127,589	130,682	133,785	136,880	139,979	143,081	146,324	149,714	153,101	156,486	159,875
P-2	94,047	96,819	99,587	102,365	105,131	107,904	110,675	113,445	116,216	118,985	121,759	124,531	127,298
P-1	72,214	74,566	76,919	79,270	81,623	83,975	86,327	88,679	91,031	93,384	95,735	98,087	100,439

ANNEX IV: ORGANIZATION OF THE 2016 BASELINE COST-OF-LIVING SURVEYS AT HEADQUARTERS DUTY STATIONS AND WASHINGTON, D.C.

Post adjustment indices are calculated by the ICSC secretariat on the basis of data collected through COL surveys conducted in each duty station. The organization of a COL survey in a duty station includes the following sequence of activities:

a. Pre-survey consultations with various stakeholders in the duty stations;
b. Establishment of the list of outlets to be used for price data collection;
c. Collection of price data for the approved basket of goods and services[16];
d. Collection of data on housing, domestic services and household expenditures from all eligible staff of UN common system organizations, or other organizations not formally part of the Common System but which adopt its salary scheme;
e. Preparation of the Survey Coordinators' Report;
f. Processing of both price and expenditures survey data, and calculation of the PAIs;
g. Updating of the PAIs;
h. Determination of PAMs.

A. Roles of key stakeholders

ICSC secretariat

The ICSC secretariat is involved in every aspect of the survey process, working closely with the organizations and staff associations in the duty stations, from the preparatory phase to price data collection, to the processing and analysing, culminating in the dissemination of the survey results to all stakeholders. During the preparatory phase for instance, intensive pre-survey consultations with the duty stations are conducted to review the roles of all stakeholders, the schedule of survey activities, the guidelines for the development of the list of outlets, the instructions about the completion of data collection forms, and various administrative and logistical arrangements.

Survey Coordinator

During the preparatory phase, organizations at each duty station are requested to set up a local survey committee (LSC) with a designated survey coordinator as its head (typically Chief of

[16] For duty stations covered by the European Comparison Programme (ECP), the relevant price data is directly provided by Eurostat and further updated by the ICSC on the basis of appropriate inflation factors to reflect price levels in the survey month.

Administration or Personnel Division, or a senior officer designated by them). LSCs comprise representatives of the organizations as well as of the staff federations, and they are responsible for coordinating the administration of the survey at the duty station. The survey coordinator plays the pivotal role of being the overall manager of the survey, with the primary responsibility of ensuring the successful conduct of the survey. The main duties of the Survey Coordinator include:

a. Compiling the initial list of outlets and the staff list;
b. Publicizing the survey and encouraging all eligible staff to participate;
c. Organizing the collection of price data and other survey information;
d. Organizing collection of expenditure and housing data from staff;
e. Completing the survey Coordinator's Report;
f. Sending all survey materials to ICSC within the pre-specified time frame; and
g. Liaising with ICSC on various aspects of the survey.

B. Organizations and staff

In keeping with the Commission's approved guidelines and procedures, the ICSC secretariat solicits the active cooperation of organizations and staff federations in the administration of the surveys, in order to enhance transparency in the price data collection process, and hence increase confidence in the results generated. Throughout the survey process, all critical aspects of the survey are handled through constructive interactions between the ICSC secretariat and these key stakeholders.

Frequent consultations (meetings, workshops, e-mail communications, etc.) with administrations and staff are conducted to review the status of preparations for the survey, the inputs expected from each of the key players, other logistical matters pertinent to the administration of the survey, as well as monitoring the progress of survey activities. For staff members at large, these consultations may take the form of town hall meetings in which the secretariat provides briefings about all aspects of the design and administration of the survey, the critical role of the key stakeholders, and the importance of high staff participation in the survey.

Independent experts representing administrations and staff participate as observers during price data collection in headquarters duty stations, and during the analysis of the collected data at the ICSC secretariat. Their role is to verify that the analysis is conducted in accordance with

the approved methodology and guidelines. The participation of independent experts is governed by the following guidelines:

a. Independent experts are familiar with the purpose of the price data collection exercise and the approved item specifications that the secretariat will be using for the 2016 round of surveys. There should be no more than one observer per pricing team. The organizations and staff associations are responsible for the selection of observers. However, the selected observers are subject to approval by the ICSC Chairman;

b. The selected independent experts are familiar with the principles underlying the COL measurement methodology and be knowledgeable about the market and shopping habits of the international staff. They are acceptable to all interested parties and must follow the same rules of confidentiality and privacy of data applicable to the ICSC secretariat. Individuals selected for this task are neither serving staff members nor close family members of serving staff;

c. The primary responsibility for the analysis of the survey data rests with the ICSC secretariat. Such analysis consists of the processing of data in accordance with the approved methodology. The role of the independent experts during the survey data analysis phase is to verify that the analysis is carried out in accordance with the approved methodology;

d. At the end of the data collection exercise or at any of the subsequent steps of the survey process, the independent experts submit to the Chairman of ICSC a report outlining their general observations or comments. These comments are taken into account by the ICSC secretariat to the extent possible and, are part of the report submitted to ACPAQ by the ICSC secretariat. In any case, the views of the independent experts are fully reflected in the final survey reports; and

e. The rules of confidentiality of the data collected are strictly observed. Observers are granted access to individual data on outlets (for example, item prices by outlet) only in electronic form on a computer screen at the secretariat. Also, summary or aggregate data or tabulations based on preliminary analysis are made available to the observers. However, these summaries or aggregate data may not be removed from the ICSC offices or disclosed to administrations and staff until after their presentation to ACPAQ by the ICSC secretariat and after final recommendations of ACPAQ and subsequent approval by the Commission.

C. Price survey consultants

For headquarters duty stations where the ICSC collects price data, consultants identified by the survey coordinator and hired by the ICSC participate in the pricing data collection activities working in tandem with ICSC statisticians (for headquarters duty stations other than New York). The consultants may be either individual experts or associates of the national statistical offices. In addition to being knowledgeable about the local market conditions, the profile of a good price survey consultant, for ICSC's purposes, typically includes such attributes as having a working knowledge of English and fluent in another UN official language (French or Spanish, etc.) and local languages, having prior experience in price data collection, and the ability to endure long hours of concentration and hard work. For New York and Washington, D.C. the use of price survey consultants is unnecessary given the ICSC secretariat's knowledge of, and experience with, these two markets.

D. Collaboration with partner organizations

There is a long history of cooperation between the ICSC, Eurostat and ISRP in sharing methodological expertise, statistical data, and in participating in one another's methodological working group meetings. In 2009, a memorandum of understanding (MOU) was signed by the three agencies, laying down a framework for the exchange, reproduction and dissemination of high-quality statistical data, as well as cooperation in methodological development. The MOU came into force with its adoption by ACPAQ at its thirty-sixth session and the subsequent approval by the Commission at its seventy-ninth session. In recognition of the provisions of the MOU, the Commission approved the use of ECP average price data for all headquarters and group I duty stations covered by the ECP, starting with the 2016 round of COL surveys, which means that the ICSC will use the ECP price data, instead of conducting price data collections in these duty stations.

Under this agreement, ICSC provides the average price data collected at the Extra-EU duty stations to Eurostat for the calculation of their correction coefficients (CC). In return, the information compiled through the ECP is made freely available to the ICSC which can use it for PAI calculations for covered group I duty stations. In particular, data for countries coordinated by Eurostat – all twenty-eight European Union Member States (EU-28), plus those in the European Free Trade Area (EFTA), the Western Balkan countries and Turkey are provided to ICSC. Furthermore, although not directly spelled out in the MOU, ISRP will continue, as has been a practice since 1995, to provide rent data to ICSC that is used for the calculation of the rent index for all headquarters and group I duty stations.

E. Price data collection

List of items and specifications

The list of items and their specifications used in the price data collection is in large part drawn from a subset of the list of items used by ECP that match in the best possible way item specifications from the 2010 round of surveys. Item specifications not drawn from the ECP include the ICSC-specific item that is, those to be collected by survey coordinators or directly by the secretariat (RTPC items, cars and scooters). The list of items reflects changes in the market and also in the consumption preferences with respect to these new technologies.

Development of the list of outlets

For headquarters duty stations not covered by ECP, namely New York, Geneva (including Canton de Vaud), Montreal, Washington, D.C., the main criterion for the selection of outlets for a duty station is to be those that are likely to be patronized by United Nations international professional staff. Capturing these outlets requires a cooperative effort involving the major stakeholders, i.e., the LSC and the ICSC secretariat.

In the particular case of ECP covered duty stations, only outlets related to ICSC specific items such as RTPC items, cars, doctor's fees, tuition fees, etc., are to be considered since the price data for items covered by ECP is directly provided to ICSC by Eurostat. Therefore, only a limited number of outlets are included in these lists of outlets. This also means that local survey committees are no longer involved in the development of the list of outlets for the items covered by the ECP market basket, even though they would retain this role for the ICSC specific items, including RTPC items. By the same token, observers would no longer be needed to monitor price data collection in these ECP covered duty stations.

The final list of outlets includes:

a. The items and specifications that satisfy the requirements of ICSC;

b. Ancillary information on each outlet, including:

   i. The type of outlet;

   ii. Corporate address and telephone number;

   iii. Physical address, website address (if available) and telephone number of the branch to be visited;

   iv. The subgroup of items expected to be priced in the outlet; and

c. Possible substitute outlets for each subgroup of items (see section on substitution of outlets on page 40).

The list also includes outlets used to collect prices of items for the Coordinator's Report. In cases where there are far more outlets than necessary for a group of items, the outlets are listed in the order of priority by the survey coordinator, having in mind that outlets for a duty station are evenly distributed by type. Other useful criteria also include the availability of the items of interest in the outlets, the accessibility of the outlets, etc. The selection and approval of the list of outlets are conducted through the following sequence of activities:

Step 1: The secretariat sends to each survey coordinator three lists of outlets:

a. The list that was approved by the ICSC Chairman to be used for price data collection in the prior survey round;

b. The list of outlets from which prices were actually collected in the previous survey round, including frequencies related to the availability of the items; and

c. The list approved by the ICSC Chairman for New York for the current survey round.

Submitting the first two lists helps identify those outlets that did not allow price data collection for the 2010 round, to be targeted for a more aggressive recruitment for the new round. Submitting the New York list helps the survey coordinator identify comparable outlets at the duty station. The survey coordinator reviews the lists along the guidelines provided by the ICSC secretariat and submits proposals for revisions along with justifications for the proposed revisions.

Step 2: The survey coordinator reviews and updates the lists of outlets in consultation with the ICSC secretariat. The purpose of the review is to:

a. Delete those outlets which, at the time of the last place-to-place survey, did not carry goods meeting ICSC specifications;

b. Delete outlets which have gone out of business;

c. Propose a list of substitutes to replace outlets in categories (a) and (b) above, if necessary;

d. Update the information on outlets that have changed names and/or line of merchandise, or moved to another location;

e. Propose new outlets for collecting prices for newly introduced items (if any); and

f. Identify those outlets that have Internet websites for their potential use as a source of online price data collection.

Step 3: The proposed list of outlets is sent back to the ICSC secretariat for final review.

In this step, the list of outlets proposed by the duty stations is reviewed by the secretariat with a view to fine-tuning before it is ultimately submitted for approval by the Chairman of ICSC,

with the understanding that minor amendments might be necessary during price data collection at each duty station to deal with unforeseen situations such as closed outlets, or changes in the address or nature of the outlets. Additional outlets are added, when necessary, to boost the number of price quotations for some items, but any changes to the lists of outlets during field operations are done in consultation with survey coordinators.

Step 4: The list of outlets is approved by the ICSC Chairman.

After consultations with the ICSC secretariat, the final list of outlets is approved by the ICSC Chairman.

Substitution of outlets

For various reasons, not all outlets included in the approved list will be 'fit for use' when time comes for the actual price data collection. For instance, an outlet on the list, cannot be used for price data collection if:

a. The ICSC pricing team cannot find it at the location address provided;
b. It is no longer in business;
c. It contains no items with the desired specifications;
d. It is a designer boutique, bargain basement or budget store; and
e. The outlet officials denied the ICSC team permission to collect price data.

In such situations, those 'unusable' outlets are identified and replaced by appropriate substitutes without impeding the overall schedule of price data collection or on the quality of the collected data. substitutes are identified in advance by the survey coordinator in consultation with the LSCs. The list of substitutes is arranged by the survey coordinator in a hierarchical order of preference to facilitate the replacement of deficient outlets. In any case, the degree of similarity to the primary outlet with respect to key outlet characteristics is one of the main criteria for such ranking. This limits the use of discretion by the pricing team during price data collection. There is also the added bonus of potentially considerable savings in time that would have been spent by the pricing team trying to figure out what outlet to use as a substitute, and how. In the limited time available for price data collection, the time saved can be used to improve the quality of the data collected. In case of outright refusal to cooperate by a local outlet, its corresponding website is considered as a substitute for purposes of price data collection, provided that it meets the requirements regarding availability of items and adequacy of specifications.

The list of substitute outlets is created concurrently with the primary list to be used for price data collection. The ICSC, in consultation with all interested parties, establish a correspondence between outlets on the primary list and their substitutes. In the event that an outlet on the primary list is found deficient, the pricing team leader proposes the corresponding substitute for the purposes of price data collection, in consultation with the survey coordinator.

In instances where an outlet on the approved list is found not to correspond to the type of outlet it was thought to be (for instance, an outlet that was thought to be a supermarket at the time the list was created, but turns out to be a gourmet shop for selected items), the pricing team could still collect price data if there are items with specifications that satisfy ICSC requirements. In general, the pricing team could look for other items in a given outlet, even if the outlet is not initially designated as containing those items. If the overall number of price quotations for a group of items is insufficient, the pricing team leader proposes additional outlets, from the list of substitutes or other alternatives, in consultation with the survey coordinator and all interested parties.

Price data collection from regular outlets

A target number of five price quotations per item are required from each of three to five outlets, for a maximum of twenty-five price quotations for each item. In instances where more than five types or brands meeting the specifications for an item are found in one outlet, the five "most important" types or brands should be priced. For food and other grocery items, the types or brands considered as "most important" are those brands that occupy the most shelf space. For clothing and footwear, they are those that occupy the largest display area. The pricing team leader is expected to make decisions on what is "most important" in terms of shelf space or display area.

In the case of New York (base of the post adjustment system), price data collection for all items in the list, covers a broader range of sizes, packaging types and brands, in order to enlarge the pool of price data used for price comparisons between New York and each of the other duty stations. Thus, the limit of twenty-five price quotations per item is waived for New York.

Use of tablet computers for actual price data collection

The ICSC secretariat uses tablet computers in the duty stations where it is responsible for conducting the actual data collection, namely New York, Geneva, Montreal, and Washington, D.C. One of the main advantages of using tablets for price collection is that the data collected can be analyzed in real-time, making it possible to identify and correct potential inconsistencies on the spot. Also, data can be directly imported into the data processing system, thereby minimizing data-entry errors. An enhanced data collection user interface has been developed by the secretariat to facilitate the use of tablets.

Use of the Internet as a source of price data

The considerable development of e-commerce in recent years has led to increased availability on the Internet of a broader range of price and item specifications information. Price data are collected by the secretariat from available websites of approved outlets in all duty stations, including New York. Internet price data collection is used mostly for, but not limited to, RTPC items. Other items priced on the Internet, may include, for instance, cinema tickets, gasoline, restaurant meals, or IKEA items, etc. Supplementary price data collection for food and beverages, clothing and footwear is also conducted from websites of approved outlets if confirmation is obtained from store managers (or management of various chains of outlets) that, with the only exception of limited and temporary local sales, prices on e-shops of their web sites coincide with those found in the physical outlets.

During the preparation of the list of outlets, survey coordinators perform the following tasks when drawing up those that are used for e-price collection:

a. Identify which outlets on the proposed list have websites;
b. Provide the Internet addresses from which purchases can be made;
c. Check the availability of the group of items associated with the proposed outlets;

and

d. Check whether the pricing policy of the relevant group of items is the same as that on the website.

Before the final approval of the list of outlets, the ICSC secretariat verifies the availability of not only the list of items on the websites but also all the information related to item specifications.

Price collection from Internet websites takes place at any point during the survey month, and is not necessarily restricted to the approximately two-week period of the price data collection at the duty station. The pricing exercise is performed in the days before, during or after data collection by the pricing teams at the duty station itself, as long as it takes place during the survey month. Finally, to be consistent with the guidelines for price data collection from regular outlets, price data is collected from the websites for as many brands as possible, up to a maximum of twenty-five price quotations for each item.

Sales taxes

If sales taxes are applicable but are not included in the prices collected, as in New York and Washington, D.C., then such taxes are applied to the prices of the relevant items after price data collection. However, for European headquarters duty stations, the value added tax (VAT) is already incorporated in the retail prices.

Treatment of sale prices

Sale prices are collected when they relate to promotional offers during the price data collection. They are not collected when they are clearly related to end-of-season or complete liquidation of the outlet, a close-out of an entire line of merchandise, fire-damaged goods being cleared from the outlet, etc.

Treatment of organic/biological items

There is no special treatment for organic/biological items over their regular counterparts. They can be collected along with regular items if they comply with the item specifications and by reference to the criteria used for sampling the items to be priced.

Calculation of the average price

The average price per item is calculated as the arithmetic mean of the prices for that item collected at the duty station, thereby giving an implicit weight to each of the sampled outlets, corresponding to the number of price quotations collected from them. The corresponding item ratio is obtained as the item average price in the duty station divided by the average price in New York for the same item.

Treatment of items subject to real-time price comparisons (RTPC) with New York

The RTPC approach is a practical and cost-effective solution to the dual problem of price changes associated with changes in quality and in product specifications, and the lack of comparability over short periods of time and across locations, for electronic and other high-technology products. The approach consists in conducting more frequent data collections in New York for RTPC items that are synchronized with price data collections at other duty stations. More specifically, for each item, prices are collected in New York at the same time that they are collected during the COL survey at the duty station, ensuring that the selected models for the item are exactly matched in both duty stations.

RTPC items are mainly products, with rapidly changing specifications that are difficult to match across duty stations for various reasons, such as seasonality or differences in the manufacturers' market presence at various locations.

Table 13 presents the basic headings related to RTPC items within the in-area (excluding housing) component of the PAI.

Table 13: Basic headings of the RTPC items

Major group	Sub group	Basic heading
Transport	Purchase of vehicles	Motor cars
		Motor cycles and bicycles
Communication	Telephone and telefax equipment	Telephone and telefax equipment
Recreation and culture	Audio-visual, photographic and information processing equipment	Audio-visual equipment
		Photographic equipment, supplies and optical instruments
		Information processing equipment

Price data collection of RTPC items (except for cars) is now under the responsibility of survey coordinators while the ICSC secretariat is responsible for collecting price data for cars in all headquarters duty stations and Washington, D.C.

F. Staff expenditures survey

The staff expenditures survey is conducted through a questionnaire administered online to all eligible staff in the duty station, so that the information elicited is automatically transmitted to an ICSC database, upon submission of the survey questionnaire. The online administration of the survey allows for real-time monitoring of response rates during the survey period, so that follow-up activities can be launched, if necessary, to boost response rates. The data collected from this survey forms the basis for the establishment of common expenditure weights for all duty stations in the United Nations common system, as well as the weights for the out-of-area component of the PAI for each duty station. These common weights are representative of the consumption patterns of the staff of the United Nations common system.

The expenditure survey has two main components: household expenditures and housing and domestic services costs. The household expenditures component of the survey elicits information on expenditures made by a staff member's household, either in the duty station or outside, and covers expenditures on all consumption categories in the current post adjustment index structure, such as food, beverages and tobacco; clothing; health and personal care; transportation and communication; household appliances; textile furnishings; recreation; education; airfare, etc. Household expenditures are requested either on a monthly or an annual basis, except for expenditure for vehicles, which are collected for the past five years.

The housing and domestics service costs component of the survey elicits information on housing and domestic services costs. The data collected are used to establish duty station-specific housing weights for the housing component, and to calculate rental subsidy thresholds.

Response rates

It is essential to achieve good response rates to the survey in order to establish more accurate and reliable estimates of relevant weights and indices of many sub-components that are based on actual staff reported data. In particular, for the housing component, the length of occupancy weights and the dwelling class weights used in the estimation of the rent index for group I duty stations, is based on actual data reported by staff in the housing section of the staff expenditures survey questionnaire. Also, the calculation of the actual out-of-area weight is based solely on staff reported data instead of the administrative specification used in past rounds of surveys.

Strategies to improve staff participation in surveys

To ensure more efficient survey operations and high staff participation in the surveys, the secretariat developed a series of technical measures and tools to monitor staff participation levels during data collection. A special website dedicated to the survey[17] provides a central source of information on all aspects of the survey, including the survey schedule, a section for survey coordinators, another for staff at large, various survey documents, and a Frequently Asked Questions (FAQs) section. Furthermore, a "Contact us" page enables staff at large to send requests for information and clarifications directly to ICSC.

In addition to the webpage, the secretariat designed a tool to enable both the ICSC secretariat and the survey coordinators to monitor staff participation, in real time, throughout the survey. Two special URLs are set up for this purpose, one for the ICSC secretariat and one for the survey coordinators. The link enables survey coordinators to generate a report on the cumulative response levels and rates by organization at the duty stations. These reports help survey coordinators determine whether and when to issue friendly reminder messages to staff about the critical importance of their participation in the surveys and the impact of the data they provide on the results generated.

G. Survey Coordinator's Report

At each duty station, the survey coordinator is requested to complete the Coordinator's Report which serves both as a guide to the survey coordinator, describing rules and procedures for the conduct of the surveys and defining the roles of all stakeholders in the process. The Coordinator's Report also includes a survey questionnaire for collecting duty station-specific information on the general conditions of living at the duty station as experienced by international staff, including information related to housing, security, domestic service, duty-free importation, and also price and tax data on selected items available at the duty station. In

[17] *Survey website is located at the following address: http://pp2016.commonsystem.org/*

addition to RTPC items, excluding cars for which the data collection remains under the responsibility of the ICSC secretariat, the survey coordinator is responsible for the data collection of all items listed in the Coordinator's Report.

H. Data processing

Data processing for all types of data collected via the various components of the survey namely: prices, housing and domestic service costs and household expenditures, is performed by the ICSC secretariat using its Integrated Data Management System (IDMS). In particular, three excel-based analysis templates are developed for each survey component (housing, household and prices) for data processing, analysis and estimation of the related PAI components. The components are further aggregated into the PAI using the corresponding module of IDMS.

Finally, smaller tasks such as the calculation of common expenditure weights, are executed outside the IDMS, using basic Excel spreadsheets.

Prices

The processing of price data is conducted through a sequence of steps: First, price data are reviewed for editing errors made during data collection. Editing in these cases usually consists of adjusting unit of measures, comments and similar types of information made during price data collection. In some cases, it is necessary to adjust the collected prices using appropriate sale taxes (for duty stations such as New York and Washington D.C. where quoted prices do not include taxes).

In the second step, a benchmark New York dataset is created for comparisons with various duty stations. At this level, exclusion of price quotations relates to outliers without reference to any specific duty station. Also, price quotations of items found not to comply with the specifications are excluded.

The third step consists of balancing price data for New York with those of individual duty stations, that is, excluding selected price quotations, item by item, either from the duty stations or from general New York's price dataset with a view to achieving a like-to-like comparison between the items of the two datasets. Outliers are then reviewed in light of the specificities of the duty station. At the end of this step separate New York datasets each specific to one of the eight other duty stations are created and ready to be used in the analysis.

It should be noted that in the case of ECP-covered duty stations, the possibility of appropriately balancing the New York's price dataset is reduced, since only average price data, already screened for internal consistency within the internal data processing procedures of the ECP

were available. Thus, the corresponding New York price dataset is very similar, if not identical, for these duty stations.

Staff expenditures data

The processing of staff expenditure data starts with the editing of individual responses to correct obvious erroneous data. In the housing and domestic services section of the questionnaire for instance, staff reported expenditures on these domestic services can be astronomically high if the respondent does not select the appropriate wage rate, which by default is set to "hourly". Similarly, in the household expenditures section, a common typical error relates to the duplication of responses provided in the fields In-Area (local currency) and In-Area (other currencies), with the latter requiring the respondent to indicate which other currency was used for the expenditures, instead of just converting the amount in local currency to US dollars. Another potential source of error relates to the reporting of annual values for individual items of expenditure in fields requesting expenditures on a monthly basis, and vice versa.

The next steps in the processing entail the exclusion of incomplete or otherwise unusable questionnaires. Also, newcomers, defined as respondents who joined the duty station less than three months before the survey [18], are generally excluded, with the exception of staff members who were employed at the duty station less than three months before the survey but had been living at the duty station for more than three months before the survey. Questionnaires showing a ratio of expenditures-to-income lower than 20 per cent or higher than 200 per cent are also statutorily excluded, with the exception of few cases with ratios higher than 200 per cent for household with two or more members working full time. Moreover, the underlying pattern of expenditures considered atypical are also excluded.

Once all price and expenditure data are processed, the next step is to estimate the COL index.

Dissemination of survey results

Before being published, the results of baseline COL surveys conducted at the eight headquarters duty stations and Washington, D.C., are presented to ACPAQ for its review and recommendations and to the Commission for its approval. This process generally takes about six months. Survey reports providing details about the methodological procedures, from data collection to processing and analysis of survey data, are published on the ICSC website and made accessible free of charge, to the various stakeholders.

For the other duty stations, COL survey results are implemented and published in the ICSC

[18] *In the housing and domestic services section of the questionnaire, the exclusion of newcomers concern those staff who joined the duty station less than three months before the survey.*

website with effect from the first of the month following completion of analysis of the data by the ICSC. In addition, special reports tailored to the needs of the duty stations can be made available to them upon request.

Besides the COL survey results and corresponding PAIs and PAMs, the ICSC also publishes retail price indices (RPIs) calculated on the basis of data collected from the COL surveys. RPIs are widely used by organizations of the UN common system, and other stakeholders, including representatives of member states who use the data for the purpose of establishing the compensation of their diplomatic staff around the world. The RPIs are also published in the Monthly Bulletin of Statistics by the United Nations Statistics Division (UNSD) in the UN Department of Economic and Social Affairs (DESA).

ANNEX V: DERIVATION OF COMMON EXPENDITURE WEIGHTS

Common expenditure weights, hereinafter referred to as common weights, are a cornerstone of the post adjustment methodology and their introduction in the PAI calculation, which dated back to the 1990 round of surveys, aimed at addressing issues related to low response rates in staff expenditure surveys, and fluctuations in the weighting structure of small duty stations. The adoption of common weights proved to work well for both group I and group II duty stations as it improved the reliability of the post adjustment index while at the same time adjusting the common weights to each duty station.

A single set of common weights is used in post adjustment calculations for all duty stations even though group II duty stations have one less of such weights (that of domestic services). Common weights are calculated based on expenditure data collected through staff expenditures surveys at the eight headquarters duty stations and Washington, D.C., at the beginning of each new round of COL surveys. However, in the past common weights for a new round were also estimated by updating the prior round's series of weights in case of too low response rates.

Common weights are calculated by averaging individual expenditure shares (percentages) at the basic heading or question level, the latter in case of multiple basic headings covered by an aggregated question, within the IA-H component, using the total staff population of the eight headquarters duty stations and Washington, D.C., as weights. The population is stratified into 45 domains defined by 9 categories of "duty station" (namely, Geneva, London, Madrid, Montreal, New York, Paris, Rome, Vienna and Washington, D.C.) and by 5 categories[19] of grade (P-1/P-2, P-3, P-4, P-5 and D-1/D-2). Two additional overall domains are also considered: "All duty stations" and "All grades". A coefficient of variation (CV) is calculated for each expenditure share in each domain and for the full population and common weights are considered sufficiently reliable if the CV of the expenditure shares across the full population is 25% or lower (a more stringent CV threshold, 15%, applies to expenditure shares at duty station or grade level, but it is not a requirement when the whole population is concerned). Table 14 below, presents the distribution of staff population by grade for each headquarter duty station and Washington, D.C.

[19] *Due to their relatively small population, P1 and D2 categories are merged into P2 and D1 respectively.*

Table 14: Breakdown of sample sizes by domain (duty station by grade) for the 2016 round

	P-1 / P-2	P-3	P-4	P-5	D-1 / D-2	Total
Geneva	334	720	733	476	173	**2436**
New York	264	646	752	370	136	**2168**
Rome	123	269	313	201	90	**996**
Vienna	131	311	384	243	51	**1120**
Paris	87	123	95	44	16	**365**
Washington D.C.	49	57	95	35	19	**255**
Montreal	48	77	95	53	19	**292**
London	32	32	33	30	17	**144**
Madrid	5	6	10	9	5	**35**
Grand Total	**1073**	**2241**	**2510**	**1461**	**526**	**7811**

The weighted arithmetic average of expenditure shares in each duty station across all grades and then across all duty stations produces the new set of expenditure shares from which the common expenditure weights are derived. Estimating common weights as average of expenditures shares rather than shares of average expenditures is a rather democratic approach in estimation, as it gives each staff expenditure shares, regardless of his/her grade or the general level of salaries at the duty station, the same importance in determining the common weights.

ANNEX VI: ISRP METHODOLOGY FOR COLLECTING MARKET RENT DATA FOR GROUP I DUTY STATIONS

The methodology for the collection of market rent data by the ISRP for group I duty stations, can be summarised as follows:

a. The annual ISRP/Eurostat rent surveys cover neighbourhoods considered as desirable by professional people in different cities. Such neighbourhoods are considered to be of good to very good quality, but not luxurious and, in this context, areas considered primarily diplomatic are avoided. Attributes such as access to shopping areas, international schools, security and commuting time to work sites are taken into consideration. Areas deemed unsuitable for United Nations common system staff are excluded, on the basis of recommendations approved by the Commission. Also, as part of the initial review of the ISRP methodology, lists of these neighbourhoods were circulated to representatives of administrations and staff federations for comments;

b. Rent data are collected through real estate agencies. Agencies who specialize in the areas and suburbs selected for the survey are canvassed and real estate agents, whose business is exclusively or mainly rented dwellings, are selected. The agents are asked for a minimum and maximum rent for each standard of dwelling, based on the agents' knowledge of the market. The computation of the average rent is based on the mid-points of the price ranges given by each real estate agent;

c. The ISRP survey teams are usually made up of two members: an ISRP staff member and a statistician from a national statistical office (NSO) who is knowledgeable about the local real estate market. Concerted efforts are made to secure an interview with the head of the real estate agency or someone who has extensive knowledge of the local housing market;

d. A simple questionnaire is used to collect rent data for types of dwelling, such as detached, semi-detached house (terraced), three-bedroom flat, two-bedroom flat; one-bedroom flat and studio, at varying sizes ranging from 30-40 m^2 for studios up to 190-220 m^2 for detached houses;

e. To ensure a consistency of approach across locations surveyed, the number of surveyors is kept to a minimum, so that the same interviewers survey different cities. Meetings of the surveyors are held both before and after the annual round of surveys, and written guidelines are provided.

Calculation of the rent index for duty station G

The following example provides explanations on the rent index calculation process for duty station G. The rent index is based on external rent data from ISRP, and from staff reported data in the 'housing' section of the staff expenditures questionnaire.

Table 15 below, summarizes the calculation of rent averages for each dwelling class based on ISRP historical rent data and longevity weights at duty station G. Yearly and average rents (across the 6 years) are shown for all six dwelling classes. Each average rent is calculated as a weighted average of yearly rents using the length of occupancy weights derived from staff reported data. The length of occupancy weights for years 2011-2016 are 11.2; 12.8; 14.5; 14.7; 21.5; and 25.5, respectively.

Table 16 summarizes the calculation of the rent index which is a comparison of average rents between duty station G and New York, based on ISRP rent data, and staff residential patterns at both duty stations.

The rent index for duty station G is calculated through the following sequence of steps;

Step 1: Calculation of rent averages

- For each dwelling class, historical rent data for years 2011-2016 are updated to 2016, using appropriate CPI series;
- The updated rents are averaged, using length of occupancy weights to obtain the average rent for the corresponding dwelling class. For instance, the average rent for a 3-bedroom flat at duty station G (= 3,777 units of the local currency of duty station G), is calculated as: 3,777 = (11.2 × 3,897) + (12.8 × 4,038) + (14.5 × 3,843) + (14.7 × 3,713) + (21.5 × 3,620) + (25.5 × 3,730);
- Average rents are converted into US dollar, using the prevailing exchange rate (0.988 units of local currency per US dollar). For instance, the average rent for a 3-bedroom flat at duty station G is $ 3,823 (= 3,777/0.988);
- A size adjustment factor is used to equalize average rent levels per unit area between the duty station and New York, for each dwelling class (see table 15). The factors for duty station G for the six dwelling classes (3-bedroom flat, 2-bedroom flat, 1-bedroom flat, studio, Non-detached house, and Detached house) are respectively: 1.25; 1.00; 1.00; 1.0; 1.25, and 1.24. For instance, the adjusted average rent for a 3-bedroom flat at duty station G is $4,779 =3,823 × 1.25 (although this figure is not shown in table 15, it is the one used in the calculation of the rent parity

between the duty station and New York). The corresponding average rent for New York is $5,958.

Step 2: Comparison of the average rent for each dwelling class between duty station G and New York

- Rent parities for each dwelling class (ratios of adjusted average rents between duty station G and New York). These are equal to 0.8021; 0.7382; 0.7569; 0.7140; 1.7019; and 1.5433, respectively. For instance, the rent parity for a 3-bedroom flat between duty station G and New York is 0.8021 (=$4,779/$5,958);

- Rent parities are aggregated to produce a Laspeyers-type index, using quantity weights (percentage distribution of staff by dwelling class) derived from the staff expenditures survey conducted in New York. The quantity weights for New York are 8.16; 30.21; 31.30; 5.66; 7.55; and 17.12, respectively. The calculated Laspeyres index is 0.9585;

- The Paasche-type index is calculated by aggregating the inverse of the above rent parities using the quantity weights from duty station G (20.95; 27.83; 18.65; 4.48; 14.03; and 14.07). The calculated Paasche index is 0.8922.

Step 3: Computation of the Fisher-type rent index

- Final rent index is calculated as the geometric average of the two above-mentioned indices: $0.9247 = (0.9585 \times 0.8922)^{1/2}$.

Table 15: Calculation of external rent averages for duty station G

Year	Weighting Pattern %	3 bedroom flat		2 bedroom flat		1 bedroom flat		Studio		Non-Detached House		Detached House		Indices for the updating*
		Survey data	Updated to 2016	Survey data	Updated to 2016	Survey data	Updated to 2016	Survey data	Updated to 2016	Survey data	Updated to 2016	Survey data	Updated to 2016	
2011	11.2	3,950	3,897	3,084	3,043	2,113	2,085	1,406	1,387	5,225	5,155	6,520	6,433	104.6
2012	12.8	4,061	4,038	3,108	3,090	2,364	2,350	1,542	1,533	5,094	5,065	6,364	6,327	103.8
2013	14.5	3,867	3,834	2,961	2,935	2,178	2,159	1,372	1,360	4,913	4,871	6,400	6,345	104.1
2014	14.7	3,753	3,713	2,900	2,869	2,059	2,037	1,358	1,344	4,525	4,477	5,847	5,785	104.3
2015	21.4	3,624	3,620	2,873	2,870	2,138	2,136	1,414	1,413	4,173	4,169	5,218	5,213	103.3
2016	25.4	3,730	3,730	2,864	2,864	2,058	2,058	1,418	1,418	4,361	4,361	5,356	5,356	103.2
Totals			3,777		2,925		2,127		1,409		4,590		5,777	3,777

*Series: CPI (Dec2005=100)

Rents in local currency

Exchange rate: **0.988**

Table 16: Calculation of the rent index for duty station G

Duty station G	3 bedroom flat	2 bedroom flat	1 bedroom flat	Studio	Non-Detached House	Detached House	Total
Size adjustment factor	1.25	1.00	1.00	1.00	1.25	1.24	
Avg. rent US $	**3,823**	**2,961**	**2,153**	**1,426**	**4,646**	**5,847**	
Dwelling class weights	**20.95**	**27.83**	**18.65**	**4.48**	**14.03**	**14.07**	**100.0**
New York							
Avg. rent US $	**5,958**	**4,011**	**2,844**	**1,997**	**3,412**	**4,698**	
Dwelling class weights.	**8.16**	**30.21**	**31.30**	**5.66**	**7.55**	**17.12**	**100.0**
Laspeyres	0.8021	0.7382	0.7569	0.7140	1.7019	1.5433	**0.9585**
1/Paasche	1.2467	1.3546	1.3212	1.4005	0.5876	0.6480	**0.8922**
Fisher-Type Index							**0.9247**

ANNEX VII: FORMULA USED IN THE CALCULATION OF THE COST-OF-LIVING INDEX

The calculations of COL indices for all headquarters duty stations and Washington, D.C., use a modified Walsh formula. In determining the COL index, the following components are calculated:

a. A weighted geometric mean for the in-area (excluding housing) component;

b. A weighted arithmetic mean for the housing component;

c. An index for pension contribution;

d. An index for medical insurance; and

e. An out-of-area index.

These components are aggregated arithmetically using a modified Walsh formula which was approved by the Commission at its 30th session (New York, 31 July-25 August 1989), as reported in ICSC/30/R.7. Earlier than that time, the PAI was calculated using a Fisher-type index, whereby all expenditure components were aggregated within the constituent Laspeyres-type and Paasche-type indices. The switch between the Fisher-type index and modified Walsh formula was needed as a consequence of the decision of the Commission to approve the use of common expenditures weights in post adjustment calculations, which in turn was a response to, primarily, low response rates (or low staff populations in field duty stations) in household expenditure surveys, but also with respect to other problems commonly referred to as the "poverty trap" and "deferred consumption".

Although the geometric index used in the in-area (excluding housing) component presented above is somewhat similar to a Törnqvist index, rather than the "classic" Walsh index, it can still be called a modified-Walsh index, since Walsh had proposed in 1901 an index almost identical to the one referenced above.

The notion of the "modification" of the original Walsh index is to be interpreted in a dual manner as the original Walsh formula was first, partly adapted to account for common weights based only on staff expenditure data collected at headquarters duty stations and Washington, D.C., instead of using data from all duty stations involved in the comparisons, and secondly, it was further modified to incorporate the additive components of the PAI, namely housing, medical insurance, pension contribution, and out-of-area.

The modified Walsh formula used in the calculation of the PAI for group I duty stations is the following:

$$COLI_{DS} = A \prod_{i=1}^{m} P_i^{v_i} + H \sum_{j=1}^{n} t_j P_j + PC \frac{c}{c_o} + MI \frac{I}{I_o} + OA \frac{O}{O_0} \quad ,$$

For group II duty stations, the formula is slightly different due to the different aggregation of the housing component as well as to the reduced number of basic headings of the in-area (excluding housing) component.

$$COLI_{DS} = A \prod_{i=1}^{m-1} P_i^{v_i} + H \frac{h}{h_o} + PC \frac{c}{c_o} + MI \frac{I}{I_o} + OA \frac{O}{O_0}$$

Where

$COLI_{DS}$ = COL index for goods and services in the duty station, relative to New York

A = duty station in-area (excluding housing) weight for goods and services

m = number of basic headings of the in-area (excluding housing) component

n = number of basic headings of the housing component

P_i = price relativity corresponding to the i-th basic heading between the duty station and New York;

v_i = weight for the i-th basic heading in the in-area (excluding housing) component, where

$$v_i = \frac{W_i}{\sum_{j=1}^{m} W_j}$$

w = duty station adjusted weight for each basic heading accounting for local expenditure patterns

t_j = weight for the j-th basic heading duty station weight of the housing component

H = duty station weight for housing

h = housing costs in the duty station

h_o = housing costs in New York

PC = duty station weight for pension contribution

c = pension contribution at the time of the survey in the duty station

c_o = pension contribution at the beginning of the survey round (that is, date of the survey in New York)

MI = duty station weight for medical insurance

I = medical insurance premium in a duty station

I_o = medical insurance premium in New York

OA = duty station weight for out-of-area expenses

O = out-of-area index at the time of the survey in the duty station

O_0 = out-of-area index at the beginning of the survey round (that is, date of the survey in New York)

Finally, the PAI for the duty station is calculated as:

$$\boldsymbol{PAI_{DS} = COLI_{DS} \times Rebasing\ Factor}$$

Where

Rebasing Factor is the PAI for New York as of June 2016.

ANNEX VIII: THE RENTAL SUBSIDY SCHEME

A. Definition and purpose

The rental subsidy scheme is an important aspect of the common system compensation system that is fully integrated with the post adjustment system, with the purpose of ensuring a greater degree of parity in the ability of professional staff members to decent housing and helping alleviate some of the burden of unusually high rent by subsidizing rental costs for those staff members who pay a higher-than-average proportion of income on rent at a duty station. The scheme is designed to deal mostly with extreme situations, usually experienced by newcomers and staff members with large families. It is not designed to cover every staff member and should not be considered an integral part of the staff member's pay package.

Generally, for Group I duty stations, staff members are entitled to rental subsidy only for a limited number of years, after being transferred or assigned to the duty station. Under a special category of force majeure, other staff members may, under limited conditions, benefit from the scheme if they are forced to change dwellings due to circumstances beyond their control, such as demolition of the building, forced eviction for security or hygienic reasons, repossession by the landlord through judicial proceedings, or conversion of the dwelling from rental to co-operative or condominiums, etc. In the other hand, staff members in Group II duty stations are entitled to rental subsidy without any restrictions as to the duration of their assignment in the duty station.

The most salient features of the rental subsidy scheme are:

a. A threshold amount, based on rental subsidy thresholds determined by the ICSC, below which no subsidy is paid;

b. A maximum reasonable rent, determined by organizations at the duty station, beyond which no subsidy is paid;

c. A ceiling on the amount of subsidy payable. Specifically, the rental subsidy cannot be higher than 40 per cent of the rent;

d. The rental subsidy amount: equal to a fraction (up to 80 per cent) of the difference between the threshold amount and the rent (subject to the maximum reasonable rent and the number of years the staff member is at the duty station);

e. Reimbursement rates as per table 17 below:

Table 17: Reimbursement rates (percentages) by type of duty station and year

Year	Group I duty stations		Group II duty stations
	Newcomers	Force Majeure cases	
1	80	80	80
2	80	80	80
3	80	60	80
4	80	40	80
5	60	20	80
6	40	0	80
7	20	0	80
>7	0	0	80

Threshold amount

For each duty station, two percentage thresholds are calculated based on the average gross rent-to-income ratio (RIR): the threshold for staff members without spouse/single parent allowance (W/O) which is equal to RIR augmented by two per cent (= RIR + 2%), and the threshold for staff with spouse/single parent allowance (W) which is derived by dividing the W/O threshold by 1.06.

The final threshold amount for each eligible staff member is calculated by multiplying his/her net monthly remuneration (net base salary plus post adjustment) by the percentage threshold applicable to the duty station.

Maximum reasonable rent

Organizations determine the maximum reasonable rents, unique to each duty station, beyond which no subsidy is paid. This is usually done through various mechanisms that vary from duty station to duty station, but would, in general, involve consultations with staff members serving at the duty station or the ICSC secretariat or sometimes in reference to external data on market rents. A good practice (as is the case in several duty stations) is to determine such maximum reasonable rents on the basis of objective information collected from a sufficiently large pool of

reputable real estate agencies in the duty station, keeping in mind the neighborhoods where United Nations Professional staff normally live.

Rent subsidy ceiling

The amount of rental subsidy is restricted to not exceeding 40 per cent of the rent paid by the staff member or of the maximum rent level applicable to the duty station, whichever is lower. However, the ICSC may grant a waiver of this 40 per cent cap (W-40) for specific duty stations, mainly field duty stations, under exceptional circumstances, such as sudden increases in rents at a duty station. In these cases, the limit may be increased to 90 per cent or, in exceptional cases, be waived altogether by the ICSC Chairman. However, the 40 per cent cap will be reintroduced as soon as the circumstances that warranted its waiver no longer exist.

Implementation of partial thresholds

In establishing the final rental subsidy thresholds applicable to a duty station, the current practice ensures that an increase in net remuneration, arising from an increased multiplier, would not be offset by a reduction in rental subsidy. Therefore, when both the multiplier and rental subsidy thresholds increase as results from a new COL survey, partial rental subsidy thresholds are calculated to ensure that there is no loss in total net income (net remuneration plus rental subsidy) due to an increase in rental subsidy thresholds. On the other hand, when there is no increase in the multiplier, the lower of the two thresholds (new and existing) is implemented.

The implementation of partial thresholds follows an iterative procedure that compares the gain in income due to the higher multiplier, to the loss of income due to the actual thresholds directly calculated from the new survey, for the average staff member (P-4, step VI). If the difference is positive, meaning that there is no loss in total net income under the new thresholds, then these actual thresholds would be implemented. If the difference is negative, then the thresholds are lowered progressively until the highest level is reached for which this difference is positive.

B. Rental deduction

In instances when staff members serving at a duty station receive housing assistance from the Organization, a Government or a related institution, such staff members are subject to a rental deduction, as opposed to a subsidy, since their rent may be considerably below the market average. The deduction is calculated as follows:

a. An Individual rental deduction threshold, equal to 64 per cent of the Individual rental subsidy threshold is calculated;

b. The deduction is then calculated as 80 per cent of the difference between rent paid and individual rental deduction threshold calculated in (a).

Eligibility for rental deduction is determined from the declaration of staff on special HR forms. Staff members that are recruited or reassigned to a duty station should submit this form upon arrival at the duty station; otherwise, automatic rental deductions will occur whether or not housing assistance is provided.

C. Relationship of rental subsidy to post adjustment

The higher the general level of rents paid by staff at a duty station, the higher the threshold percentages for the duty station, and hence the lower the rental subsidy amounts received to staff members eligible for rental subsidy. Duty stations experiencing sustained increases in rent levels will therefore eventually see the higher cost of the housing component gradually absorbed in the post adjustment index. However, as the rent component is generally less than 25 per cent of the PAI, such increases in the PAI cannot be expected to be of the same order of magnitude as the increase in rent. Nevertheless, all things being equal, an increase in the PAI leads to a decrease in rental subsidy thresholds.

D. Calculations of rental subsidy thresholds

Actual rental subsidy thresholds are calculated based on staff members' responses in COL surveys conducted at the duty station. More specifically, rent and net remuneration data from staff members are used to calculate two thresholds for the duty station: one for staff members in receipt of spousal/single parent allowance (*ThW*), and one for those staff members without such allowance (*ThWO*).

The two duty-station-specific thresholds are calculated through the following steps, using the net remuneration and the gross rent paid by staff members at the duty station:

a. For each staff member a rent-to-income ratio (RIR_i) is first be computed as:

$$RIR_i = \frac{R_i}{NI_{iwo}}$$

where R_i is gross rent and NI_{iWO} is the net income of a staff with no dependents in the same grade and step;

b. An average rent-to-income ratio (*RIR*) is calculated over all staff members as:

$$RIR = \frac{\sum_i RIR_i}{N}$$

where *N* is the number of staff (respondents to the survey, after exclusion of non-eligible cases and outliers);

c. The threshold for staff members without spouse/single-parent allowance (*ThWO*) is calculated as: *ThWO = RIR + 2 percentage points;*

d. The threshold for staff members with spouse/single-parent allowance (*ThW*) is calculated as: *ThW = ThWO/ 1.06.*

E. Example of rental subsidy calculation

In the following example, rental subsidy is calculated for a P3 step V staff member without spouse/single-parent allowance, based in a field duty station for which the post adjustment multiplier (PAM) is equal to 35 and the percentage threshold is 18.

Parameters

- Threshold for duty station = 18%
- 80 per cent reimbursement level
- Monthly rent paid by staff member = $2,300
- Maximum subsidy (= 40 per cent of monthly rent) = $920
- PAM = 35

Is subsidy payable?

1. Determine staff member's monthly net remuneration:
   Monthly base salary (P-3 step V, W/O)[20]: $5,356
   1% of base salary: $53.56
   Multiplier: 35
   Post adjustment: $53.56 x 35 = $1,875 (rounded to the nearest dollar)

   Monthly net remuneration = (base salary) + (post adjustment)
   = $5356 + $1,875 = $7,231
2. Determine staff member's threshold rent = (monthly salary) * (threshold percentage)

[20] *As of 1 January 2017, the annual base salary for P3 step V without spouse/single-parent allowance is $ 64,273. Thus, monthly salary is equal to $5,356 (= $64273/12)*

= $7,231 × 18% = $1,202

3. Compare monthly rent to threshold rent: $2,300 vs $1,202
4. If monthly rent is lower than threshold rent, then no subsidy is payable to staff member.
5. If monthly rent is higher than threshold rent, then use difference to calculate subsidy: $2,300 > $1,202, so rental subsidy is payable.

Calculation of subsidy

1. Determine amount of rent in excess of threshold rent: $2300 – $1202 = $1,098
2. Apply the applicable percentage difference to the excess: $1,098 x 80 % = $878.4
3. Compare this amount with the maximum subsidy payable: $878.4 vs. $920
4. Subsidy = lower of the two amounts, i.e. $878.40 per month.

ANNEX IX: FREQUENTLY ASKED QUESTIONS

A. Margin Management

Background

Net base salary of UN professional staff is set with reference to salary levels in the US federal civil service (the comparator). Furthermore, the evolution of net remuneration in New York is subject not only to the cost of living in New York, but also the UN/US net remuneration margin, which is defined as the average ratio of UN/US remuneration after accounting for the cost-of-living differential between New York and Washington, D.C.

The current mechanism for margin management stipulates that the net remuneration of officials in the Professional and higher categories of the United Nations common system in New York should be within 10 and 20 per cent **higher** than that of officials in comparable positions in the comparator (US Federal civil service) in Washington, D.C., with a desirable midpoint of 15 per cent, over a period of time. In other words, the margin is expected to be within the 110-to-120 range with a desirable midpoint of 115.

Procedures are applied by the ICSC through the operation of the post adjustment system, to ensure that the margin remains close to the desirable midpoint of the specified range. More specifically, action is taken by the Commission whenever the calendar margin breaches one of the two pre-defined trigger levels as follows:

- When the calendar margin is projected to fall below 113 per cent, the lower threshold, the Commission would act through the post adjustment system, to grant a real salary increase in New York in order to bring the margin to 113. To maintain purchasing power parity of salaries across the system, this gain in purchasing power is extrapolated to all duty stations worldwide by scaling up their PAIs, which leads to salary increase for only those duty stations whose scaled-up PAIs exceed prevailing pay indices at the time of interim adjustments of post adjustment multipliers (every 4 months for group II duty stations; and every year for group I duty stations).; otherwise, the prevailing pay indices are maintained.
- In case of upward movement that would take the margin above 117 per cent, the upper threshold, the Commission is empowered by the General Assembly to take immediate action to freeze salaries of staff in New York until it is brought back within the specified range. To maintain purchasing power parity of salaries across the system, any resulting loss in purchasing power is extrapolated to all duty stations worldwide by scaling back their PAIs, further reducing the chances of salary increases or reducing the extent of

salary increases at the time of the next interim adjustment of multipliers (every 4 months for group II duty stations; and every year for group I duty stations).

- If the calculated margin falls within the specified margin range of 113-117, the margin management mechanism would have no impact on UN salaries.

Question 1

Does an increase in the US federal civil service salaries lead to an increase in UN common system salaries?

Answer

Not necessarily. This is because the link between salary movements in the two civil services (UN and US) is not direct but is manifested through the US/UN net remuneration management mechanism, which requires that the margin be kept within a range (between 113 and 117) through the operation of the post adjustment system. If it were to exceed 117, the Commission would impose a salary freeze in New York and scale back post adjustment indices of all other duty stations accordingly, in order to maintain purchasing power parity of salaries. If it were to fall below 113, the Commission would grant a salary increase for New York and scale up the post adjustment indices of all other duty stations accordingly, in order to maintain purchasing power parity of salaries. This would lead to salary increases in duty stations where the scaled up PAIs exceed the prevailing pay indices. There would be no salary increases where the updated PAIs are less than the prevailing pay indices by more than the scale-up factor.

If the calculated margin remains within the 113-117 range, then no special action would be required by the Commission. This means that the post adjustment classifications of all duty stations would be based exclusively on the normal operation of the post adjustment system, that is, according to the evolution of cost of living at the duty station.

Question 2

How are UN salaries adjusted when the calculated margin falls outside of the specified range? Illustrate with numerical examples

Answer

Let us assume that the margin falls below 113. Consequently, net remuneration in New York is increased by increasing the pay index (PI), that is PAM +100, to bring the margin to the level of 113. The resulting increase in the PAI is then extrapolated to the PAIs of all other duty stations,

through the rebasing factor (see Subsection III.C8). For instance, in 2017, the PI in New York was increased from 163.2 to 166.1 (1.78%) to bring the margin to 113. This required the PAI for New York to be increased by 2.04% as shown below. The adjustment is carried out in the following steps:

Step 1: Determine the increase in the NY PAI by bringing PAI to the PI level after the adjustment, as per the table below:

Table 1: Increase in the PAI for New York

New York	Before adjustment	After adjustment	Increase
PI	163.2	166.1	1.78%
PAI	162.8	166.1	2.04%

Step 2: The increase in PAI of 2.04% is then applied to PAIs of other duty stations taking into account the following scenarios:

Duty station A: PAI is lower than existing PI by more than 2.04 percentage points.
PI is not increased but difference between PAI and PI is reduced.

Duty station B: PAI is lower than existing PI by less than 2.04 percentage points.
Difference between PAI and PI is closed, the remainder increase is applied to PI.

Duty station C: PAI is equal to the existing PI
PAI and PI are increased by 2.04%.

Duty station D: PAI is higher than existing PI
PAI is increased by 2.04% and PI is brought up to the resulting PAI level.

The results are summarized in the table below.

Table 2: Pay indices and PAIs for the four duty stations

	Duty station A			Duty station B			Duty station C			Duty station D		
	Before	After	Increase	Before	After	Increase	Before	After	Increase	Before	After	Increase
PI	180.7	180.7	0%	180.7	183.7	1.65%	180	183.7	2.04%	180.7	184.7	2.21%
PAI	169	172.4	2.04%	180	183.7	2.04%	180	183.7	2.04%	181	184.7	2.04%

As the table shows, the PAIs of duty station were always increased due to the PAI increase in New York, but PI and net remuneration were correspondingly updated. However, the impact on

the PI and net remuneration depends on the relativity of the adjusted PAI to the PI in each individual situation.

B. Post Adjustment Indices and Multipliers

Background

For a given month, the ICSC generates two indicators: the post adjustment index (PAI) and the post adjustment multiplier (PAM).

- The PAI is first set at the date of the last cost-of-living survey (guaranteeing the parity or purchasing power of salaries relative to New York) and updated monthly to account for exchange rate fluctuations, local inflation, as well as inflation in the other PAI components.
- The PAM is set at a level that guarantees stability or net take-home pay (net base salary plus post adjustment minus pension contribution), which is paid either in local currency for group I duty stations, or in US dollars for field duty stations.

Another element frequently used in the terminology, although not published per se, is the pay index (PI) defined as PAM+100. It is used to express the PAM in the same scale as the PAI, in order to make them comparable.

Question 1

What are the expected outcomes of the annual post adjustment classification reviews of group I duty stations? How are the revised post adjustment multipliers determined?

Answer

The updated post adjustment indices are compared to the pay indices (PAM +100) that are adjusted for exchange-rate fluctuations alone. Under the current Commission-approved operational rules, real salary increases are granted to group I duty stations for which the updated PAI exceeds the prevailing PI (exchange rate-only adjusted PAM plus 100). Otherwise, the prevailing PI is maintained.

For instance, let us assume that for a given duty station, the updated PAI is 183.3 while the prevailing PI is 180.0, meaning that actual pay is below that warranted by the post adjustment index. Therefore, the new multiplier is 83.3, and there is a real salary increase of about 1.73% to align actual pay with the PAI. However, if the prevailing PI for this duty station is 185.6, this

means that the actual pay is higher than justified by the index. Therefore, the prevailing PAM (85.6) is maintained and there is no change in salary.

Question 2

The local CPI increased by 20 per cent last year, but our post adjustment hardly increased. Is there something wrong?

Answer

It is a common assumption that post adjustment should follow the movement of a local CPI. This assumption is not correct. There are three major aspects that must be considered before a reasonable comparison can be made between the movement of CPI and post adjustment index:

i. The local CPI relates only to the in-area component of the PAI. The out-of-area expenditures, pension contributions, medical insurance and, in some cases, rents paid in US dollars are not affected by the local CPI movement;

ii. The local CPI is based on local currency. Post adjustment is, however, based on the US dollar and as such the exchange rate of the local currency relative to the US dollar must also be taken into account;

iii. There may be a difference in the weighting pattern of the two indices, which reflects different consumption habits of the two groups (national population versus international staff).

Question 3

The post adjustment in the neighbouring country is much higher than ours, but I know that some items cost less there. Is there an error in our post adjustment?

Answer

The formula for calculating post adjustment is a complex one. Many items are priced in a place-to-place survey and the weight (relative importance) attached to each item could be different from one location to another. One must therefore consider all the facts to determine whether there is an error in the system.

The following are some of the factors that may account for differences in post adjustment between your country and other countries:

i. housing types and costs may not be the same;

ii. the currency in which rents and other housing costs are paid may be different i.e., local currency or US dollars;

iii. the calculated weight for housing may not be the same across countries;

iv. local currency movements of the countries against the US dollar may be different;

v. consumption items purchased in your country may not be the same or may not have the same weight as those bought in the other countries;

vi. there may be differences in the in-area/out-of-area proportions across countries.

All of the above factors and others need to be considered when comparing the post adjustment for two localities.

Question 4

Petrol doubled in price last month, as did many other items in the shops. Why hasn't the post adjustment increased?

Answer

The PAI is based on a complex formula of weights and average pricing which can dampen the effect of a rise in the price of one particular item. In most post adjustment indices, transportation has a weight of between 5 and 10 per cent. This includes the cost of local transportation, vehicle repairs, etc., as well as the price of fuel, which will probably have a weight of less than 1 per cent. Thus, doubling the price of petrol will only have a very small effect on the total index and this may not be sufficient to trigger an increase in post adjustment. Most individual items have small weights, so the prices of many items will have to rise before the post adjustment rises.

The average price for the group of items may not necessarily reflect the price movement of any one particular brand. Perhaps only three out of five brands increased in price, as the other two were in greater supply in the country. This, or any combination of reasons, may apply. These price changes do indeed affect your expenditure, but they take some time to have a measurable effect on the index.

Question 5

The continuous decrease of the post adjustment in the country during the past year(s) is

not understood by the UN staff members. Could you kindly explain the reasons for this decrease?

Answer

The decrease in post adjustment at a specific location can be caused by a number of factors, including the following:

i. Place-to-place surveys conducted at the duty station, the results of which could lead to a decrease or increase in both post adjustment index and multiplier. However, housing surveys cannot lead to a decrease in the post adjustment multiplier (hence remuneration), although they can lead to a decrease in the post adjustment index. In other words, housing surveys result in either an increase or status quo in remuneration, but never a decrease;

ii. Depreciation of the local currency will result in a reduction of local price averages when expressed in US dollars which could push the index downwards;

iii. Regular reviews of post adjustment can result in the decrease of the amount of post adjustment. These reviews take into account exchange rate changes and movement in the local CPI; and

iv. Post adjustment is occasionally consolidated into the net base salary on a "no-gain, no-loss basis", which means that a certain number of multiplier points of the post adjustment index are removed and added to the net base salary. In this case, although the post adjustment is reduced, net take-home pay pre- and post-consolidation should be approximately equal.

Question 6:

Under what circumstances does the Post Adjustment Index (PAI) differ from the Post Adjustment Multiplier (PAM)?

Answer

The PAI is the result of a place-to-place survey, a housing survey or the continuous updating of the results of one of these two surveys. The PAM should normally reflect the PAI at the time of implementation of place-to-place survey results except that, a reduction in PAM of less than 5% will not be implemented. This immediately creates a situation where the PAM will be retained at a higher level than the PAI. Another reason is that for Group II duty stations, the PAM is usually adjusted three times a year while the PAI is recalculated every month. The general system of

adjustments to the PAM is designed to reduce the frequency of changes in PAM for Group II duty stations. In these duty stations, the discrepancy between PAI and PAM usually favours the PAM and, therefore, staff members. For Group I duty stations the application of the 0.5% rule minimizes the differences between PAI and PAM, but these still do occur.