The Cost-Variation Index for 2019

This document is in line with the method for calculating the cost-variation indices applicable to the personnel budget (basic salary and stipend index and index for subsistence allowances and family benefits, Annex A1 II of the Staff Rules and Regulations 11th edition\(^1\)) approved in December 2006\(^2\) and with the method for calculating the materials budget cost-variation index approved in June 1996\(^3\).

The Finance Committee is invited to recommend, and the Council is invited to approve:

- a basic salary and stipend index of 1.05%, and a subsistence allowances and family benefits index of 0.68% (bringing the overall cost-variation index for the personnel budget to 1.02%, including the applicable indexation for home leave of 2.35%);
- a materials budget cost-variation index of 2.64%;
- an overall cost-variation index of 1.83% (by which Member States’ contributions will be indexed).

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1 Document CERN/FC/5155-CERN/2730
3 Document CERN/FC/3881
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I. METHOD OF CALCULATION
Method of Calculation

In accordance with the rules and procedures decided by the Council, the latter decides annually on the cost-variation indices applicable to the personnel budget, to the materials budget and to interest and financial costs. The rules applicable to the calculation of these indices are set out below.

1. COST-VARIATION INDICES FOR THE PERSONNEL BUDGET

1.1. BASIC SALARY AND STIPEND INDEX (ANNEX A1 II A OF THE STAFF RULES AND REGULATIONS)

Basic salaries and stipends are reviewed annually by the Council using the calculated basic salary and stipend index as a guide. The purpose of the review is to protect basic salaries and stipends from erosion of purchasing power resulting from an increase in the cost of living. The annual adjustment decision enters into force on 1 January of the following year.

In this context it is recalled that, in a resolution dated 15 December 2000 which concluded the 2000 five-yearly review, the Council decided:

“that, with a view to maintaining the competitiveness of CERN salaries and in parallel to increasing flexibility of the career structure, the Council will use its best efforts to adjust annually the salary scale in accordance with the guide provided for in Annex 1 of the Staff Rules”.

The basic salary and stipend index consists of two components:

1) the Geneva cost-of-living movement for the twelve-month period from August of the year preceding the current year to August of the current year (according to the data supplied by the Statistical Office of the Canton of Geneva, taking the index for the month of August in the year preceding the current year as base 100);

2) the average movements of the real net salaries of the civil servants of:
   - the Swiss Federal Public Service, and
   - the Member States whose regular contribution in the current year represents more than 2% of the Organization’s Budget, for the twelve-month period from June of the year preceding the current year to June of the current year (according to the data supplied by the Statistical Office of the European Communities, Eurostat, taking the index for June of the year preceding the current year as base 100).

The data for Switzerland accounts for 50% of the second component and the data for the other Member States determined according to the above criterion accounts for the other 50%, weighted by the number of those Member States’ nationals among the Organization’s personnel (according to the personnel statistics at 31 December of the year preceding the current year).
The basic salary and stipend index is thus calculated using the following formula:

\[
I = \frac{G_{\text{va}} \times (\text{CH} + \sum_{n=1}^{p} a_n s_n)}{2}/100
\]

- **I**: Basic salary and stipend index;
- **G_{\text{va}}**: Geneva cost-of-living movement (August-August);
- **CH**: Average movement of real net salaries of Swiss federal civil servants (June-June);
- **a_n**: Weighting for Member State n;
- **s_n**: Average movement of real net salaries of civil servants in Member State n (June-June);
- **p**: Number of Member States determined using the criterion specified in paragraph 1.1.2) above.

### 1.2. SUBSISTENCE ALLOWANCES AND FAMILY BENEFITS INDEX (ANNEX A1 II B OF THE STAFF RULES AND REGULATIONS)

Subsistence allowances and family benefits are reviewed annually by the Council using the Geneva cost-of-living movement as a guide. The purpose of the review is to protect subsistence allowances and family benefits from erosion of purchasing power resulting from an increase in the cost of living.

### 2. COST-VARIATION INDEX FOR THE MATERIALS BUDGET (CERN/FC/3881)

The materials budget cost-variation index consists of the following components:

1) the cost-variation index for goods, consumables and supplies, based on the capital goods index published by Eurostat (Luxembourg) and on the competitive positions index published by the OECD (Paris). The variations of these indices are applied to the relative share over three years of purchases made in the Member States concerned and are adjusted to take account of the changes in exchange rates;

2) the indices for electricity, heating gas and water, based on contractual changes in tariffs adjusted to take account of exchange rate fluctuations;

3) the cost-variation index for industrial services, based on the competitive positions index published by the OECD (Paris). The variations are applied to the relative share over three years of purchases in the Member States concerned and are adjusted to take account of the changes in exchange rates;

4) the indices for insurance and postal charges, subsistence payments to associated members of the personnel and other overheads, based on the contractual changes in tariffs adjusted to take account of the impact of exchange rate fluctuations and the Geneva cost-of-living movement index.

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4 In line with the Council decision in 1996 CERN/FC/3881 with the terminology updated to reflect the requirements of IPSAS and with the Financial Rules.
The following basic principles apply to exchange rates and to the calculation of the relative percentage of purchases:

- in order to express the cost-variation index in Swiss francs, the variation of the exchange rate of the national currencies with respect to the Swiss franc is applied to the change in the corresponding cost-variation indices;
- the relative shares of the supplies purchased from those Member States that together make up at least 90% of the total payments and outstanding commitments for supplies during the previous three years are used as weights and taken into account in the variation applied to the goods, consumables and supplies;
- the relative shares of the industrial services contracted from those Member States that together make up at least 90% of the total payments and outstanding commitments for industrial service contracts during the previous three years are used as weights and are taken into account in the variation applied to industrial services

3. COST-VARIATION INDEX FOR INTEREST AND FINANCIAL COSTS

The interest on loans is indexed according to the Geneva cost-of-living movement index.
II. CALCULATED COST-VARIATION INDICES FOR 2019
1. PERSONNEL BUDGET COST-VARIATION INDEX

1.1. BASIC SALARY AND STIPEND INDEX

The Geneva cost-of-living movement for the period August 2017 to August 2018 was 1.30%.

The movement of the real net salaries of the Swiss federal civil servants for the period June 2017 to June 2018 was 0.60%.

Eurostat publishes data for the ten\(^5\) Member States whose regular contribution in the current year represents more than 2% of the Organization’s budget. Their weighting for half of the second component for the reference period is as follows:

<table>
<thead>
<tr>
<th>Member State</th>
<th>Weight in %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>2.51</td>
</tr>
<tr>
<td>Belgium</td>
<td>4.92</td>
</tr>
<tr>
<td>France</td>
<td>45.51</td>
</tr>
<tr>
<td>Germany</td>
<td>8.06</td>
</tr>
<tr>
<td>Italy</td>
<td>13.94</td>
</tr>
<tr>
<td>Netherlands</td>
<td>3.19</td>
</tr>
<tr>
<td>Poland</td>
<td>3.42</td>
</tr>
<tr>
<td>Spain</td>
<td>7.43</td>
</tr>
<tr>
<td>Sweden</td>
<td>1.23</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>9.79</td>
</tr>
</tbody>
</table>

The movement of real net salaries of civil servants in the Member States between June 2017 and June 2018 was -1.10%, based on the October 2018 statistics provided by Eurostat.

Annex A shows that the basic salary and stipend index calculated in accordance with the method described in chapter I 1.1) above amounts to 1.05%.

1.2. SUBSISTENCE ALLOWANCES AND FAMILY BENEFITS INDEX

As mentioned in chapter I 1.2) above, the Geneva cost-of-living movement for the period between August 2017 and August 2018 was 1.30%. Considering that:

- the August 2014 to August 2015 Geneva cost-of-living movement was -1.20%,
- the August 2015 to August 2016 Geneva cost-of-living movement was 0.10%,
- the August 2016 to August 2017 Geneva cost-of-living movement was 0.50%,
- no index has been applied in any of the last three years,

a cumulative “memory” of -0.60% remains from previous years. When offset by this cumulative negative memory, the index for 2019 is 0.68%.

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\(^5\) According to the current Staff Regulations (which have been in force since January 2014) Eurostat calculates the global indicator on the basis of a sample of countries consisting of the following eleven Member States: Austria, Belgium, France, Germany, Italy, Luxembourg, Netherlands, Poland, Spain, Sweden and United Kingdom.
1.3. OVERALL PERSONNEL INDEX

The two indices together result in an overall personnel index of 1.02%, including the index for home leave shown in Annex C.

2. MATERIALS BUDGET COST-VARIATION INDEX

The materials budget is divided into the following four components:

1) Goods, consumables and supplies (as detailed in Annex B);
2) Electricity, heating gas and water;
3) Industrial services;
4) Insurance and postal charges, subsistence payments to associated members of the personnel and other overheads.

The amounts for the above components of the materials budget are as shown in the 2019 Draft Budget, except in the case of industrial services, for which the amount has been revised in accordance with document CERN/FC/6254/RA “Service contracts at CERN”.

The cost-variation indices computed as explained in chapter I 2.) above are as follows:

- 3.53% for goods, consumables and supplies. This index is the result of significant changes in the industry price indices in the relevant Member States in 2017, which were compounded by the evolution of the CHF/EUR exchange rate;
- 1.72% for electricity, heating gas and water. This includes the impact of the evolution of the CHF/EUR exchange rate;
- 2.47% for industrial services;
- 0.68% for insurance and postal charges, subsistence payments to associated members of the personnel and other overheads.

3. COST-VARIATION INDEX FOR INTEREST AND FINANCIAL COSTS

The Fortis bank loan has a fixed interest rate and is therefore not subject to indexation. No short-term loans are budgeted for 2019.

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6 Document CERN/SPC/1107-CERN/FC/6232-CERN/3362
III. CALCULATED OVERALL COST-VARIATION INDEX FOR 2019
Annex C shows the 2019 Draft Budget at 2018 prices broken down into the headings “Personnel”, “Materials” and “Interest and Financial Costs” and converted into 2019 prices taking into account the corresponding indices detailed in Chapter II above.

The movements under the “Personnel” heading are broken down into the following categories:

- Expenses affected by the basic salary and stipend adjustment, which are subject to a 1.05% increase as explained;
- Subsistence allowances and family benefits, which are both subject to the Geneva cost-of-living movement, reduced to 0.68% due to the facts explained;
- Home leave, which is subject to a 2.35% index, based on the Eurostat harmonised consumer price index for transport.

The various movements are shown in Column 2 and may be summarised as follows:

- an overall personnel budget cost-variation index of 1.02%;
- an overall materials budget cost-variation index of 2.64%.

Based on the breakdown of the 2019 Draft Budget and on document CERN/FC/6254/RA “Service contracts at CERN”, the above cost-variation indices for the personnel budget, the materials budget and interest and financial costs result in an overall cost-variation index of 1.83%.

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Document CERN/SPC/1107-CERN/FC/6232-CERN/3362
IV. PROPOSAL
The Finance Committee is invited to recommend and the Council is invited to approve:

- a basic salary and stipend index of 1.05%, and a subsistence allowances and family benefits index of 0.68% (bringing the overall cost-variation index for the personnel budget to 1.02%, including the applicable indexation for home leave of 2.35%);
- a materials budget cost-variation index of 2.64%;
- an overall cost-variation index of 1.83% (by which Member States' contributions will be indexed).
## Annex A – CALCULATION OF THE 2018 BASIC SALARY AND STIPEND INDEX

   - \(101.30\)

2. **Average movement of the real net salaries of Swiss federal civil servants**
   (June 2017 - June 2018)
   - \(100.60\)

3. **Average movement of the real net salaries of the civil servants of ten Member States**
   (June 2017 - June 2018)
   - \(98.90\)

<table>
<thead>
<tr>
<th>Member State</th>
<th>June 2017 - June 2018</th>
<th>Weight</th>
<th>Weighted movement</th>
</tr>
</thead>
<tbody>
<tr>
<td>Austria</td>
<td>99.60</td>
<td>2.51%</td>
<td>2.50</td>
</tr>
<tr>
<td>Belgium</td>
<td>99.20</td>
<td>4.92%</td>
<td>4.88</td>
</tr>
<tr>
<td>France</td>
<td>97.60</td>
<td>45.51%</td>
<td>44.42</td>
</tr>
<tr>
<td>Germany</td>
<td>100.70</td>
<td>8.06%</td>
<td>8.12</td>
</tr>
<tr>
<td>Italy</td>
<td>102.40</td>
<td>13.94%</td>
<td>14.28</td>
</tr>
<tr>
<td>Netherlands</td>
<td>101.30</td>
<td>3.19%</td>
<td>3.23</td>
</tr>
<tr>
<td>Poland</td>
<td>99.20</td>
<td>3.42%</td>
<td>3.39</td>
</tr>
<tr>
<td>Spain</td>
<td>96.80</td>
<td>7.43%</td>
<td>7.19</td>
</tr>
<tr>
<td>Sweden</td>
<td>100.60</td>
<td>1.23%</td>
<td>1.24</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>98.70</td>
<td>9.79%</td>
<td>9.67</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>98.90</strong></td>
</tr>
</tbody>
</table>

4. **Calculated basic salary and stipend index**
   - \(101.05\)

\[
I = \frac{Gva^*[CH+\sum_{n=1}^{p} a_n^{*} s_n]^2}{100} = \frac{101.3*[100.6+98.9]^2}{100} = 101.05
\]

1. Based on data for June 2017 to June 2018 received from Eurostat in October 2018

2. Basic salary and stipend index; \(p=10\), since ten Member States publish real net movements.

**Gva** Geneva cost-of-living movement (August-August).

**CH** Average movement of real net salaries of Swiss federal civil servants (June-June).

\(a_n\) Weighting for Member State \(n\).

\(s_n\) Average movement of real net salaries of the civil service of Member State \(n\) (June-June).
### Annex B – CALCULATION OF THE COST VARIATION INDEX FOR GOODS, CONSUMMABLES AND SUPPLIES

<table>
<thead>
<tr>
<th>Member State</th>
<th>Index of capital goods in national currencies (^1) ((2010=100))</th>
<th>Competitive positions based on national currencies (^2)</th>
<th>Average exchange rate of year</th>
<th>Change of national indexes applied to exchange rate variation of national currencies with respect to CHF</th>
<th>Percentage purchases (average of the years)</th>
<th>Weighted change of national indexes expressed in CHF by origin of purchases</th>
</tr>
</thead>
<tbody>
<tr>
<td>France</td>
<td>102.30</td>
<td>100.00</td>
<td>101.37</td>
<td>1.090</td>
<td>1.044</td>
<td>1.033</td>
</tr>
<tr>
<td>Germany</td>
<td>102.30</td>
<td>100.00</td>
<td>101.59</td>
<td>1.090</td>
<td>1.045</td>
<td>1.036</td>
</tr>
<tr>
<td>Italy</td>
<td>100.30</td>
<td>100.00</td>
<td>101.75</td>
<td>1.090</td>
<td>1.046</td>
<td>1.037</td>
</tr>
<tr>
<td>Netherlands</td>
<td>95.80</td>
<td>100.00</td>
<td>102.93</td>
<td>1.090</td>
<td>1.075</td>
<td>1.049</td>
</tr>
<tr>
<td>Poland</td>
<td>105.90</td>
<td>100.00</td>
<td>102.19</td>
<td>24.986</td>
<td>1.094</td>
<td>1.068</td>
</tr>
<tr>
<td>Hungary</td>
<td>102.20</td>
<td>100.00</td>
<td>101.80</td>
<td>0.350</td>
<td>0.359</td>
<td>1.074</td>
</tr>
<tr>
<td>Spain</td>
<td>104.50</td>
<td>100.00</td>
<td>101.57</td>
<td>1.090</td>
<td>1.164</td>
<td>1.035</td>
</tr>
<tr>
<td>Switzerland</td>
<td>94.20</td>
<td>100.00</td>
<td>100.94</td>
<td>1.000</td>
<td>0.999</td>
<td>1.009</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>101.90</td>
<td>100.00</td>
<td>106.53</td>
<td>1.335</td>
<td>1.268</td>
<td>1.012</td>
</tr>
</tbody>
</table>

**TOTAL** 103.53

**INDEX (%)** 3.53
Annex C – CONVERSION OF THE 2019 DRAFT BUDGET (CERN/FC/6232) FROM 2018 TO 2019 PRICES (IN MCHF), ROUNDED TO 5 kCHF

<table>
<thead>
<tr>
<th>PERIOD</th>
<th>2019 Draft Budget at 2018 Prices</th>
<th>Change due to Cost-Variation</th>
<th>2019 Draft Budget at 2019 Prices</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MCHF</td>
<td>%</td>
<td>MCHF</td>
</tr>
<tr>
<td><strong>PERSONNEL</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 Expenses affected by the basic salary and stipend adjustment</td>
<td>544,545</td>
<td>1.05</td>
<td>5,720</td>
</tr>
<tr>
<td>2 Family allowances</td>
<td>25,905</td>
<td>0.68</td>
<td>0.175</td>
</tr>
<tr>
<td>3 Other expenses affected by the cost-of-living index</td>
<td>29,230</td>
<td>0.68</td>
<td>0.200</td>
</tr>
<tr>
<td>4 Home leave</td>
<td>1,980</td>
<td>2.35</td>
<td>0.045</td>
</tr>
<tr>
<td><strong>TOTAL PERSONNEL</strong></td>
<td>601,660</td>
<td>1.02</td>
<td>6,140</td>
</tr>
<tr>
<td><strong>MATERIALS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Goods, consumables and supplies</td>
<td>303,910</td>
<td>3.53</td>
<td>10,740</td>
</tr>
<tr>
<td>6 Electricity, heating gas and water</td>
<td>21,840</td>
<td>1.72</td>
<td>0.375</td>
</tr>
<tr>
<td>7 Industrial services (services, repairs and temporary labour)</td>
<td>181,785</td>
<td>2.47</td>
<td>4.495</td>
</tr>
<tr>
<td>8 Associated Members of Personnel and other overheads (incl. insurance and postal charges)</td>
<td>111,455</td>
<td>0.68</td>
<td>0.760</td>
</tr>
<tr>
<td><strong>TOTAL MATERIALS</strong></td>
<td>618,990</td>
<td>2.64</td>
<td>16,370</td>
</tr>
<tr>
<td><strong>INTEREST and FINANCIAL COSTS</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Interest on Fortis bank loan</td>
<td>7,325</td>
<td>0.00</td>
<td>0.000</td>
</tr>
<tr>
<td>10 Short-term interest</td>
<td>0,000</td>
<td>0.00</td>
<td>0.000</td>
</tr>
<tr>
<td>11 In-kind (FIPOI interest 0%)</td>
<td>2,045</td>
<td>0.00</td>
<td>0.000</td>
</tr>
<tr>
<td>12 Other financial expenses</td>
<td>0,965</td>
<td>0.00</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>TOTAL INTEREST AND FINANCIAL COSTS</strong></td>
<td>10,335</td>
<td>0.00</td>
<td>0.000</td>
</tr>
<tr>
<td><strong>GLOBAL INDEX</strong></td>
<td>1,230,985</td>
<td>1.83</td>
<td>22,510</td>
</tr>
</tbody>
</table>

1 Basic salaries, stipends, non-residence allowances, overtime, shift work, contract terminations, installation, social contributions, progressive retirement programme allowances, special contributions for the Pension Fund and unemployment benefits.

2 Excluding internal taxation.

3 Removal, education, contribution to health insurance for pensioners and contribution to Long-Term Care.

4 Travel expenses are indexed on 1 March each year, in accordance with the Eurostat harmonised consumer price index for transport as at December of the previous year.

5 Geneva cost-of-living movement.