C 2021/3 Web Annex 10:

Cost increase methodology and estimates

NF145e (NE576 Sup.1)

Methodology and context

1. The methodology for calculating cost increases in the PWB 2022-23 follows the approach previously approved by the Finance Committee, Council and Conference. The cost increase estimates cover the recosting of Regular Programme inputs from 2020-21 to 2022-23 levels to deliver the Programme of Work, namely for personnel services and goods and services. The cost increase estimates are developed on a biennial basis from: actual cost adjustments that are occurring in the current biennium (*biennialization*); projected adjustments to unit costs that will take effect in the next biennium (*inflation*); and the lapse factor on established posts.

2. *Biennialization* is the financial effect in 2022-23 of staff cost adjustments that are occurring in the 2020-21 biennium. Biennialization is the consequence of two factors:

a) under- or over-budgeted costs in the current biennium (2020-21) - that is where actual staff costs per work month are at variance from the budgetary estimates prepared two years earlier.

b) cost adjustments that took or will take effect at some point during the 2020-21 biennium, whether budgeted or not, that have to be applied to a full 24-month period in the 2022-23 biennium.

3. As such, biennialization objectively reflects the financial impact of events that have already taken place or are expected to take place before the implementation of the 2022-23 budget. Most changes in staff costs implemented during the biennium are the results of the recommendations and decisions by the International Civil Service Commission (ICSC) and the General Assembly of the United Nations and the actuarial valuations of the staff-related liabilities. The movements of the US dollar against local currencies in those decentralized offices where staff costs incurred in national currencies are funded by the US dollar assessments also contributed to some extent to biennialization.

4. Accordingly, the financial implications of biennialization are essentially a matter of fact, not conjecture or long-range planning. The estimates for the current service cost of after-service staff benefits are based on the latest results of the actuarial valuation for the staff-related liabilities schemes (After-service Medical Coverage, Termination Payments Fund, Separation Payments Scheme, and Compensation Plan Reserve Fund). An actuarial valuation is carried out every year.

5. *Inflation* represents the cost impact in 2022-23 of those adjustments that are expected to take effect at various points in the next biennium. Inflation estimates for salaries, pension fund contributions and allowances are derived from the most recent external forecasts (consumer price index and nominal wage index) by the Economist Intelligence Unit (EIU), published data of authoritative bodies such as the ICSC and of independent verification.

Cost increases estimates

6. The cost increases for the proposed 2022-23 net appropriation are estimated at USD 15.5 million for personnel services. *Biennialization* is estimated as a moderate increase of USD 1.4 million and *inflation* an increase of USD 14.1 million.

7. The inflation for total goods and services is estimated at USD 4.6 million, assuming the same expenditure pattern as in the last biennium. These costs can be absorbed within the proposed net appropriation through the continued efforts to maximize efficiency and innovation.

Personnel services

8. Personnel services comprise all staff costs, including salaries, pension fund contributions, dependency allowances, social security and other staff-related entitlements and after-service benefits for both the professional and general service staff categories. The changes in personnel services costs derive from decisions regarding the United Nations common system, as reviewed and determined by the International Civil Service Commission and the United Nations General Assembly, independent verification, and other external factors such as prevailing market exchange rates. This last element is relevant to the estimation of the US dollar assessment for staff costs in those decentralized offices where local currencies fluctuate against the US dollar.

Personnel services – biennialization factors

9. *Biennialization*, estimated at USD 1.4 million for the cost of personnel services, can be broken down as follows:

a) The lower-than-budgeted increase in the professional staff net remuneration in the headquarters and the decentralized locations, the latter due to the appreciation of the US dollar and the postponement of the place-to-place (cost-of-living) survey due to the COVID-19 pandemic led to USD 0.3 million savings in the total net remunerations.

b) The higher basic medical insurance plan (BMIP) cost mainly attributable to the change in the premium formula, and the appreciation of the US dollar, resulting in a biennialized increase of USD 1.5 million in 2022-23.

c) The unchanged level of entitlement travel costs in anticipation that the travel restrictions for the COVID-19 pandemic will be lifted by 2022.

d) The USD 5.1 million savings for other elements mainly for recruitment and transfer, dependency allowances, and rental subsidy.

e) The higher-than-budgeted overall increase in the current service costs of the after-service staff benefits, based on the actuarial valuations as at 31 December 2019,[1] resulting in a biennialized increase of USD 5.3 million in 2022-23.

Personnel services – inflation factors

10. An inflationary cost increase of USD 14.1 million is foreseen for personnel services, mostly from the application of modest inflation rates based on the lower-end of the EIU consumer price index (CPI) projections to the net remuneration and pension, and no increase for other staff cost components as follows:

a) A modest increase of 0.7 and 1.1 percent applied to professional staff net remuneration at headquarters in 2022 and 2023 each year taking into consideration the EIU CPI forecasts for Italy (0.8 percent and 1.2 percent for 2022 and 2023 respectively) and the time lag before the outcome of the next cost-of-living survey planned for late 2021 becomes available by August 2022.

b) A modest increase of 1.3 and 1.5 percent applied to general service staff net remuneration at headquarters in 2022 and 2023 each year, lower than the latest EIU average nominal wage index at 1.3 and 1.8 percent as per the current methodology in place for interim adjustments between the comprehensive salary surveys, the schedule of which is unknown for the next survey.

c) Modest inflationary increases projected for professional and general service net remunerations in decentralized locations, taking into account factors such as inflation and recent patterns of increases. The approach employed the lower consumer price indexes in the region or country where FAO has large offices, ranging from 1.0 percent increase for non-headquarters FAO offices in Europe and Central Asia to a maximum of 4.0 percent increase in Africa and Near East and Latin America and the Caribbean regions. For example, the average inflation rates applied for the Africa region are 4.0 percent for 2022 and 2023 while the EIU CPI forecasts for Ghana, where FAO has a regional office, are around 9 percent each year. The same applies to the Near East region where the inflation rates for Egypt where the regional office is located are projected at around 6 percent in 2022 and 2023.

d) No increase for the basic medical insurance plan (BMIP), taking account of the cost containment efforts continuously pursued by the Organization and the insurer.[2]

e) No increase for education grant taking into account the decision of the UN General Assembly to defer its consideration of the ICSC recommendations on the revised sliding reimbursement scale and the boarding lump sum and its request to the ICSC to provide a detailed review, taking into consideration a maximum amount per household.[3]

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[1] FC 180/4

[2] FC 164/5

[3] A/RES74/255A-B II C; FC 180/8 paragraph 9; CL 163/3-WA2 paragraph 5.f); FC 178/7 paragraphs 7-8

f) No increase is applied for all other entitlements and allowances.

g) No increase is anticipated for the current service cost of after service staff benefits in the future actuarial valuations. The estimates in the final actuarial valuation reports as at 31 December 2021 and 2022 will be the basis for 2022-23 expenditures. This remains a high-risk area to be managed during implementation.

11. The FAO governing bodies have been advised that staff costs are difficult to predict despite the refined information systems used to analyse current cost patterns and quantify trends and this leads to variances from the budgetary estimates prepared in advance of the budget implementation.[4]

12. For example, as noted above in point g), the actuarial variations at end-2021 and 2022 could introduce significant variances from the current assumptions. Similarly, inflation rates and exchange rate fluctuations for non-headquarters locations where the expenses in local currency are funded by the US dollar assessments are difficult to predict. Any variance must be managed within the budgetary appropriation for the biennium, requiring programme adjustments during the implementation cycle to manage these unbudgeted costs, and adjustments are reflected under biennialization for the following biennium.

Goods and services – expenditure breakdown

13. *Goods and services* include other non-staff human resources (e.g. consultants), travel, general operating expenses, contracts and other (e.g. furniture and equipment). The inflation is estimated at USD 4.6 million, equivalent to a 1.1 percent increase in the biennium which is significantly lower than the EIU CPI forecasts for the World (3.4 percent and 3.2 percent for 2022 and 2023 respectively) and Italy (0.8 percent and 1.2 percent for 2022 and 2023 respectively). The expenditure pattern for goods and services is assumed to be similar in 2022-23 to the current biennium. The inflation estimated at USD 4.6 million can be absorbed within the proposed net appropriation through the continued efforts to maximize efficiency and innovation.

14. The evolution of the estimated cost increases for 2022-23 is tabulated by main element in *Table 1*.

[4] FC 113/10 Treatment of Staff Cost Variance

Table 1: Breakdown of 2022-23 cost increases by cost element and location (USD million)

	Proposed Net Appropriation at 2020-21 Cost	Cost Increases Biennialization	Cost Increases Inflation	Total Cost Increases	Cost Increase Percentage Biennial	Proposed Net Appropriation at 2022-23 Cost
	a	b	c	d = b+c	e = d¸a	f = a+d
Personnel Services						
Professional Staff						
Net Remuneration – headquarters	219.3	(1.1)	2.5	1.4	0.6%	220.7
Net Remuneration – non-headquarters	135.1	(1.5)	6.1	4.6	3.4%	139.7
Pension	86.4	0.3	1.8	2.1	2.4%	88.5
Education Grant	29.2	(0.7)	0.0	(0.7)	(2.4%)	28.5
Entitlement Travel	13.6	0.0	0.0	0.0	(0.1%)	13.6
Medical Cost	7.9	3.9	0.0	3.9	48.9%	11.8
Other Allowances - Dependency Allowance - Recruitment and Transfer Allowances - Rental Subsidy - Danger Pay - Representation Allowance	47.6	(3.2)	0.0	(3.2)	(6.7%)	44.4
Total Professional Staff	**539.1**	**(2.5)**	**10.5**	**8.0**	**1.5%**	**547.2**
General Service Staff						
Net Remuneration – headquarters	66.8	0.9	1.1	2.0	3.0%	68.9
Net Remuneration – non-headquarters	42.0	1.6	1.9	3.5	8.3%	45.5
Pension	21.4	0.5	0.6	1.1	5.0%	22.5
Medical Cost	16.2	(2.4)	0.0	(2.4)	(14.8%)	13.8
Other Allowances - Dependency Allowance - Danger Pay	11.7	(1.9)	0.0	(2.0)	(16.7%)	9.7
Total General Service Staff	**158.2**	**(1.4)**	**3.6**	**2.2**	**1.4%**	**160.4**
Personnel Services	**697.3**	**(3.8)**	**14.1**	**10.3**	**1.5%**	**707.6**
After Service Benefits	66.8	5.3	0.0	5.3	7.9%	72.0
Total Personnel Services	**764.1**	**1.4**	**14.1**	**15.5**	**2.0%**	**779.6**
Goods and Services						
- Consultant - General Operating Expenses - Contract - Travel - Non-Expendable Procurement - Supplies and Materials						
Total Goods and Services	**430.1**	**-**	**-**	**0.0**	**0.0%**	**430.1**
Total Income	**(204.1)**	**-**	**-**	**0.0**	**0.0%**	**(204.1)**
Grand Total	**990.1**	**1.4**	**14.1**	**15.5**	**1.6%**	**1 005.6**

Lapse factor

15. The lapse factor consists of a reduction in the budgetary provision for the estimated cost of established posts to account for the fact that some of them will be vacant for some time as a result of staff movements. The lapse factor methodology approved by the Council at its 107th Session as recommended by the External Auditor and endorsed by the Finance Committee for application in the 1996-97 budget, has been consistently applied to all budgets since then, that is:

The lapse factor is a budgetary devise aimed at reducing the budgetary provision for Regular Programme established posts to take into account the effects of vacancies arising from separations and usual delays in recruitment, including recruitment to new posts, on salaries and common staff costs expenditure. A Regular Programme established post is considered vacant when there is no incumbent against either the established post or against another post formally declared to be funded from the established post.

16. The parameters which determine the lapse factor are monitored and the resulting values of each parameter are indicated in the Programme of Work and Budget in order to derive the proposed lapse factors for each biennium.

17. In accordance with this methodology, several new posts have been costed in the programme budget for only part of the 2022-23 biennium, where the expected incumbency period is less than the full biennium. The resulting reduction to staff costs is shown in C 2021/3, *Table 5*.

18. The methodology for ongoing posts is based on three factors:

a) staff turnover rates, as measured through separations;

b) standard recruitment times to reflect historical turnover rates and changes in the policy as might affect current recruitment practices;

c) the extent to which separations are foreseen, so that recruitment action can be anticipated and the effective lead time thus reduced.

19. In accordance with the established methodology, a five-year moving average (i.e. 2016 through 2020 inclusive) has been applied to calculate staff turnover rates. This results in an average turnover rate of 5.92 percent for professional staff and 5.77 percent for general service staff. Compared to the five-year moving average used in the PWB 2020-21, the turnover rate has slightly decreased for professionals by 0.38 percent and for general service by 1.71 percent.

20. The standard recruitment lead times applied are as follows: professional 26 weeks and general service 22 weeks. The extent of separations which can be foreseen is derived from a review of the reasons for separation, the results of which are summarized in *Table 2*.

Table 2: Extent to which recruitment action can be foreseen

Categories of Separations	Professional		General Service	
	Percent of population	No. of weeks foreseen	Percent of population	No. of weeks foreseen
Foreseen separations (e.g. mandatory requirements)	16	26 or more	9	22 or more
Foreseen separations for a limited period (e.g. resignation with notice)	65	10	56	7
Unforeseen separations	19	0	35	0

21. These results have been applied to calculate the 2022-23 lapse factor of 1.75 percent for professional and 1.78 percent for general service costs respectively. Compared to the percentages used in 2020-21, the lapse factor has slightly increased for the professional and decreased for general service categories from 1.52 percent and 1.92 percent, respectively. Given the overall minimal change, the new lapse factor has a marginal impact on staff costs of USD 1 million when applied to all locations except country and liaison offices, which are exempt.