

## FINANCE COMMITTEE

### Hundred and Twenty-sixth Session

Rome, 11 – 15 May 2009

### 2008 Actuarial Valuation of Staff-Related Liabilities

#### EXECUTIVE SUMMARY

- i) This document updates the Finance Committee on the results of the actuarial valuation of the Organization's liability for staff-related plans at 31 December 2008.
- ii) Section *I. Introduction* describes the four plans, which provide distinct benefits to staff either on completion of service or as a result of work-related illness or injury. It also explains the purpose of annual actuarial valuations.
- iii) Section *II. Results of Actuarial Valuations* provides the key assumptions used in the actuarial valuations for the last three years and provides a comparative illustration of the actuarial liabilities by plan as at 31 December 2008, 2007 and 2006, respectively. The increase in the overall liability is mainly due to an increase in the After Service Medical Coverage (ASMC) liability and the key drivers of changes in this liability are the introduction of an "age grading" assumption that future claim costs will increase with age; the strengthening of the EUR against the USD; updates to the mortality assumptions to reflect expected increases in longevity; and, the introduction of an assumption that the current cost sharing arrangement between FAO and retirees will be retained.
- iv) Section *III. Increase in Total Liability: 2003 – 2008* illustrates the increase in the values of all liabilities from 2003 – 2008 and summarizes the key reasons for these increases. The analysis highlights that the overall increase relates primarily to the Terminal Payment Fund (TPF) and ASMC. The TPF increased primarily due to the revision in assumption that more staff members than previously estimated will receive repatriation benefits. From 2003 to 2008, the ASMC increased USD 547.6 million or 166% over the same period primarily as a result of the strengthening of the EUR against the US Dollar (USD 212.1 million or 39% of the increase); the introduction of an "age grading" assumption (USD 210.6 million or 38% of the increase); and, greater longevity in the mortality assumptions (USD 96.2 million or 18% of the increase).
- v) Section *IV. Current Financial Situation* provides the total recorded, unrecorded and the

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net balance sheet liabilities for the Plans based on the actuarial valuations, as well as the total funded and unfunded liabilities for all Plans as at 31 December 2008, 2007 and 2006, respectively. The total liability of the four plans as at 31 December 2008 was USD 1,042.2 million of which USD 787.4 million was unfunded.

vi) Section **V. Accounting and Funding** provides a comparison of the annual Current Service Costs for all plans for the three years ended 31 December 2009 and explains the reason for the USD 6.6 million increase in 2009 based on the 2008 actuarial valuation. Current Service Cost for 2009 is USD 17.7 million. This section also discusses the funding requirements for the After-service Medical Coverage plan and provides a comparative illustration of the required funding amortization based on the most recent actuarial valuation as compared to the actual funding level authorized by Conference. The annual past-service ASMC funding amortization to fully fund the liability by 2027 amounts to USD 50.8 million, while the funding approved by Conference for 2008 and 2009 amounts to USD 7 million each year giving a shortfall of USD 43.8 million for each year. Finally, the section discusses the funding requirements for the Terminal Payments Fund based on the most recent actuarial valuation.

vii) Section **VI. Other Funding Considerations** provides key considerations for any plan to fully fund the ASMC liability. In particular, this section discusses the significant EUR component of the liability noting that while the ASMC is reported in US Dollars, approximately 67% of the liability is EUR. Consequently, to have a clearer view of the liability with an aim to funding it requires valuing it in its underlying currencies. At 31 December 2008, the value of the ASMC is estimated at EUR 460 million and USD 220 million. This section also highlights that the valuation for financial reporting purposes follows United States actuarial standards, which assume that the entire amount of the liability will be funded by FAO; however, because of the cost sharing arrangement between FAO and all health care plan participants, approximately 20% of the retiree health claims are in fact funded through a portion of active staff contributions. This source of funding amounts to approximately USD 217.0 million of the actuarial liability at 31 December 2008 and USD 19.4 million of the combined annual amounts of Current Service Cost and Past Service Amortization. Therefore, including the active staff contribution, the amount of the ASMC liability at 31 December 2008 and combined annual Current Service Cost and Past Service Amortization from 2009 required to be funded by FAO are USD 661 million and USD 49.1 million, respectively. This section also highlights the challenges to maintaining the Organization's current cost sharing ratio with active and retiree staff. Finally, the section provides a schedule that shows the impact on the value of the liability, current service cost and funding requirements both with and without the active staff subsidy.

viii) Section **VII. Comparison with other UN Organizations** provides the Committee with an updated table comparing the status of the After-service Medical Coverage liabilities at various UN agencies.

#### **Action Requested**

The Finance Committee is requested to consider the contents of this paper in conjunction with its funding recommendation for the ASMC to be included in the PWB 2010-11.

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## Introduction

1. FAO has four staff-related plans (the “Plans”) that provide benefits to staff members either upon completion of service or as a result of work related illness or injury. The Plans are as follows:

- **Separation Payments Scheme (SPS)** – Within the UN common system, the terms and conditions of staff in the General Service category are established to reflect the best prevailing local employment conditions (the Flemming principle). Accordingly the General Service category staff at HQ are entitled to receive a separation payment equivalent to 1/12<sup>th</sup> of the staff member’s Final Net Annual Salary Rate multiplied by years of service between 1 January 1975 and 31 December 1990, plus 1/13.5<sup>th</sup> of the staff member’s Final Net Annual Salary Rate multiplied by years of service after 1 January 1991.
- **Termination Payments Fund (TPF)** – The Termination Payment Fund comprises benefits payable to staff upon separation from service, specifically Repatriation Grant, Repatriation Travel and Removal, Commutation of Accrued Leave, Termination Indemnity, and where applicable, Death Grant.
- **After-service Medical Coverage (ASMC)** – is a medical insurance plan for retired staff and their families meeting certain eligibility criteria. The Basic Medical Insurance Plan provides partial reimbursements for certain hospital, physician, dental, psychiatric, physical therapy, hospice and eyeglass charges subject to various limits and exclusions. The cost of the Basic insurance is nominally shared between the retired staff member and the Organization. Refer to paragraph 18 for further details of ASMC cost sharing.
- **Compensation Plan Reserve Fund (CPRF)** – The Compensation Plan provides benefits subject to certain limitations to staff members (including, inter alia, consultants and persons holding Personal Service Agreements) in the event of injury, illnesses, or death attributable to the performance of official duties. The benefits include annuities or lump-sum payments (supplementing the UN Pension benefits, if applicable) in the event of death or disability, and reimbursement of reasonable medical, hospital and directly-related expenses.

2. On an annual basis, FAO obtains from an external actuarial firm a valuation of all the Plans in order to:

- a) determine the Organization’s overall liabilities associated with the Plans;
- b) quantify recommended rates of contributions to fully fund the liabilities;
- c) obtain information necessary to meet financial reporting requirements; and,
- d) calculate the current service cost which is included in the Programme of Work and Budget.

The previous actuarial valuation of *all Plans* reported to the Finance Committee was that as at 31 December 2007<sup>1</sup>. This document refers to the results of the actuarial valuation as at 31 December 2008 and the current financial situation and accounting and funding of the Organization’s liability with comparative information as at 31 December 2008, 2007 and 2006.

## Results of Actuarial Valuations

3. The actuarial valuation of the Plans requires FAO to make certain assumptions in order to best estimate the cost of providing these benefits to its staff members. Such assumptions are both demographic (e.g. mortality rates/estimates, rates of staff member turnover, claim rates under medical plans, etc.) and financial (e.g. discount rate, future salaries and benefits, future medical

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<sup>1</sup> FC 122/9 refers.

costs, etc.). Owing to changes in factors, both internal and external, FAO, together with the actuaries, performs an annual review of the assumptions used in the actuarial valuation and adjusts them where it is deemed necessary for a more accurate calculation of the Plan liabilities. Like most actuarial calculations, annual valuations are subject to significant uncertainty and unpredictability. In particular, the values of FAO's liabilities for the Plans are highly sensitive to changes in the EUR-US Dollar exchange rate, the discount rate, and medical claims and anticipated medical inflation. The key assumptions used in the valuations of the Plans for 2008, 2007 and 2006, respectively, are presented below in Table 1.

**Table 1**

<u>Key Assumptions</u>	<u>2008</u>	<u>2007</u>	<u>2006</u>
<b><u>Economic</u></b>			
1 Discount rate	5.6%	5.6%	5.0%
2 Medical cost inflation rate	7% during 2009, 6% during 2010, and 5% thereafter	5.0% per year	5.0% per year
3 General inflation rate	2.5% per year	2.5% per year	2.5% per year
4 ASMC exchange rate for claims costs (4-year average of USD per Euro for 2006 & 2007. Year end spot rate for 2008)	1.43	1.28	1.22
5 Year-end exchange rate used to convert SPS from Euro to USD	1.43	1.44	1.32
6 Variation of per capita Claims Cost by Age	6% per year of age before age 65 and 3% from age 65 to age 89, with no increases after age 90	N/A	N/A
<b><u>Demographic</u></b>			
7 Mortality	Actual 2007 UNJSPF Mortality Table with mortality improvements projected through 2027	Estimated 2007 UNJSPF Mortality Table with mortality improvements projected through 2027	1993 UN Mortality Table with mortality improvements projected through 2006

4. The ASMC liability represents the present value of the estimated future cost of the Organization's share of medical claims to be incurred by retirees. Therefore, the rate at which the value of claims will increase over time is a principal determinant of the overall liability. The estimate of this increase is set by reviewing recent experience and also taking into consideration increases expected in the future. Previous valuations attributed these expected increases to 1) increasing costs of current medical services; 2) higher costs as a result of new medical technology; and, 3) general increases in the use of medical services by all individuals. Assumption no. 6 in Table 1, *Variation of per capita Claims Costs by Age*, is a refinement in the calculation of future claims costs and represents an additional factor in the expected increases of medical costs related to retiree aging. While previous valuations assumed that retiree medical visits would occur with the same frequency, regardless of age, the current valuation recognizes that the frequency of medical visits generally increases with age. Further, the valuation recognizes that as these same retirees age, they tend to purchase more expensive types of medical services. 2008 is the first year that this refinement was applied to the calculation, and is a required and

accepted practice according to actuarial standards. Please refer to paragraph 6 for further discussion of the impact of this and other assumptions on the actuarial valuation.

5. Table 2 below is a comparison of the actuarial liability by plan as at 31 December 2008, 2007 and 2006, respectively.

**Table 2**

<i>(in USD Million)</i>							
<b>Plan</b>	<b>2008</b>	<b>Increase/ (Decrease)</b>		<b>2007</b>	<b>Increase/ (Decrease)</b>		<b>2006</b>
		<b>\$</b>	<b>%</b>		<b>\$</b>	<b>%</b>	
CPRF	20.5	3.8	22.8%	16.7	0.5	3.1%	16.2
TPF	50.6	21.4	73.3%	29.2	1.9	7.0%	27.3
SPS	93.5	(3.6)	(0.2)%	97.1	(0.2)	(0.2)%	97.3
ASMC	877.6	301.5	52.3%	576.1	49.8	9.5%	526.3
<b>Total actuarial liability</b>	<b>1,042.2</b>	<b>323.1</b>	<b>44.9%</b>	<b>719.1</b>	<b>52.0</b>	<b>7.8%</b>	<b>667.1</b>

6. As reflected in Table 2 above, the net increase of USD 323.1 million in the overall liability between 31 December 2007 and 31 December 2008 is mainly due to an increase in the TPF liability of USD 21.4 million and ASMC of USD 301.5 million. The principal factors contributing to this increase are as follows:

***TPF***

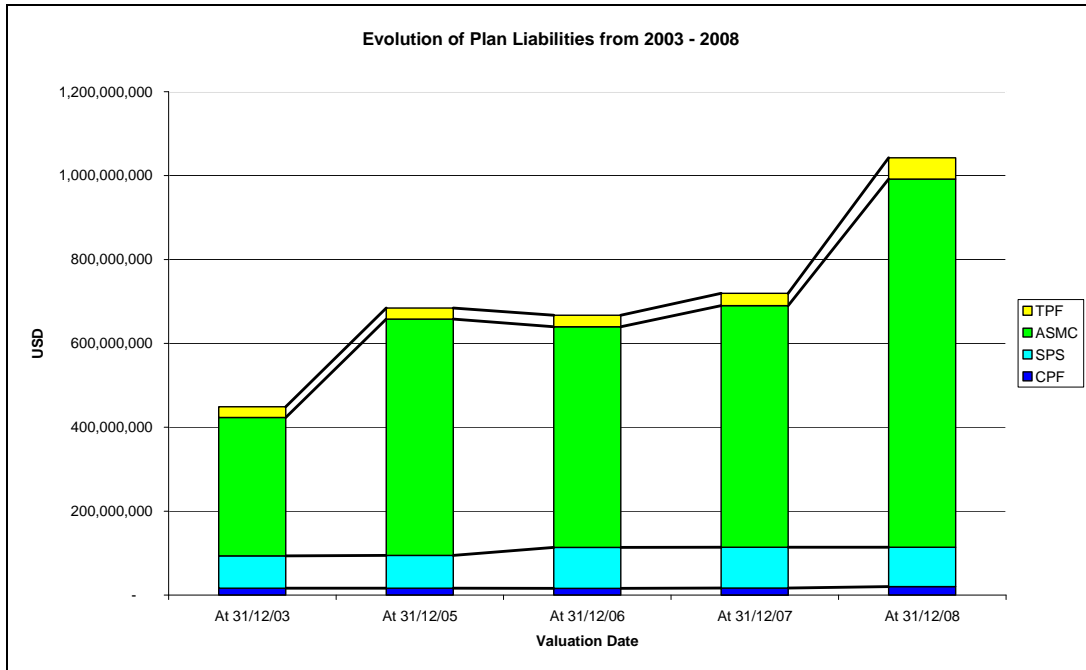
- Change in the assumed percentage of eligible staff members receiving repatriation benefits from 27% in 2007 and prior years to 90% in 2008. FAO's actuaries performed an updated analysis of actual experience as compared to actuarial assumptions over the past few years and determined that the number of staff members receiving this benefit is higher than previously estimated. Consequently, while the updated estimate has increased the liability significantly for 2008, future valuations are not expected to notably increase this liability as a result of changes to this assumption.

***ASMC***

- Adoption of assumption that future claims costs will increase as retirees age - USD 210 million (70% of the total increase).
- Increase in the valuation exchange rate used in the translation of EUR medical claims from USD 1.28 to USD 1.43 - USD 70 million (23% of the total increase).
- Update to the mortality table to reflect expected increases in longevity
- Expected increase based on the prior year valuation
- The above increases were offset by a reduction in the net liability due to the adoption of an assumption that the cost sharing arrangement for retirees will be maintained in line with the growth in medical inflation.

**Increase in Total Liability: 2003 - 2008**

7. The items in paragraph 6 illustrate the principal drivers of the increase in the gross value of the ASMC liability from 2007 to 2008. This analysis has been extended further in Graph 1, which shows the evolution of the total liabilities for each staff-related scheme according to the actuarial valuations since 31 December 2003, which was the first year in which FAO's Plans were valued separately from the other Rome-based agencies.

**Graph 1**

8. The analysis again highlights that the overall increase in the liability between 31 December 2003 and 31 December 2008 is mainly due to an increase in the TPF liability (reasons reported above) and the ASMC.

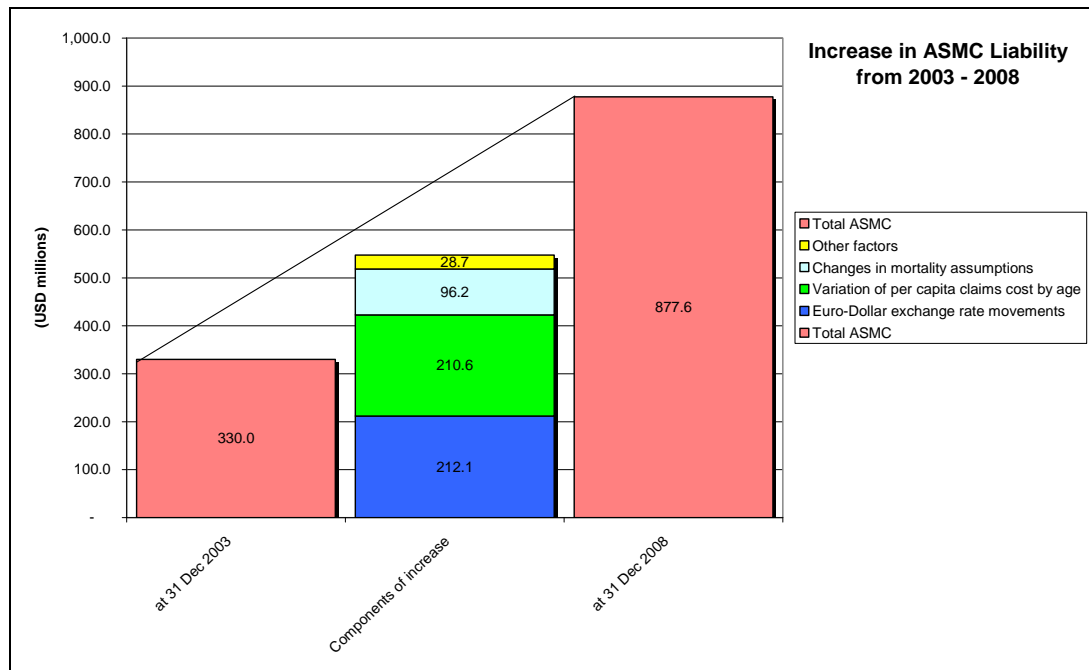
9. FAO's actuaries have performed a high-level analysis to identify the principal factors that have contributed to the increase in the ASMC liability from 2003 – 2008 and which is presented in Table 3 and Graph 2 and further described below.

**Table 3**

<i>(in USD millions)</i>		
ASMC Liability at 31 December 2003	\$330.0	
ASMC Liability at 31 December 2008	<u>877.6</u>	
Increase	\$547.6	
<b>Components of change</b>		<i>% total</i>
Euro-Dollar exchange rate movements	\$212.1	39%
Variation of per capita claims cost by age	210.6	38%
Changes in mortality assumptions	96.2	18%
Other factors *	<u>28.7</u>	5%
Total change	\$547.6	100%

\* Other factors include changes in various components of the actuarial valuation, such as expected increase due to the passage of time; increases in medical inflation rates, pay and pension increases, and others.

Graph 2



9.1. *EUR-USD exchange rate movements* – The USD-EUR exchange rate used for translating EUR medical claims and contributions has a significant impact on the reported USD liability due to the high proportion of EUR denominated claims (approximately two thirds of total claims). The EUR-USD exchange rate used in the valuation of the ASMC for 2003 was approximately 1:1, while the rate used in the 2008 calculation valued the EUR at USD 1.43. Consequently, the reported value of the ASMC has increased approximately 40% since 2003 solely as a result of movements in EUR-USD exchange rates. As of the writing of this paper the exchange rate has decreased to approximately 1:1.36 (i.e. an approximate 5% decrease in the value of the EUR portion of the reported liability as at 31 December 2008).

9.2. *Variation of per capita Claims Cost by Age* – As previously explained, the inclusion of this assumption represents an improvement in the precision of the calculation of estimated future claims costs and was applied to the actuarial calculation for the first time in 2008. Excluding the impact of foreign exchange rate movements, the addition of this assumption in the actuarial calculation represents the single largest factor in the increase in the liability since 2003. As with all key assumptions, FAO will continue to periodically review the actual variation of claims by age as compared to the estimate included in the 2008 valuation. However, while the impact on the current year's valuation is significant, future changes in this assumption are expected to have a comparatively modest impact on the ASMC liability and are as likely to be favorable as unfavorable.

9.3. *Changes in mortality assumptions* – FAO's ASMC valuations follow the same mortality assumptions as used by the United Nations Joint Staff Pension Fund ("UNJSPF"). While the UNJSPF mortality table previously projected mortality to improve through 2006, the 2007 table increased projected improvements in longevity of plan participants through 2027 with a consequent increase in the ASMC liability. As with the variation of claims costs by age, the mortality rates of plan participants will be periodically reviewed and updated if longevity continues to improve. However, the impact of these updates are expected to be small compared to the updates over the past several years.

## Current Financial Situation

10. Table 4 and Graph 3 below show the total recorded and unrecorded liabilities<sup>2</sup> for the Plans based on the actuarial valuations, as well as the total funded and unfunded liabilities<sup>3</sup> for all Plans as compared to the fair market value of earmarked long-term assets<sup>4</sup> at 31 December 2008, 2007 and 2006, respectively.

**Table 4**

<i>(in USD Million)</i>						
<b>Plan</b>	<b>2008</b>	<b>% total liability</b>	<b>2007</b>	<b>% total liability</b>	<b>2006</b>	<b>% total liability</b>
CPRF	20.5	2.0%	16.7	2.3%	16.2	2.4%
TPF	20.4	2.0%	29.2	4.1%	-	0.0%
SPS	92.5	8.9%	97.1	13.5%	87.6	13.1%
ASMC	596.5	57.2%	576.1	80.1%	173.0	25.9%
<b>Total accrued liabilities</b>	<b>729.9</b>	<b>70.0%</b>	<b>719.1</b>	<b>100.0%</b>	<b>276.8</b>	<b>41.5%</b>
Add: Unrecorded liabilities	312.3	30.0%	-	0.0%	390.3	58.5%
<b>Total actuarially determined liabilities</b>	<b>1,042.2</b>	<b>100.0%</b>	<b>719.1</b>	<b>100.0%</b>	<b>667.1</b>	<b>100.0%</b>
Less: Earmarked long-term investments (at Fair Market Value)	(242.3)	23.2%	(299.7)	41.7%	(266.3)	39.9%
Less: Advances to staff on SPS	(12.5)	1.2%	(14.9)	2.1%	(9.8)	1.5%
<b>Total unfunded liabilities *</b>	<b>787.4</b>	<b>75.6%</b>	<b>404.5</b>	<b>56.3%</b>	<b>391.0</b>	<b>58.6%</b>
* Of which:						
TPF	50.6		29.2		27.3	
ASMC	736.8		375.3		363.7	
<b>Total unfunded liabilities</b>	<b>787.4</b>		<b>404.5</b>		<b>391.0</b>	

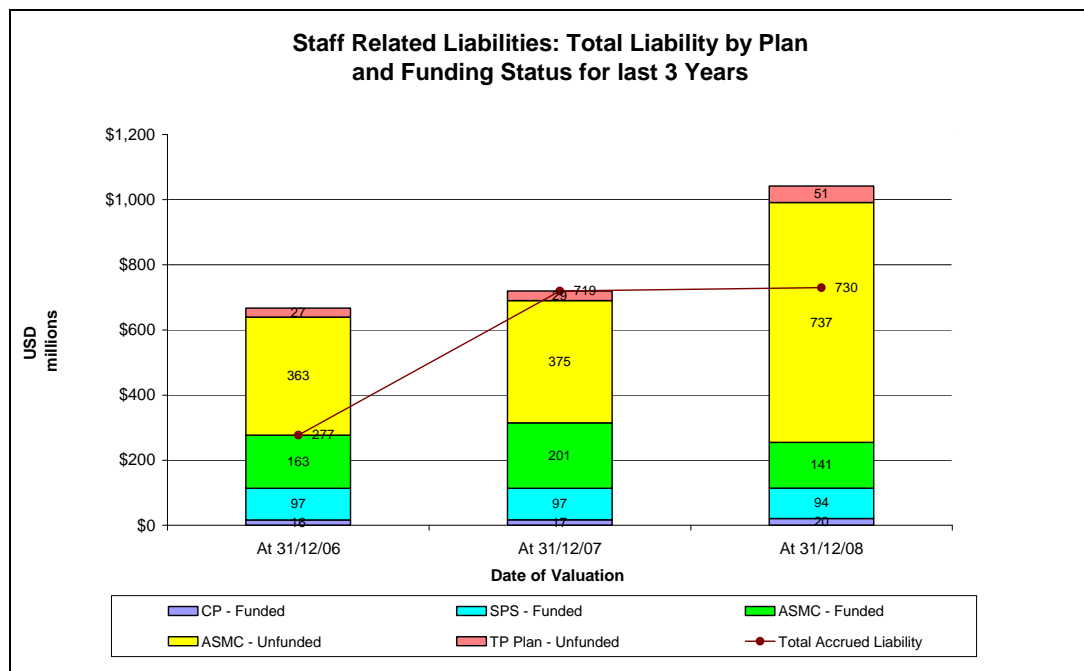
<sup>2</sup> Recorded liabilities totaled USD 729.9 million at 31 December 2008. Unrecorded liabilities of USD 312.3 million reflect the adoption of the corridor method for recognising actuarial gains and losses, in accordance with IPSAS (please refer to para. 11 for further details).

<sup>3</sup> Unfunded liabilities totaled USD 787.4 million at 31 December 2008.

<sup>4</sup> Earmarked long-term assets include outstanding advances to staff members on final Terminal Emoluments of USD 12.5 million, USD 14.9 million and USD 9.8 million at 31 December 2008, 2007 and 2006, respectively.



Graph 3



11. As shown in Table 4, the Organization has deferred recognition of USD 312.3 million of the actuarially determined liability as at 31 December 2008. In accordance with FAO's move toward full implementation of IPSAS, the Organization has adopted the policy of utilizing the corridor method to recognize actuarial gains and losses. Under this method, actuarial gains and losses that exceed 10 per cent of the value of the actuarial liability are deferred and recognized over the expected average remaining working lives of the employees participating in the plan, which is currently estimated from 9 to 11.3 years. Of the total amount deferred, USD 281.0 million relates to ASMC; USD 30.3 million relates to TPF; and, USD 1.0 million relates to SPS.

### Accounting and Funding

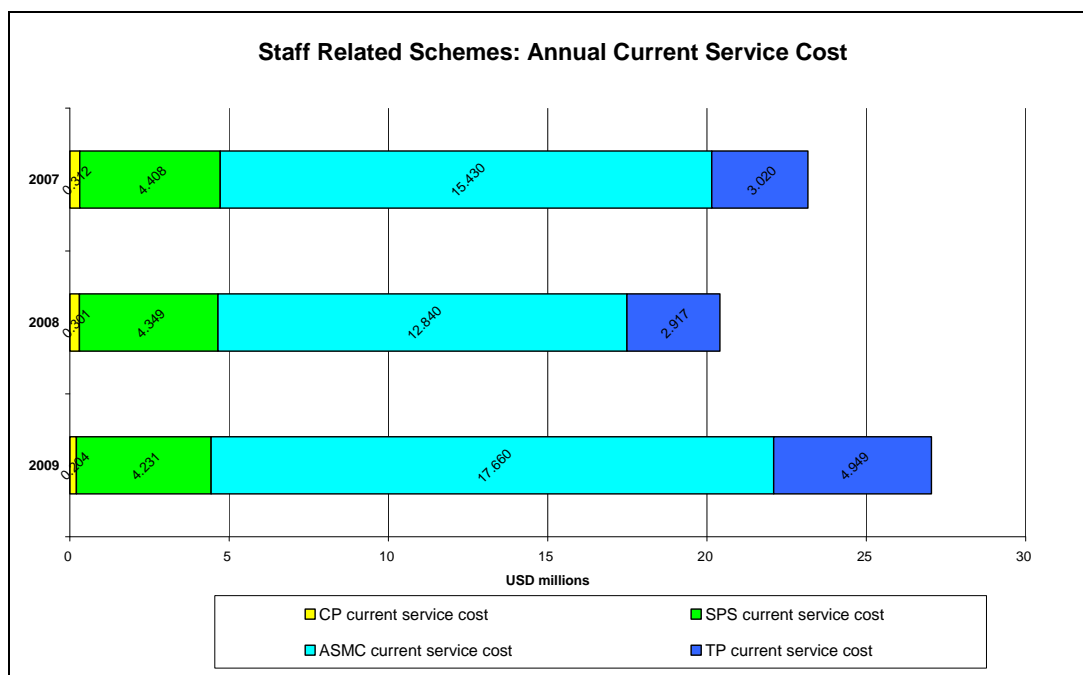
12. Table 5 and Graph 4 below show the annual Current Service Costs<sup>5</sup> for the three years ended 31 December 2009, which are based on the actuarial valuations for the preceding years at 31 December 2008, 2007 and 2006, respectively.

<sup>5</sup> The current service cost is a standard component of staff costs and arises each year as active staff members provide their services in exchange for these benefits to be paid in the future. Reported amounts represent total current service cost for staff members working on both Regular Programme (RP) and Extra-budgetary (EB) activities. In 1997 the Governing Bodies recognized that current service cost related to RP staff members be funded each biennium from the Regular Programme Budgetary appropriation and expensed in the official accounts among costs to deliver the current programme of work of FAO. Current service cost for EB staff members is charged to trust fund project expense and, therefore, funded through project revenues. Funding of actuarial losses (i.e. increases in the liability as a result of adverse experience as compared to actuarial estimates) is considered in the overall funding requirements for past service liabilities (please refer to Table 6 for details of ASMC funding requirements).

Table 5

<i>(in USD Million)</i>						
<b>Plan</b>	<b>2009</b>		<b>2008</b>		<b>2007</b>	
	<i>expense</i>	<i>% total</i>	<i>expense</i>	<i>% total</i>	<i>expense</i>	<i>% total</i>
CPRF current service cost	0.204	0.8%	0.301	1.5%	0.312	1.3%
SPS current service cost	4.231	15.6%	4.349	21.3%	4.408	19.0%
ASMC current service cost	17.660	65.3%	12.840	62.9%	15.430	66.6%
TPF current service cost	4.949	18.3%	2.917	14.3%	3.020	13.0%
<b>Total</b>	<b>27.044</b>	<b>100.0%</b>	<b>20.407</b>	<b>100.0%</b>	<b>23.170</b>	<b>100.0%</b>

Graph 4



13. The increase of USD 6.6 million in the annual Current Service Cost from USD 20.4 million in 2008 to USD 27.0 million in 2009 is principally the result of the following changes:

**ASMC**

- Introduction of new age grading assumption
- Strengthening of the EUR against the USD
- Updates to the assumed mortality rates to reflect expected increases to longevity

**TPF**

- Increase in the assumed percentage of eligible staff members receiving repatriation benefits

14. Conference Resolutions 10/99 and 10/2001 provide that long-term investments and any income which they generate are to be applied first to ensure the adequacy of funding of the SPS and CPRF. The Resolutions also provided that any additional investments and related income then be earmarked for the ASMC and subsequently for the TPF. As of 31 December 2008, both the ASMC and TPF are underfunded (refer also to Table 4 and Graph 3).

15. Based on the most recent actuarial valuation as of 31 December 2008, in order to fully fund the past service liability associated with the TPF of USD 50.6 million (using the original 15-year amortization period which began in 1998), the Organization would need to contribute USD 13.9 million per year (USD 27.8 million per biennium).

16. Based on the most recent actuarial valuation as of 31 December 2008, in order to fully fund the US Dollar value of the ASMC past service liability as calculated for financial reporting purposes in accordance with US actuarial standards (using the original 30-year amortization period which began in 1998), USD 50.8 million per year (USD 101.6 million per biennium) would need to be contributed (refer to Other Funding Considerations section and Table 6 for further details regarding funding requirements and considerations). By comparison, assessments on Member Nations towards funding of the past service ASMC liability in 2008-09 currently amount to USD 7.05 million per year (USD 14.1 million per biennium) as approved by Conference in November 2007. This level of funding was first approved by Conference in November 2003 for the 2004-05 biennium, and again in November 2005 for 2006-07. In November 2005 the 129th Council recognized the need to “*recommend funding at the level prescribed in the latest actuarial valuations in future biennia*”.

### Other Funding Considerations

17. **EUR Liability Funding** – Following the adoption of split-assessments effective with the 2004-05 biennium, FAO pays all EUR liabilities with EURs. While the reported overall USD value of the liability will vary based on movements in the EUR/USD exchange rate, this does not change the underlying EUR funding requirement. Consequently, in order to have a clearer picture of FAO’s obligation related to the ASMC, the liability and associated funding requirements should be viewed in terms of their separate EUR and USD components. Based on the estimated split of the liability by currency of 2/3 EUR and 1/3 USD, the approximate values of the liability at 31 December 2008 are EUR 460 million and USD 220 million. FAO will begin to report the ASMC liabilities and annual funding requirements in their underlying currencies beginning with the 2009 actuarial valuation.

18. **Cost-sharing Assumption** - FAO, together with the other Rome-based agencies, offers a health insurance scheme (Basic Medical Insurance Plan or BMIP) in which both active staff members and retirees (together “plan participants”) participate. Based on the amount of contributions that active and retired staff members are currently required to make, the cost of medical claims incurred under this plan are effectively borne approximately 60 per cent by FAO and 40 per cent by plan participants. While the individual contributions that plan participants are required to make to fund their 40 per cent of the costs are the same regardless of whether they are active staff or retirees, the overall cost of medical claims is in fact higher for retirees than for active staff members. As a result, active staff member contributions comprise a greater percentage of their actual medical claims costs (approximately 90 per cent) than retirees’ contributions (approximately 20 per cent) and there is an inherent cross-subsidization of retiree medical claims costs by active staff member contributions, which maintains the overall plan cost sharing ratio of 60/40 between FAO and all plan participants.

19. For the purposes of preparing the actuarial valuation of the liability, the actuaries isolate the expected gross cost of retiree medical claims, net of estimated retiree contributions only. This methodology, which is consistent with standard actuarial practice in the United States, does not recognize the inherent cross-subsidization of funding that will be provided through future active staff member contributions. Excluding the future active staff contributions from the actuarial valuation of the ASMC liability implies that FAO will fund the remaining 80 per cent of the cost of retiree claims (i.e. 80 per cent of the gross actuarial liability) not funded through retiree contributions. It is, however, FAO’s view that both plans for active and retired staff should reflect the Organization’s commitment to overall cost sharing, which effectively amounts to 60 per cent FAO and 40 per cent plan participants. This view is supported by over 20 years of experience, during which FAO has maintained this ratio of cost sharing. In addition, FAO is currently

committed to maintaining this cost sharing for the foreseeable future, regardless of changes to the demographics of FAO's active and retired staff.

20. The active staff contribution toward retiree premiums is estimated to be approximately 20 per cent. Were FAO to consider the full, estimated active staff contribution as a component of ASMC funding it would reduce the ASMC liability reported in the actuarial valuation as at 31 December 2008 by USD 217 million to USD 661 million. Further, required annual funding for Current Service Cost and Past Service Amortization would be reduced by a total of USD 19.4 million to USD 49.1 million. Table 6 shows the change in the values of the ASMC liability and 2009 Service Cost and Past Service Amortization, as well as funding requirements as at 31 December 2008 by including the full estimated active staff subsidy.

**Table 6**

<i>(in USD million)</i>		
	<b>USD/EUR F/X rate 1.43:1</b>	
	<b>W/out Active Subsidy</b>	<b>With Active Subsidy</b>
<b><u>Net Liability</u></b>		
Gross ASMC	\$1,101	\$1,101
Less:		
Retiree contributions	(223)	(223)
Active staff contributions	-	(217)
Net ASMC	878	661
Less: Plan Assets	(141)	(141)
Net ASMC to be funded by FAO	\$737	\$520
<b><u>Service Cost for 2009</u></b>		
Claims	\$22.2	\$22.2
Less:		
Retiree contributions	(4.5)	(4.5)
Active staff contributions	-	(4.4)
Net Service Cost	\$17.7	\$13.3
<b><u>Annual Contributions as of 31 December 2008</u></b>		
Service Cost	\$17.7	\$13.3
Amortization Cost	50.8	35.8
Total Required Annual Contributions	\$68.5	\$49.1
Less:		
Service Cost	(17.7)	(13.3)
ASMC Past Service Funding	(7.1)	(7.1)
Total Approved Funding	(24.8)	(20.4)
Funding Shortfall	\$43.8	\$28.8

21. It is important to note that there are three challenges in applying the 60/40 cost sharing principle:

- a) ***Barriers to Maintaining Cost Sharing*** – The actuarial valuation assumes that medical costs at each age will increase at rates of 7% in 2009, 6% in 2010 and 5% in 2011 and subsequent years. Assuming stable participant demographics, participant contributions must grow at the same rate. However, pay and pension amounts are assumed to grow at lower rates. Therefore, maintaining the 60/40 cost sharing principle requires participants to contribute an ever-increasing share of their pay or pension. Based on a study by FAO's actuaries, which was completed in 2007, participant contributions would need to increase approximately 2 per cent more per annum than the increase in medical costs in order to retain the 60/40 cost sharing ratio.
- b) ***Possible Increase in Dependency Ratio*** – While point a) above assumes stable demographics, the reality is that the number of retirees has increased and the number of active staff members decreased in every FAO actuarial valuation for the past decade, resulting in an increasing dependency ratio (number of retired staff divided by the number of active staff) from 60% (Retired Staff – 3,413; Active

Staff – 5,646) to 118% (Retired Staff – 4,048; Active Staff – 3,422). Therefore, a continued increase in the dependency ratio would require additional increases in participant contributions to maintain the 60/40 cost sharing principle.

- c) **Possibility of Adverse Experience** – The analysis in Table 6 presumes that all actuarial assumptions from the 31 December 2008 valuation will be realized. However, as with any long-term actuarial projection, there is inherent uncertainty relating to the ultimate cost of the plan. Adverse deviations from the valuation assumptions could reduce the sustainability of the current cost sharing or require greater contributions.

22. This paper serves to provide the Finance Committee with detailed information and key factors for consideration in conjunction with ASMC past service liability funding recommendations to be included in the PWB 2010-11.

23. As regards the unfunded Termination Payment Fund liability, it is noted that funding sources have never been established. Cash outflows in excess of the funding provided for TPF current service costs generate a structural cash deficit in the General Fund, pending establishment of a funding approach for this liability.

### Comparison with other UN Organizations

24. For information purposes, Table 7 below shows a comparison of the ASMC liability and funding at FAO as at 31 December 2008 and at other large UN organizations as at 31 December 2007 (or at latest date available). [NOTE: An updated schedule will be provided at the 126th FC Session.]

Table 7

Comparative analysis of ASMC liability for UN Organizations				
	Total Liability USD millions	Funding Available USD millions	Liability recorded on the Balance Sheet USD millions	Liability not yet recorded on the Balance Sheet USD millions
FAO *	878.0	141.0	596.0	282.0
WHO ***	371.0	272.0	206.0	165.0
WFP *	165.2	93.5	165.2	-
IFAD *	50.0	50.0	50.0	-
UN **	2,433.0	-	2,433.0	-
UNESCO **	614.0	30.0	-	614.0
ILO **	415.0	-	-	415.0
IAEA **	207.0	-	-	207.0

\* 31 December 2008  
 \*\* 31 December 2007  
 \*\*\* 31 December 2005