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# FINANCE COMMITTEE

**Hundred and Sixty-sixth Session**

**Rome, 27 - 31 March 2017**

**2016 Actuarial Valuation of Staff Related Liabilities**

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### EXECUTIVE SUMMARY

- This document updates the Finance Committee on the results of the actuarial valuation of the Organization's liability for staff-related plans (the "Plans") at 31 December 2016.
- **Section I. Introduction** describes the 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.
- **Section II. Results of Actuarial Valuation** summarises the total liability of the Plans as at 31 December 2016, 2015 and 2014 and provides the key assumptions used in those valuations. During 2016, the total liabilities of the Plans increased by an amount totalling USD 194.5 million from USD 1,124.7 million at 31 December 2015 to USD 1,319.2 million at 31 December 2016. The various reasons for the increase are detailed in this section.
- **Section III. Current Financial Situation** provides the total recorded, unrecorded and net balance sheet liabilities for the Plans based on the actuarial valuations, as well as the total funded and unfunded liabilities for the Plans as at 31 December 2016, 2015 and 2014, respectively. The total unfunded liability of the Plans as at 31 December 2016 was USD 875.6 million compared to USD 710.4 million at 31 December 2015.
- **Section IV. Accounting and Funding** provides a comparison of the annual Current Service Costs for the Plans for the three years ending 31 December 2017. The total Current Service Cost for 2017 is USD 42.4 million (2016 – USD 36.9 million). This section also includes full funding proposals for the ASMC plan and Terminal Payments Fund (TPF). The annual past-service ASMC funding amortization to fully fund the liability by 2040 amounts to USD 22.7 million, while the funding approved by Conference for 2016 and 2017 amounted to USD 7.05 million per year leaving a shortfall of USD 15.65 million per year. The annual past-service TPF funding amortization to fully fund the liability by 2025 amounts to USD 6.0 million for which no funding has ever been approved.

### GUIDANCE SOUGHT FROM THE FINANCE COMMITTEE

- The Committee is invited to note the results of the 2016 actuarial valuation and the current financial situation, accounting and funding of the Organization's liability for staff-related plans at 31 December 2016.

#### Draft Advice

##### **The Committee:**

- **noted that total staff related liabilities as at 31 December 2016 amounted to USD 1,319.2 million, representing an increase of USD 194.5 million from the valuation at 31 December 2015;**
- **further noted that the net increase in the valuation at 31 December 2016 was primarily due to changes in the following actuarial assumptions: a decrease in the discount rate used; an increase in the medical cost inflation rate; and a decrease in the year-end EUR-USD exchange rate.**

## 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) –The provisions of the separation payments scheme apply only to staff members in the General Service category at Headquarters and are paid on separation from the Organization or on promotion to the Professional category;
- 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 premium of the Basic Medical Insurance is nominally shared between the retired staff member and the Organization; and
- 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. All of the above Plans are treated by the Organization as defined benefit plans. To meet the financial reporting requirements the Organization annually 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) establish the annual expense related to the Plans’ maintenance;
- c) quantify recommended rates of contributions to fully fund the liabilities; and
- d) obtain information necessary to meet financial reporting requirements.

The actuarial valuations for 2016, 2015 and 2014 were all performed by Aon Hewitt ([www.aon.com](http://www.aon.com)). This document refers to the results of the actuarial valuation as at 31 December 2016 and the current financial situation, and accounting and funding of the Organization’s liability with information as at 31 December 2015 and 2014 as comparatives.

## II. Results of Actuarial Valuations

3. A comparison of the total actuarial liability by plan as at 31 December 2016, 2015 and 2014 is detailed in Table 1.

**Table 1**

<i>(in USD Millions)</i>							
Plan	2016	Increase/ (Decrease)		2015	Increase/ (Decrease)		2014
		USD m	%		USD m	%	
CPRF	17.6	(0.5)	-2.8%	18.1	(0.8)	-4.2%	18.9
TPF	59.9	(0.9)	-1.5%	60.8	(3.7)	-5.7%	64.5
SPS	49.4	(6.8)	-12.1%	56.2	(11.2)	-16.7%	67.4
ASMC	1,192.3	202.7	20.5%	989.6	(250.0)	-20.2%	1,239.6
<b>Total actuarial liability</b>	<b>1,319.2</b>	<b>194.5</b>	<b>17.3%</b>	<b>1,124.7</b>	<b>(265.7)</b>	<b>-19.1%</b>	<b>1,390.4</b>

As detailed in Table 1 above, the net increase of USD 194.5 million in the actuarial liability between 2016 and 2015 was significant. The variations relating to the assumptions and methods were as follows:

**Table 1a**

Sources of Changes of the Plans from 2015 to 2016	Variations USD millions
Expected change, without new entrants*	26.8
Decrease in discount rates	130.7
Movement in Euro-USD exchange rate	(32.5)
Change in accounting cost sharing due to plan experience	14.0
Claims and administrative expenses experience	28.4
Increase in assumed medical trend rates	46.4
Other demographic experience	(4.9)
Updates to reflect Latest UNJSPF assumptions	(11.3)
Others	(3.2)
<b>Total net increase</b>	<b>194.4</b>

\* Expected increase due to Service Cost (additional benefits earned) and Interest Cost, offset by expected decrease due to actual benefit payments

4. The actuarial valuation of the Plans requires the Organization to make certain assumptions in order to best estimate the cost of providing these benefits to its staff members. Such assumptions include 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 costs, etc.). Owing to changes in factors, both internal and external, the Organization, 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 the Organization's liabilities for the Plans are highly sensitive to changes in the EUR-USD exchange rate, the discount rate, and medical claims and anticipated medical inflation. For the purpose of the 2016 actuarial valuation there were marked changes in the basis of the assumed medical trend rates assumption. The key assumptions used in the valuations of the Plans for 2016, 2015 and 2014 are presented below in Table 2.

Table 2

<b>Key Assumptions</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
<b>Economic</b>			
→ Discount rate			
ASMC	2.7%	3.3%	2.9%
SPS	1.2%	1.8%	1.4%
TPF	2.8%	3.1%	2.8%
CPRF	4.1%	4.2%	3.7%
→ Medical cost inflation rate	5.0% for 2017 decreasing 0.1% every 2 years to 4.4% in 2029, and then decreasing 0.1% every 3 years to 4% for 2041+.	4.5% for 2016 to 2020, decreasing 0.1% per year for subsequent five-year periods, until the rate reaches 4.0% for 2041 and later years	5% starting from 2015 to 2024; 4.5% for 2025-2044; 4% for 2045 and beyond
→ General inflation rate	2.5 % per year	2.5 % per year	2.5 % per year
→ Year end spot rate €/USD	1.05	1.09	1.22

### III. Current Financial Situation

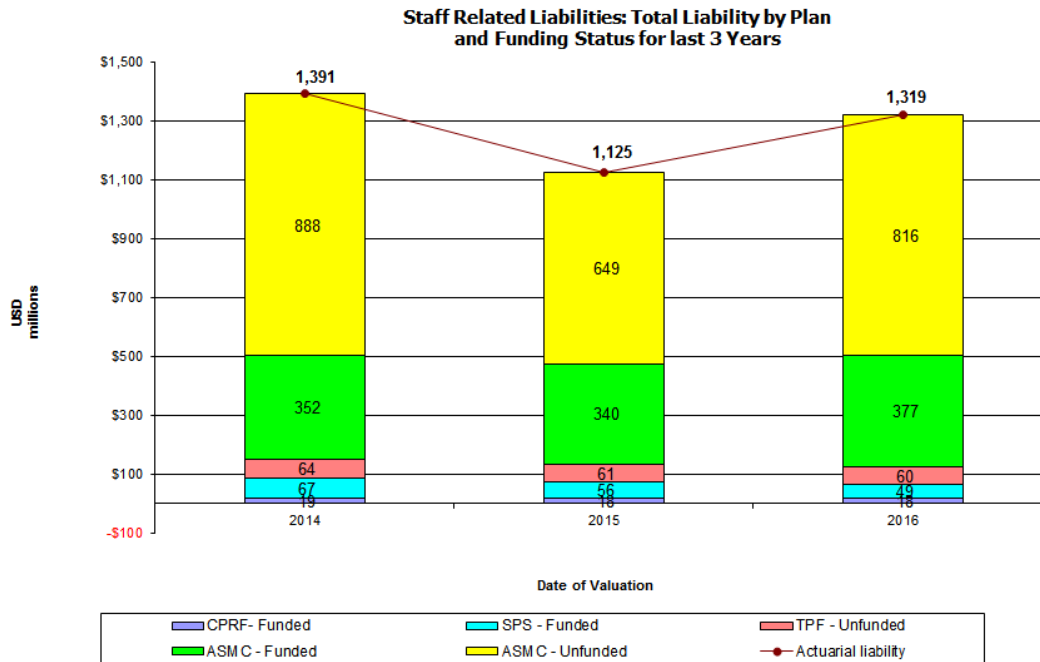
5. Table 3 below shows the total recorded and unrecorded liabilities for the Plans based on the actuarial valuations, as well as the total funded and unfunded liabilities for all Plans as compared to the fair market value of earmarked long-term assets at 31 December 2016, 2015 and 2014 respectively.

Table 3

<b>Plan</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
	<b>USD millions</b>	<b>USD millions</b>	<b>USD millions</b>
CPRF	17.6	18.1	18.9
TPF	59.9	60.8	64.5
SPS	49.4	56.2	67.4
ASMC	1,192.3	989.6	1,239.7
<b>Total actuarially determined liabilities</b>	<b>1,319.2</b>	<b>1,124.7</b>	<b>1,390.5</b>
Less: Earmarked long-term investments (at Fair Market Value)	(443.6)	(414.3)	(438.2)
<b>Total unfunded liabilities **</b>	<b>875.6</b>	<b>710.4</b>	<b>952.3</b>
** Of which:			
TPF	59.9	60.8	64.4
ASMC	815.7	649.6	887.9
<b>Total unfunded liabilities</b>	<b>875.6</b>	<b>710.4</b>	<b>952.3</b>

Graph 1 below details the total liability by plan and its funding status:

**Graph 1**



6. During 2016, the carrying value of long-term investments earmarked by the Organization for the Plans increased by USD 29.3 million from USD 414.3 million at 31 December 2015 to USD 443.6 million at 31 December 2016. For comments on investments, reference should be made to the Report on Investments 2016 (document FC 166/3).

#### IV. Accounting and Funding

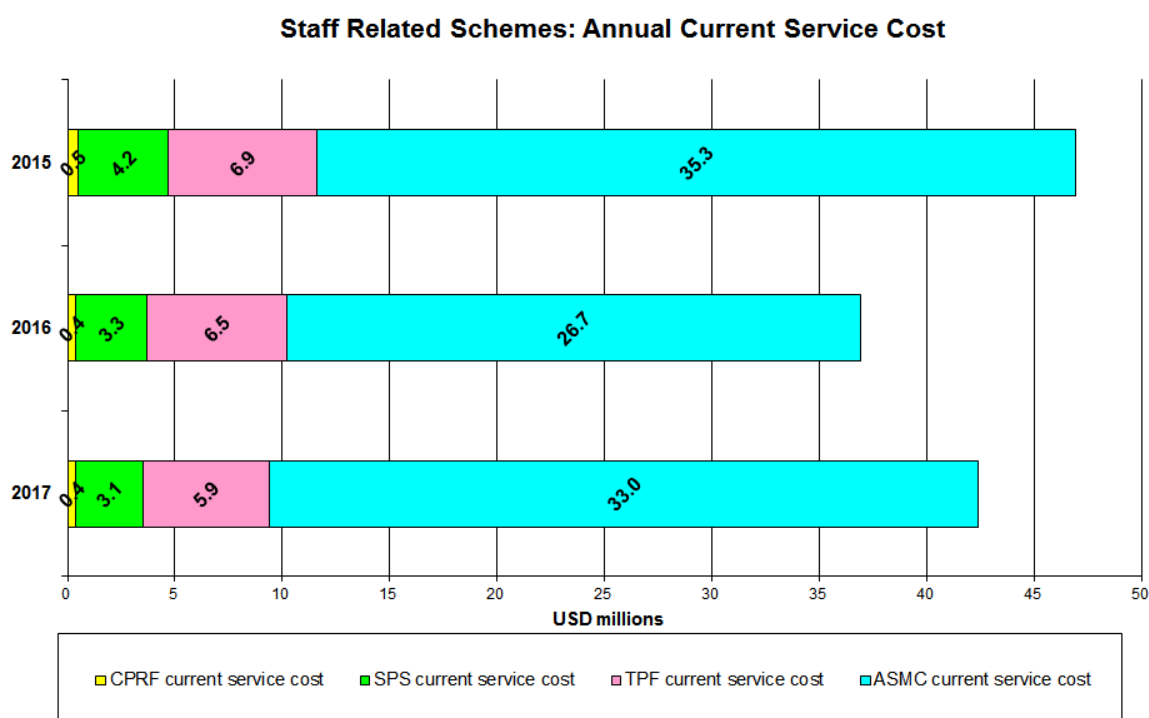
7. Table 4 and Graph 2 below show the annual Current Service Costs<sup>1</sup> for the three years ending 31 December 2017, which are based on the actuarial valuations for the preceding years at 31 December 2016, 2015 and 2014 respectively.

<sup>1</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. The above costs comprise both the Regular Programme and Trust Funds

Table 4

<b>Current service costs</b>						
<b>Plan</b>	<b>2017</b>		<b>2016</b>		<b>2015</b>	
	<b>USD millions</b>	<b>% total expense</b>	<b>USD millions</b>	<b>% total expense</b>	<b>USD millions</b>	<b>% total expense</b>
CPRF	0.4	0.9%	0.4	1.1%	0.5	1.1%
TPF	5.9	13.9%	6.5	17.6%	6.9	14.7%
SPS	3.1	7.3%	3.3	8.9%	4.2	9.0%
ASMC	33.0	77.8%	26.7	72.4%	35.3	75.3%
<b>Total</b>	<b>42.4</b>	<b>100.0%</b>	<b>36.9</b>	<b>100.0%</b>	<b>46.9</b>	<b>100.0%</b>

Graph 2



8. In total, the 2017 service cost increased by a net USD 5.5 million of which USD 6.3 million relates to an increase in ASMC. The reasons for the increase in ASMC service cost include:

- an increase of USD 5.6 million due to the decrease in the discount rate from 3.3% to 2.7%;
- an increase of USD 1.6 million due to the increase in assumed medical trend rates
- an increase of USD 2.0 million due to new entrants in 2016
- offset by a net decrease of USD 2.9 million related to the movement in the year end Euro-Dollar exchange, plan amendments and other demographic experience.

9. 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 2016, both the ASMC and TPF continue to be underfunded (refer also to Table 3 and Graph 1). The earmarking of the long-term investments and the SPS advances to the plans is shown in Table 5 below.

**Table 5**

<b>Long term investments earmarked against the Plans</b>			
<b>Plan</b>	<b>2016</b>	<b>2015</b>	<b>2014</b>
	<b>USD millions</b>	<b>USD millions</b>	<b>USD millions</b>
<i>Fully funded</i>			
CPRF	17.6	18.1	18.9
SPS	49.4	56.2	67.4
<i>Partially funded</i>			
ASMC	376.6	340.0	351.9
<i>Unfunded</i>			
TPF	0.0	0.0	0.0
<b>Total funded liabilities</b>	<b>443.6</b>	<b>414.3</b>	<b>438.2</b>
<b>Funded by:</b>			
Earmarked long-term investments	<b>443.6</b>	<b>414.3</b>	<b>438.2</b>

10. In accordance with Finance Committee and FAO Council guidance, the Secretariat has obtained from FAO's actuaries the annual amounts required to fully fund the ASMC and TPF liabilities using target dates of 31 December 2040 and 31 December 2025, respectively.

11. Based on the most recent actuarial valuation as of 31 December 2016, in order to fully fund the TPF past service liability of USD 59.9 million (using a 15-year amortization period starting in 2010), the Organization would need to contribute an additional USD 6.0 million per year (USD 12.0 million per biennium).

12. Based on the most recent actuarial valuation as of 31 December 2016, in order to fully fund the US Dollar value of the unfunded ASMC past service liability of USD 815.7 million (using a 30-year amortization period beginning in 2010), USD 22.7 million per year (USD 45.4 million per biennium) would need to be contributed. By comparison, assessments on Member Nations towards funding of the past service ASMC liability for the biennium 2016-17 currently amount to USD 7.05 million per year (USD 14.1 million per biennium) as approved by Conference in June 2015. This level of funding, based on the original target funding date of 31 December 2027, was first approved by Conference in November 2003 for the 2004-05 biennium, and has remained unchanged through subsequent biennia, notwithstanding the increase in the unfunded amount of the ASMC.