



INTERNAL AUDIT DIVISION

REPORT 2014/079

Audit of the utilization and monitoring of investment guidelines in the Investment Management Division of the United Nations Joint Staff Pension Fund

Overall results relating to the effective and efficient utilization and monitoring of investment guidelines in the Investment Management Division of the United Nations Joint Staff Pension Fund were initially assessed as partially satisfactory. Implementation of two important recommendations remains in progress.

FINAL OVERALL RATING: PARTIALLY SATISFACTORY

13 August 2014
Assignment No. AS2013/801/02

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AUDIT REPORT

Audit of the utilization and monitoring of investment guidelines in the Investment Management Division of the United Nations Joint Staff Pension Fund

I. BACKGROUND

1. The Office of Internal Oversight Services (OIOS) conducted an audit of the utilization and monitoring of investment guidelines in the Investment Management Division of the United Nations Joint Staff Pension Fund (UNJSPF).
2. In accordance with its mandate, OIOS provides assurance and advice on the adequacy and effectiveness of the United Nations internal control system, the primary objectives of which are to ensure: (a) effective and efficient operations; (b) accurate financial and operational reporting; (c) safeguarding of assets; and (d) compliance with mandates, regulations and rules.
3. UNJSPF comprises the Secretariat, which is responsible for pension administration matters, and the Investment Management Division (IMD), which is responsible for the investment of the Fund's assets. The management and administration of the investments of the Fund is the fiduciary responsibility of the Secretary-General of the United Nations. The Secretary-General has delegated this responsibility to a senior United Nations official referred to as the Representative of the Secretary-General for the Investments of the UNJSPF, who in turn is assisted by the IMD and advised by the Investments Committee. The IMD Standard Operating Investment Policy and Procedures indicate that the long-term objectives of the Division are to: (i) preserve the principal of the Fund in real terms; (ii) obtain optimal return without undue risk; and (iii) diversify the portfolio with respect to asset type, currency and geography.
4. The Fund invested in a global portfolio of equities, fixed income, real assets, short-term instruments and alternative assets. The General Assembly has stipulated four investment criteria for the Fund: safety, profitability, liquidity and convertibility.
5. IMD used the term "investment guidelines" to refer to investment limits, which are quantitative thresholds for use in the risk management of investment portfolios and serve as controls to keep investment transactions within relevant investment policies. The Division included these guidelines in its July 2010 Standard Operating Investment Policy and Procedures (Portfolio Constraints, Investment Authority, and Investment Guidelines sections) and January 2010 Risk Management Manual (Risk Management Controls section). OIOS noted that IMD defined a set of 66 investment guidelines in the Standard Operating Investment Policy and Procedures as controls to ensure portfolio diversification. Also, implicit (or indirect) limits on asset allocations across geographic, sovereign, sector and currency were defined by benchmarks adopted by the Division, which were also included in the same policy and procedures.
6. Comments provided by the UNJSPF are incorporated in *italics*.

II. OBJECTIVE AND SCOPE

7. The audit was conducted to assess the adequacy and effectiveness of the IMD governance, risk management and control processes in providing reasonable assurance regarding the **effective and efficient utilization and monitoring of investment guidelines**.

8. This audit was included in the 2013 OIOS risk-based work plan due to risks related to the inadequate diversification of the investment portfolio.

9. The key control tested for the audit was regulatory framework. For the purpose of this audit, OIOS defined regulatory framework as controls that provide reasonable assurance that policies and procedures: (a) exist to guide the operations of IMD in the utilization and monitoring of investment guidelines; (b) are implemented consistently; and (c) ensure the reliability and integrity of financial and operational information.

10. The key control was assessed for the control objectives shown in Table 1.

11. OIOS conducted this audit from November 2013 to March 2014. The audit covered the period from 1 October 2013 to 31 January 2014.

12. The audit team conducted an activity-level risk assessment to identify and assess specific risk exposures, and to confirm the relevance of the selected key control in mitigating associated risks. Through interviews, analytical reviews and tests of controls, OIOS assessed the existence and adequacy of internal controls and conducted necessary tests to determine their effectiveness.

13. The audit team reviewed relevant policies, procedures and guidelines to identify the breadth of investment limits and their nature (i.e., preventive and detective controls); analyzed equity portfolio holding reports and various compliance and exception reports produced by the third party Master Record Keeper; selected and reviewed a sample of trade orders to test selected limits; tested system-embedded controls in the trading order management system; and reviewed risk reports for completeness and accuracy.

III. AUDIT RESULTS

14. The IMD governance, risk management and control processes examined were initially assessed as **partially satisfactory**¹ in providing reasonable assurance regarding the **effective and efficient utilization and monitoring of investment guidelines**. OIOS made two recommendations to address issues identified in this audit.

15. Strategic Asset Allocation limits were complied with. Guidelines were embedded in the trading order management system as preventive controls. Controls over investment authority limits were adequate. IMD established mechanisms to monitor compliance with investment guidelines. To improve controls, the Division needed to develop written procedures for the investment tracking error and Value-at-Risk limits, which were risk management tools; as well as define the independence of the risk management and compliance function and establish the means to ensure its independence.

¹ Partially satisfactory overall ratings apply to audit results concluding that important but not critical deficiencies exist in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control or business objectives under review.

16. The initial overall rating was based on the assessment of key controls presented in 1 below. The final overall rating is **partially satisfactory** as implementation of two important recommendations remains in progress.

Table 1: Assessment of key controls

Business objective	Key control	Control objectives			
		Effective and efficient operations	Accurate financial and operational reporting	Safeguarding of assets	Compliance with mandates, regulations and rules
Effective and efficient utilization and monitoring of investment guidelines	Regulatory framework	Partially satisfactory	Satisfactory	Satisfactory	Partially satisfactory
FINAL OVERALL RATING: PARTIALLY SATISFACTORY					

Regulatory framework

Strategic Asset Allocation limits were complied with

17. The Standard Operating Investment Policy and Procedures defined Strategic Asset Allocation (SAA) as a strategic decision to maximize the return on investments whilst diversifying risks. During quarterly meetings of the Investment Committee, the SAA limits were reviewed and submitted to the Representative of the Secretary-General for the Investments of the UNJSPF for approval.

18. OIOS reviewed reports from the Master Record Keeper and concluded that investments were within the approved SAA limits.

Guidelines were embedded in the trading order management system as preventive controls

19. IMD developed system embedded controls for its 66 investment guidelines. These were preventive controls aimed to flag a trade which did not comply with the compliance criteria and stop the trade pending the authorization by the Director/Deputy Director or Compliance Officer. To test whether system-embedded preventive controls flagged compliance breaches as intended, OIOS conducted a test of the specific guideline relating to the investment authority² in a test environment and confirmed that any trade with a value in excess of the threshold was suspended by the system pending authorization by the Director/Deputy Director. In addition, OIOS reviewed an exception report showing 64 transactions that triggered a preventive control during the audit period and verified the completeness of exception reporting by cross checking these transactions with other reports, e.g., full list of investment transactions for the audit period. As a result of various tests and reviews conducted, OIOS concluded that built-in compliance rules in the trading order management system were effective in flagging and stopping a trade when a potential compliance breach was detected.

20. A compliance control set-up report showed that the system logged the date and user's name when a compliance criterion was revised. Therefore, OIOS concluded that IMD had established an audit trail in the system to identify any changes to the compliance criterion.

² The guideline required that an equity trade over \$50 million should be authorized by the Director or Deputy Director, IMD.

Controls over investment authority limits were adequate

21. According to the Standard Operating Investment Policy and Procedures, a minimum of two investment officers should review and authorize trade order recommendations. This control was designed to ensure that a trade order recommendation contained certain information (including some limit checks) and was properly authorized with adequate segregation of duties.

22. OIOS selected a sample of 34 trade recommendation forms from the investment portfolio to test guidelines relating to investment authority. All the forms included the required information and were signed by authorized staff in accordance with the delegated authorities. OIOS concluded that manual controls over investment authority limits were adequate.

The Investment Management Division established mechanisms to monitor compliance with investment guidelines

23. The Standard Operating Investment Policy and Procedures required that the compliance function issue a quarterly report to senior management (i.e. the Director of IMD and the Representative of the Secretary-General for the Investments) on compliance matters. It also stated that the Representative of the Secretary-General for the Investments and the Director of IMD must approve exceptions for bonds rated “BBB” and below, and any exception to short-term investments.

24. Through interviews and review of a sample of six exception reports produced by the Compliance Unit on a weekly basis from the “Master Record Keeper Compliance Radar”, OIOS noted that the Unit monitored potential breaches regularly. The fact that prior approvals for exceptions were sought from the Representative of the Secretary-General for the Investments in the event of non-compliance, (e.g. approval was sought for holding bonds in the portfolio below “A” rating and 15 per cent sovereign limit for bonds) were also indicative of follow-up on compliance matters.

25. The Compliance Unit conducted quarterly compliance reviews and addressed related observations to the Director of the Division and copied the Representative of the Secretary-General. OIOS reviewed compliance review reports prepared in the audit period and verified that the reviews were conducted every quarter and the results were communicated to the Director and the Representative of the Secretary-General in a timely manner. Further, OIOS verified the completeness of the compliance reports by comparing them with the compliance exception report produced by the Information Systems Section and a sample of third party exception reports. OIOS concluded that the internal control process was adequate.

Need to conduct a periodic review of the portfolio of investment limits to establish their relevance and compatibility

26. According to the IMD Risk Management Manual, the risk management policy and the investment policy should be reviewed every quarter to ensure IMD policies and processes take into account the latest market conditions; changes in the policies should be internally debated, reviewed, and presented to the Investment Committee to seek their guidance; and all material changes should be approved by the Representative of the Secretary-General and be operational.

27. OIOS noted that there was no evidence to demonstrate the quarterly review of policies and procedures, including investment limits. Although the Risk Management Manual required that all material changes be approved and operational, the Standard Operating Investment Policy and Risk Management Manual were not updated despite a material change that took place in 2011, specifically the introduction of the risk analytics tool. With this new tool, the Division introduced implicit investment limits, some of which were incompatible with existing limits. For example, IMD had to breach the 15 per

cent sovereign limit for bonds by purchasing bonds from a sovereign state corresponding to 17.4 per cent of the portfolio value to be able to meet the United States Dollars currency allocation requirement imposed by the tracking error³ limit.

28. During the audit, IMD conducted a comprehensive review of the investment guidelines, and issued a new set of IMD Investment Policy and Investment Procedures and Risk Management Manual. OIOS noted that the new policy made reference to a periodic review of investment guidelines and made some revisions to limits, and as a result did not make a recommendation. OIOS discussed with the Division management the opportunity to improve its periodic review process by documenting its analysis of the compatibility of limits, which IMD management agreed to implement.

Need for written procedures for establishment and monitoring of tracking error and Value-at-Risk limits

29. In March 2010, IMD acquired a new risk analytics tool as a portfolio risk analysis and performance attribution system, which had been in production since October 2011. The Risk Management and Compliance Section established tracking error limits for the overall portfolio and individual portfolios. The portfolio tracking error was set as 275 (maximum 298) basis points⁴ in 2013, which was reduced to 245 basis points (maximum 280) in 2014.

30. The Division did not develop written procedures defining the process for establishing and monitoring the tracking error and interpreting the results. Furthermore, the role and responsibility of management in setting the tracking error limits and enforcing compliance with the limits were not defined. For example, the Deputy Director for Risk Management alerted respective Portfolio Managers when their actual limits came close to the set limits, investigated the risk contributors for the high tracking error figures and recommended courses of actions, but there was a risk that management or Portfolio Managers would not act upon the recommendations as there was no defined follow-up mechanism.

31. Similarly, IMD started measuring Value-at-Risk figures to address the downside risk⁵ after the adoption of the new risk analytics tool; however, the Division did not establish guidelines on the management of limits for Value-at-Risk.

32. The focus of IMD was mainly on the successful launch of the new risk analytics tool and its reporting capabilities, i.e. its ability to produce risk and performance attribution reports. Therefore, the Division did not prioritize developing written procedures for tracking error and Value-at-Risk.

33. In the absence of written procedures, there was a risk that consistent and effective utilization of tracking error and Value-at-Risk limits would not be achieved.

(1) The Investment Management Division should develop written procedures on the tracking error and Value-at-Risk limits, defining the respective roles and responsibilities of staff in establishing and monitoring the limits and in ensuring compliance with the established limits.

IMD accepted recommendation 1 and stated that in order to further develop and implement such procedures, 36 months of historical data was needed. The risk analytics system was implemented in November 2011, and accordingly IMD intended to develop and rollout such

³Tracking error is a measure of how closely a portfolio follows the index to which it is benchmarked. Tracking error tolerance is the acceptable deviation from the benchmark return.

⁴A basis point is a unit of measure used in finance to describe the percentage change in the value or rate of a financial instrument. One basis point is equivalent to 0.01% (1/100th of a percent).

⁵Downside risk is the likelihood that an investment's value will decline due to a change in market conditions.

procedures in the first half of 2015. Recommendation 1 remains open pending receipt of evidence indicating that written procedures on establishing and monitoring of tracking error and Value-at-Risk limits have been developed.

Need to fully define the arrangements for ensuring the independence of the risk and compliance function

34. The Risk Management Manual required the risk and compliance function to perform independent oversight of all the processes of the front office, middle office and back office, and to have direct access to the Representative of the Secretary-General for the Investments of the UNJSPF.

35. The Manual did not define the arrangements for ensuring the independence for the risk and compliance function, which was the responsibility of the Risk Management and Compliance Section. Also, it did not provide examples or criteria on how to exercise this independent function, e.g., through reporting lines.

36. OIOS noted that the Risk Management and Compliance Section copied the Representative of the Secretary-General for the Investments of the UNJSPF in the quarterly compliance review reports and met with him/her to discuss compliance matters, however, it was unclear whether this was adequate to assure independence of the risk management and compliance function, and if it provided sufficient direct access to the Representative of the Secretary-General.

37. Lack of clearly defined arrangements for ensuring the independence of the risk and compliance function may result in significant investment risks and non-compliance matters not being brought to the attention of stakeholders on a timely basis.

(2) The Representative of the Secretary-General for the Investments of the UNJSPF should review the responsibilities and reporting lines of the risk and compliance function and ensure that the function has a sufficient degree of autonomy and independence.

The Representative of the Secretary-General for the Investments of the UNJSPF accepted recommendation 2 and stated that any modifications to a change in the role and responsibilities of this function including the reporting lines would have to be considered and implemented by the to-be-determined full time Representative of the Secretary-General for the Investments of the UNJSPF. Recommendation 2 remains open pending receipt of evidence that the responsibilities and reporting lines of the risk and compliance function have been reviewed by the Representative of the Secretary-General for the Investments of the UNJSPF.

IV. ACKNOWLEDGEMENT

38. OIOS wishes to express its appreciation to the Management and staff of IMD of the UNJSPF for the assistance and cooperation extended to the auditors during this assignment.

(Signed) David Kanja
Assistant Secretary-General for Internal Oversight Services

STATUS OF AUDIT RECOMMENDATIONS

Audit of utilization and monitoring of investment guidelines in the Investment Management Division of the United Nations Joint Staff Pension Fund

Recom. no.	Recommendation	Critical ⁶ / Important ⁷	C/ O ⁸	Actions needed to close recommendation	Implementation date ⁹
1	The Investment Management Division should develop written procedures on the tracking error and Value-at-Risk limits defining the respective roles and responsibilities of staff in establishing and monitoring the limits and in ensuring compliance with the established limits.	Important	O	Receipt of evidence indicating that written procedures on establishing and monitoring of tracking error and Value-at-Risk limits have been developed.	March 2015
2	The Representative of the Secretary-General for the Investments of the UNJSPF should review the responsibilities and reporting lines of the risk and compliance function and ensure that the function has a sufficient degree of autonomy and independence.	Important	O	Receipt of evidence that the responsibilities and reporting lines of the risk and compliance function have been reviewed by the Representative of the Secretary-General for the Investments of the UNJSPF.	March 2015

⁶ Critical recommendations address significant and/or pervasive deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of control and/or business objectives under review.

⁷ Important recommendations address important deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.

⁸ C = closed, O = open

⁹ Date provided by IMD in response to recommendations.

APPENDIX I

Management Response


TO: Ms. Carmen Vierula, Chief, New York Audit Service
A: Internal Audit Division, OIOS

DATE: 6 August 2014

REFERENCE:

THROUGH:

S/C DE:

FROM: Yukio Takasu 

DE: Representative of the Secretary-General for the Investments
of the Assets of the UNJSPF

SUBJECT: **Draft report on an audit of the utilization and monitoring of
investment guidelines in the Investment Management Division of the
United Nations Joint Staff Pension Fund (Assignment No.
AS2013/801/02)**

1. Further to my memorandum dated 28 July 2014 providing the IMD's comments on the findings and recommendations to the above-mentioned report, please find attached the revised Annex, containing the detailed IMD's responses to the findings.
2. Please replace the earlier submission with the attached Annex.
3. Thank you.

cc: Ms. Bishopric
Mr. Singh
Mr. Willey
Ms. Avena-Castillo

Management Response

**Audit of utilization and monitoring of investment guidelines in the Investment Management Division
of the United Nations Joint Staff Pension Fund**

Rec. no.	Recommendation	Critical ¹ / Important ²	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	The Investment Management Division should develop written procedures on the tracking error and Value-at-Risk defining the respective roles and responsibilities of staff in establishing and monitoring limits, and in ensuring compliance with the established limits.	Important	Yes	Ajit Singh, Deputy Director for Risk Management	March 2015	In order to further develop and implement such procedures, thirty-six months of historical data is needed. The risk analytics system was implemented in November 2011, accordingly the Investment Management Division intends to develop and rollout such procedures in the first half of 2015
2	The Representative of the Secretary-General for the Investments of the UNJSPF should review the responsibilities and reporting lines of the Deputy Director for Risk Management and ensure that the risk and compliance function has a sufficient degree of autonomy and independence.	Important	Yes	The RSG	March 2015	The RSG accepted this recommendation and stated that any modifications to a change in the role and responsibilities of this position including the reporting lines would have to be considered and implemented by the to-be-determined full time Representative of the Secretary-General for the Investments of the UNJSPF.

¹ Critical recommendations address significant and/or pervasive deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance cannot be provided regarding the achievement of control and/or business objectives under review.

² Important recommendations address important deficiencies or weaknesses in governance, risk management or internal control processes, such that reasonable assurance may be at risk regarding the achievement of control and/or business objectives under review.