INTERNAL AUDIT DIVISION

REPORT 2020/056

Audit of the information and communications strategy and implementation of the Target Operating Model in the Office of Investment Management of the United Nations Joint Staff Pension Fund

Governance mechanisms and practices relating to management of the information and communications technology programme need to be strengthened

17 December 2020
Assignment No. AT2020-801-02

Audit of the information and communications strategy and implementation of the Target Operating Model in the Office of Investment Management of the United Nations Joint Staff Pension Fund

EXECUTIVE SUMMARY

The Office of Internal Oversight Services (OIOS) conducted an audit of the information and communications technology (ICT) strategy and implementation of the Target Operating Model in the Office of Investment Management (OIM) of the United Nations Joint Staff Pension Fund (UNJSPF). The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the ICT strategy and implementation of the Target Operating Model in OIM. The audit covered the period from January 2017 to October 2020 and included a review of relevant risk areas which included: (i) the ICT strategy; (ii) ICT governance mechanisms; (c) programme and project management; and (iv) procurement planning and contract management.

The audit indicated that OIM needs to strengthen the governance mechanisms and practices relating to management of the ICT programme.

OIOS made 11 recommendations. To address the issues identified in the audit, OIM needed to:

- Periodically update its ICT strategy document and apply version control for the Target Operating Model to enable effective monitoring of their implementation;
- Strengthen ICT governance mechanisms and project management by expanding the scope of the Programme Management Office and Change Advisory Board to all OIM projects and initiatives with an ICT component;
- Strengthen ICT governance by: increasing the awareness of the ICT Steering Committee members about their responsibility for the ICT strategy and Target Operating Model; empowering project managers and project boards to make decisions on issues that do not require escalation to the ICT Steering Committee; and allocating subjects such as information security, crisis management and business continuity to sub-committees of the ICT Steering Committee;
- Ensure that its implementation of data governance, data warehouse and data quality operations are aligned to the United Nations system-wide data strategy;
- Document and periodically update a detailed resource plan for its ICT projects identifying the internal and external resources required for successful implementation of the Target Operating Model, as well as forecasts to mitigate the impact of any shortfall in resources;
- Strengthen its project management practices by maintaining a risk register, preparing appropriate risk responses, and empowering project managers to manage project risks within their authority;
- Strengthen its project management practices by consistently using the appropriate templates for all projects and initiatives with an ICT component;
- Establish a consistent procedure to identify a change, initiative or project, depending on its materiality and nature, as well as the process for their review and approval;
- Address the weaknesses in its internal processes relating to procurement and implement appropriate measures to improve its efficiency and effectiveness;
- Improve the quality and management of task orders; and
- Strengthen contract management by effective monitoring, comparing deliverables against targets, and providing timely feedback on vendor performance.

OIM accepted the recommendations and has initiated action to implement them.

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Audit of the information and communications strategy and implementation of the Target Operating Model in the Office of Investment Management of the United Nations Joint Staff Pension Fund

I.   BACKGROUND

1.   The Office of Internal Oversight Services (OIOS) conducted an audit of the information and communications technology (ICT) strategy and implementation of the Target Operating Model (TOM) in the Office of Investment Management (OIM) of the United Nations Joint Staff Pension Fund (UNJSPF).

2.   UNJSPF was established by the General Assembly in 1949 to provide retirement, death, disability and related benefits for the staff of the United Nations and other international intergovernmental organizations admitted to the Fund. UNJSPF serves 205,000 active participants and retirees of the United Nations and 23 other member organizations. The value of the Fund's investments, which are managed by OIM, stood at $73.7 billion as of September 2020.

3.   OIM is composed of four main sections: (i) Office of the Representative of the Secretary-General (RSG); (ii) Risk and Compliance Section; (iii) Operations and Information Systems Section (ISS); and (iv) Investment Section. Operations and ISS is headed by the Chief Operating Officer (COO) who reports to the RSG.

4.   ISS is responsible for ICT operations of OIM and provides technical support to investment operations by facilitating ICT solutions for portfolio management, asset allocation, market research and analysis, trading, cash management, risk management, benchmarking, compliance monitoring, trade settlement, data management, reporting, safe-keeping of assets, and accounting.

5.   In 2017, OIM developed the TOM with the assistance of a consulting firm by identifying strategic ICT initiatives and projects to enable OIM to meet its long-term objectives. The approved budget for this purpose during the biennium 2018-2019 was $5.2 million. Based on the TOM study, OIM documented its ICT strategy in November 2017 and initiated its ICT projects. The ICT strategy outlined a summary of the projects and the roadmap that OIM will undertake over the next five years to ensure that ICT supports and enables the core work of OIM. An ICT Steering Committee was tasked to prioritize and oversee the implementation of the TOM.

6.   Comments provided by OIM are incorporated in italics.

II.   AUDIT OBJECTIVE, SCOPE AND METHODOLOGY

7.   The objective of the audit was to assess the adequacy and effectiveness of governance, risk management and control processes over the ICT strategy and implementation of the TOM in OIM.

8.   This audit was included in the 2020 risk-based work plan of OIOS due to the risk that potential weaknesses in the ICT strategy and implementation of the TOM could compromise the achievement of the intended objectives.

9.   OIOS conducted this audit from July to October 2020. The audit covered the period from January 2017 to October 2020. Based on an activity-level risk assessment, the audit covered relevant risk areas which included: (i) the ICT strategy; (ii) ICT governance mechanisms; (c) programme and project management; and (iv) procurement planning and contract management.

10.   The audit methodology included: (a) interviews with key personnel; (b) observation of committee meetings; (c) review of relevant documentation; and (d) analytical review of data.

11.   The audit was conducted in accordance with the International Standards for the Professional Practice of Internal Auditing.

III.   AUDIT RESULTS

A.   ICT strategy

The ICT strategy document needs to be updated

12.   Achievement of enterprise and organizational goals involves the attainment of ICT-related outcomes. An ICT strategy should map how each enterprise goal is supported by ICT-related goals, projects, organizational structures and processes as enablers.

13.   OIM hired a consulting company in 2017 to conduct a study to assess the current "as-is" operating model, review the existing business applications, systems integration and infrastructure, identify gaps that existed in the current model, and determine the TOM. OIM documented its ICT strategic goals based on the outcomes of the TOM study including the costs, benefits and an implementation roadmap for the proposed projects. OIM's ICT Steering Committee endorsed the TOM in November 2017.

14.   The ICT strategy of November 2017 identified 22 projects to be implemented over five years to achieve the TOM and grouped these projects under six categories, namely: (i) investment management; (ii) trading; (iii) risk and compliance; (iv) investment operations; (v) data management and governance; and (vi) information technology. For each category, the ICT strategy described the scope, assumptions and dependencies, high level cost estimates, and benefits. Additionally, for each project, it provided: (i) a short description; (ii) project duration; (iii) estimated start and end dates; and (iv) high level project phases and internal and external resources required for each phase.

15.   In the ensuing years, OIM's strategic goals remained the same. However, OIM needed to re-adjust its ICT strategy and overall planning horizon due to changing risks and priorities. For example, a new procurement exercise was required for the 'Buy Side Asset Management' solution as the existing solution had been procured as a stop-gap measure without competitive bidding. Similarly, other new requirements were identified including a new risk and performance system, a fixed income portfolio analytics tool, and reporting requirements for sustainable investment. While the ICT Steering Committee monitored the project dashboard which reflected the implementation status of some new projects, OIM did not update its ICT strategy and TOM documents after new requirements were added. Also, there were shifts in the planning horizon primarily due to delays in procurement. An updated strategy and TOM document are essential for effective monitoring of the overall programme, budget, risks, dependencies and priorities.

> **(1)   OIM should periodically update its ICT strategy document and apply version control for the Target Operating Model documents reflecting new requirements and changes in scope, timelines, and estimated costs to enable effective monitoring of their implementation.**
>
> *OIM accepted recommendation 1 and stated that it will refresh the TOM strategy alongside with the ICT strategy, making sure it considers the uniqueness of OIM processes for staffing, and sourcing.* Recommendation 1 remains open pending receipt of the updated ICT strategy and version control for TOM documents.

B. ICT governance

<u>ICT projects were developed without the involement of the ICT Steering Committee and the ICT Team</u>

16.   To improve governance, coordination and communication, OIM established various committees including the ICT Steering Committee, Risk Committee, Internal Investment Committee, and Compliance Committee. OIM also established a Programme Management Office (PMO) and Change Advisory Board (CAB) to support the project life cycle and align with best practices. Issues or requirements discussed in the committees led to changes in processes and systems, either as a change activity, initiative, or project.

17.   The ICT Steering Committee was established as a governance and coordinating body to lead OIM's ICT strategic planning, set priorities, endorse and approve ICT projects, monitor the progress of major ICT initiatives, and address other ICT-related issues as required. The role of the PMO was to improve controls over programme monitoring and enhance project management capabilities and skills to ensure that TOM projects are realized within time, scope and budget. In December 2019, OIM formalized a charter for the PMO, clarifying its roles and responsibilities.

18.   OIOS' review showed that some business-led projects which had an ICT component did not follow established ICT governance processes. For example, the ESG (Environmental, Social and Governance investing) team which reported to the Director of OIM developed ESG Dashboard prototypes without following the process established by the PMO. The project was not presented to the ICT Steering Committee for endorsement and monitoring, and the ICT team was not involved in any phase of the project. There were scope overlaps with other TOM projects; further, the costs, human resources, and project risks (such as sustainability and continuity) were not evaluated by any committee. The project leader separated from OIM in September 2020; there was no project documentation available. Similarly, various ESG tools that were integrated into the existing ICT universe were procured and implemented without adequate involvement of the Investment Officers and the ICT team.

19.   In a December 2019 meeting, the ICT Steering Committee recommended "to add a procedure for business-driven initiatives with a technology component even though it may not fall within the scope of the PMO". In OIOS' opinion, business-led projects with an ICT component do not need separate procedures but should follow the same best practices developed by PMO and should comply with established procedures through the ICT Steering Committee. Lack of centralized governance of projects and programmes may undermine the achievement of optimal solutions and lead to duplication of effort.

> **(2) OIM should strengthen ICT governance mechanisms and project management by expanding the scope of the Programme Management Office and Change Advisory Board to all OIM projects and initiatives with an ICT component.**
>
> *OIM accepted recommendation 2 and stated that the COO will start the dialogue and provide a suggested plan to the RSG and senior management to discuss the need and the steps to implement Enterprise Programme Management for OIM.* Recommendation 2 remains open pending receipt of evidence that the scope of the PMO and CAB has been expanded to all projects and initiatives with an ICT component.

<u>Multiple roles combined in the ICT Steering Committee affected its effectiveness</u>

20.   The ICT Steering Committee acted as the Project Board, Crisis Management Committee, and ICT Security Committee, in addition to its role of monitoring ICT strategic initiatives and priorities. The Committee comprised of eight members including those representing Investments, Risk and Compliance,

and Operations and ISS. The Committee held quarterly meetings until April 2019 and monthly meetings since then.

21.   As the Committee played the role of Project Board for most of the projects, sometimes it made decisions of a purely technical nature on issues of lower priority. For example, a low-level project activity such as user acceptance testing for the "internet filtering upgrade" initiative was expected to be endorsed by the Committee. On the other hand, the Committee did not always pay enough attention to large impact issues that were presented to it, with potentially OIM-wide risks. OIOS' review of the minutes of the Committee's meetings showed that the amount of information provided to the Committee, the extent of subjects discussed in its meetings, and the low-level project decisions that the Committee got involved in resulted in shifting its focus and affected its effectiveness. ICT security and crisis management subjects could be discussed in separate sessions for improved effectiveness; Project Boards can be established as needed, and project managers can be empowered for better focus on project level risks and issues that do not require escalation to the Committee.

> **(3) OIM should strengthen ICT governance by: (i) increasing the awareness of the ICT Steering Committee members about their responsibility for the ICT strategy and Target Operating Model; (ii) empowering project managers and project boards to make decisions on issues that do not require escalation to the ICT Steering Committee; and (iii) allocating subjects such as information security, crisis management and business continuity to sub-committees of the ICT Steering Committee.**
>
> *OIM accepted recommendation 3 and stated that: (i) the Chair of the ICT Steering Committee will prepare a presentation for the members to raise awareness of their responsibility; (ii) OIM will ensure that a Project Initiation Document is produced for each project, clearly defining the Project Board with relevant staff at the appropriate level; and (iii) OIM will schedule separate sessions for the Crisis Management Team sub-committee, the Information Security sub-committee and the Business Continuity Disaster Recovery working group.* Recommendation 3 remains open pending receipt of evidence of the measures taken to strengthen ICT governance.

The ICT Steering Committee suspended projects without considering cost, risks and impact

22.   Good governance requires a committee culture that values discussion and an effective decision-making process, aligned with organizational strategies, relying on factual data and evaluating the risks and impact of the possible decisions.

23.   After the ICT Steering Committee's endorsement of the TOM, three projects were initiated under the data programme in 2017: (i) a data governance framework to define data ownership, roles, responsibilities and practices; (ii) a data warehouse to consolidate and store data from various platforms; and (iii) data operations and quality to reconcile data across platforms.

24.   In July 2019, the Committee decided to pause the entire data programme without discussing or evaluating the issues, risks, cost and impact of halting the three projects. This was due to the concern of the former RSG about the contractual services that were assisting the data management programme. Although the Committee decided to re-prioritize the data management programme in its next meeting in October 2019, the subject was not discussed again. Despite the attempts made by the project team, the Committee did not re-initiate the projects and did not endorse the business case until October 2020. OIOS' review of the meeting minutes and observation of the Committee's meetings showed that some Committee members stopped supporting the initially endorsed projects without presenting any substantive reason to justify their position.

25.   The Committee did not also consider the justification for re-initiation of the data programme and the risks brought to its attention e.g., (i) data loss issues related to data converted from a previous vendor to a new vendor, and the need for a data warehouse to eliminate similar occurrences in the future; (ii) ongoing data quality issues which were detected months after the incidents due to lack of organized data management and automated reconciliation; and (iii) a data incident involving a financial implication which was subsequently resolved. Additionally, the Committee did not consider that OIM had already prepared the requirements analysis and solicitation documents, and had also partially implemented the projects.

26.   Furthermore, the Committee's inaction on the data management programme was at variance with the United Nations' system-wide data strategy as well as OIM's ICT strategy, thereby delaying the achievement of OIM's strategic goals. The one-year suspension of projects also increased the risk of undetected data errors across platforms, as well as the risk of delaying the procurement process because bidders who submitted proposals may not be interested after more than a year had passed since then.

> **(4) OIM should: (i) ensure that its implementation of data governance, data warehouse and data quality operations are aligned to the United Nations system-wide data strategy; and (ii) re-initiate the suspended data management projects, as appropriate, with adequate resources and update their project plans accordingly.**
>
> *OIM accepted recommendation 4 and stated that it will define a data strategy document aligned with the United Nations system-wide data strategy. OIM will also re-initiate the Request for Proposal (RFP) for the data warehouse, re-establish the Data Governance Working Group, and start the recruitment of project staff.* Recommendation 4 remains open pending receipt of evidence of the measures taken to address the issues relating to OIM's data management programme.

C.   Programme and project management

Resource planning for implementation of the TOM was inadequate

27.   The OIM ICT strategy indicates the necessity to develop a resource plan by identifying the individuals who will be responsible for various parts of the roadmap, including internal OIM staff and external resources (consultants). It is important to review the resource plan periodically, consider the shifts in project timelines, and prepare contingency plans for unavailability scenarios of internal staff to ensure the timely implementation of the ICT strategy and the TOM.

28.   OIM did not document a resource plan for TOM projects. Since 2017, there were no documented annual ICT work plans for executing short-term and long-term projects and operational activities. This information was partially available in the performance appraisal documents of individual staff members. Consequently, the work plan of ISS was determined by day-to-day needs and changing priorities.

29.   Furthermore, the resourcing plan for consultancy services was not determined for TOM projects. Consultancy services were required to assist OIM in developing and reviewing its RFP (Phase-2) and implementing the projects included in the TOM (Phase-3). The initial estimate of services for Phase-2 was 920 hours during contract planning. However, at the time of the audit, 4,173 hours had been utilized for Phase-2, without any assessment of resources required for future phases. This raises concern as to whether the contracted amount would be sufficient to complete the remaining activities for Phase-2 and Phase-3.

30.   OIOS' review of large impact projects showed various weaknesses in budgeting and resource management, as described below.

(a)   Inadequate budgeting and lack of key resources for the data management programme

31.   OIM's budget proposals considered the staffing requirements for some projects. For instance, OIM requested general temporary assistance (GTA) funding for a programme management officer, business applications officers, and other posts required for increased support for TOM implementation. However, similar consideration was not given to staffing requirements for execution of the data management programme. This significant and crosscutting component of the ICT strategy was not budgeted in a timely manner. To mitigate the risk, consultancy services were used until July 2019 for defining the requirements and preparation of RFPs. Further, due to lack of a dedicated project manager with adequate expertise, OIM assigned the database administrator as the project manager for the data management programme who primarily played the role of ICT focal point rather than project manager. Additionally, even though the TOM study recommended the creation of a data operations group to monitor data quality across vendors and groups, OIM did not allocate resources for this purpose. At the time of the audit, recruitment of a temporary data analyst was in progress.

(b)   Staffing requirements for new projects were not assessed in a timely manner

32.   OIM had procured a 'Risk and Performance System' in 2011. Due to the approaching contract expiration, a new procurement exercise was completed in 2020 which resulted in the selection of a new vendor. At the time of the audit, OIM was still in discussion with the vendor on finalization of the contract. The implementation phase was expected to be completed within nine months after the contract date. The project plan and staffing resources were yet to be determined. There is a risk that ICT resources may not be immediately available for all projects if their timelines overlapped. Start dates of projects often shifted by several months due to delays in the procurement process. The amount of internal resources required for project implementation should be part of the requirements analysis, and vendors' input may be required on the level of effort from internal staff for improved resource planning.

33.   Similarly, OIM included 'Buy Side Asset Management Project' into the TOM in 2018 due to a need to re-perform the procurement exercise. Selection of a new vendor may require implementation of a new system. OIM did not have a contingency plan for this scenario.

34.   OIM needs to strengthen its resource planning (i.e., internal staff requirements for various projects, as well as external support required for each phase of the projects in the TOM) to enable the identification of areas that may need additional resources, and budget for them in a timely manner.

> **(5) OIM should document and periodically update a detailed resource plan for its ICT projects identifying the internal and external resources required for successful implementation of the Target Operating Model, as well as forecasts to mitigate the impact of any shortfall in resources.**
>
> *OIM accepted recommendation 5 and stated that it will prepare a monthly resource plan, weekly time allocation and annual leave calendar for the team. OIM will also prepare a proper document for each project including a clear list of critical staff, and proper budget allocated for additional resources to mitigate the impact of any shortfall.* Recommendation 5 remains open pending receipt of the detailed resource plan, updates and forecasts to mitigate the impact of any shortfall in resources for ICT projects under the TOM.

Project risks were not adequately monitored and addressed

35.   Risk management includes the process of identifying potential project risks, planning risk responses based on criticality, and monitoring risks over the projects' life cycle.

36.   OIOS' review showed that project risks were not managed in a systemic manner to allow for timely remediation. Project teams did not maintain a project risk register and document the issues encountered during implementation. Some risks that were escalated to the ICT Steering Committee were not adequately considered by the Committee. For example, the 'Buy Side Asset Management' project team identified a potential risk relating to budget allocation and cost overrun if a vendor other than the existing one was selected in the procurement exercise. This risk was presented to the ICT Steering Committee in its 1 August 2019 meeting and in the following months. The minutes of the Committee's meetings did not show any discussion or decision on this matter. Though the risk was imminent, it did not materialize eventually because the existing vendor was selected through the procurement exercise.

37.   Similarly, for the data management programme, the risk response presented to the ICT Steering Committee was to "create a data task force with business users" which was an important requirement for the project. However, the Committee did not take any action.

38.   Project and programme risks need to be anticipated and addressed in a timely and effective manner to ensure successful project implementation, realize the benefits, and achieve the intended goals.

> **(6) OIM should strengthen its project management practices by: (i) maintaining a risk register and documenting the issues relating to each project; (ii) preparing appropriate risk responses and actions to be taken; and (iii) empowering project managers to manage project risks within their authority and escalate the others either to project boards or the ICT Steering Committee, as necessary.**
>
> *OIM accepted recommendation 6 and stated that it will update the project documentation template to incorporate a risk register at the project level, including the appropriate risk responses and triggers.* Recommendation 6 remains open pending receipt of evidence of the measures taken to strengthen project management practices.

Project documents were not consistently prepared

39.   PMO was established to support the implementation of the TOM. In December 2019, OIM approved a set of document templates to be used during the project life cycle in accordance with its project management methodology. Project dashboards were also created to track and report the status of projects.

40.   OIOS' review of project documentation indicated that best practice guidelines and templates prepared by PMO were not consistently utilized for all projects and initiatives. For example, project initiation and business case documents were not prepared and approved at the time of project initiation; many of them were prepared on ex post-facto basis. As the TOM was composed of multiple projects, scope overlaps, interference, and impact of projects on each other need to be managed and monitored in an integrated manner by documenting business cases and project initiation documents, which should be updated throughout the project life cycle.

41.   Furthermore, project closure documents were not consistently documented for completed projects. This made it difficult to transparently assess the success of the projects, their planned and actual costs, timelines, and benefits.

> **(7) OIM should strengthen its project management practices by consistently using the appropriate templates for all projects and initiatives with an ICT component.**
>
> *OIM accepted recommendation 7 and stated that it will make sure that the proper templates (i.e. Business Case, Project Initiation Document, Progress Report and Closure Report) are used consistently for all projects.* Recommendation 7 remains open pending receipt of evidence of the consistent use of appropriate templates for all projects and initiatives with an ICT component.

Procedures to differentiate a change, project, or initiative were unclear

42.   OIM established CAB and developed change management policies and procedures to follow when an ICT-related change is expected to be introduced in a production environment that could affect end-user service. The change management process covered: (a) functional modification to a service or system which requires user acceptance tests before migrating to a production environment; and (b) change in configuration of software services (i.e., systems hosted off-site). However, there was no clarity on the definition of a change.

43.   Issues or requirements that were discussed either in the committees (i.e., ICT Steering Committee, Risk Committee, Internal Investment Committee, and Compliance Committee) or working groups resulted in either a change proposal, an initiative, or a project. However, there was no standard or uniform approach to identify a task as "initiative", "project" or "change activity". Further, there was no clear procedure describing the process to plan and approve small or large scale activities and how they will be managed, implemented and monitored. For example, the Custody Equity Account Optimization change request (CR037) was initially presented to the CAB with its objectives and benefits. The CAB recommended that the decision to approve the initiation of the entire project should be referred to the Risk Committee before it comes back to the CAB. Similarly, the ESG Dashboard prototypes did not go through the established change management process.

44.   OIOS is of the view that the materiality (cost and impact) of activities that have an ICT component should be considered at the initiation phase and an adequate process should be followed for their planning, evaluation, approval, implementation and deployment according to the assigned category, regardless of the committee that should be considering and approving them.

> **(8) OIM should establish a consistent procedure to identify a change, initiative or project, depending on its materiality and nature, as well as the process for their review and approval.**
>
> *OIM accepted recommendation 8 and stated that it will create a procedure defining a change, initiative or project in the PMO charter and will also review the terms of reference of the relevant committees to define the process for project review and approval.* Recommendation 8 remains open pending receipt of procedures defining a change, initiative or project, and the process for their review and approval.

D.   Procurement planning and contract management

There were weaknesses in procurement planning

45.   Acquiring the right services, solutions and software in an efficient and timely manner is key to successful implementation of the ICT strategy and TOM. The Procurement Manual states that

requisitioners and procurement officials should plan for demand in a timely manner; define an acquisition strategy; and conduct the procurement exercise based on clear specifications to achieve best value.

46.   Initially in 2014, OIM intended to undertake an assessment of its existing ICT infrastructure, gap analysis and recommendations for a most appropriate and achievable integrated information infrastructure to meet its operating requirements. After issuing the RFP and completing the technical evaluation, OIM requested the Procurement Division (PD) to cancel the RFP due to a change in scope and issue a new expression of interest (EOI) for a consultant for assessing the TOM. OIM explained that the reason for cancellation of the RFP and change in scope was due to the change in senior management.

47.   A new EOI was posted on PD's website in July 2016. At the time of finalizing the statement of work and criteria for technical evaluation, OIM requested PD to reissue the EOI to include additional requirements. After this was done, OIM requested the cancellation of the reissued EOI to avoid delays in issuing the RFP. PD approved the cancellation and issued the RFP based on responses received to the previous EOI.

48.   Similar instances of cancellation and re-issuance of RFPs were also observed in other projects, such as 'Infrastructure as a Service', Information Technology Service Management, and Data Integration. OIM needs to strengthen its procurement practices to address this issue and prevent delays in project implementation.

> **(9) OIM should address the weaknesses in its internal processes relating to procurement and implement appropriate measures to improve its efficiency and effectiveness.**
>
> *OIM accepted recommendation 9 and stated that it will create an internal process relating to procurement and a set of measures to improve its efficiency and effectiveness.* Recommendation 9 remains open pending receipt of evidence of the actions taken to address the weaknesses and improve the efficiency and effectiveness of internal processes relating to procurement.

Lack of clarity in task orders

49.   OIM issued task orders to the consulting firm to acquire services required for projects under the TOM. Task orders should clearly describe the activities to be performed with clear timelines, deliverables and estimated hours for each component. They should provide an outline of the activities arranged in a logical sequence and clearly describe the objective to be achieved

50.   OIM had issued 12 task orders to the consulting firm for Phase 2 and Phase 3. OIOS observed that: (i) multiple projects with various phases, requiring inputs from various project managers, were consolidated in a single task order; (ii) activity definition was not clear; and (iii) the beginning and completion dates of activities were not clearly specified. Also, since no work plans were attached to the task orders, it was difficult to monitor the performance of the various activities with reference to the respective work plan(s).

51.   While it is understandable that multiple projects or activities under different project phases may need to be initiated simultaneously, the inclusion of multiple projects in one task order prevented effective monitoring and also created problems for verifying the deliverables and certifying the related invoice(s) for payment.

> **(10) OIM should improve the quality and management of task orders by ensuring that: (i) each task order is associated with only one project and phase; (ii) the objective and scope of tasks are clearly defined; (iii) expected outcomes, deliverables, milestones, and**

> **timeframes are clearly indicated and synchronized with OIM work plans; and (iv) closure reports are documented, identifying gaps and issues in a timely manner.**
>
> *OIM accepted recommendation 10 and stated that it will update the task order template to ensure that it covers only one project and phase, that the objective and scope of tasks are clearly defined, and that expected outcomes, deliverables, milestones and timeframes are clearly indicated and synchronized with OIM work plans. OIM will also create a closure report at the end of each engagement.* Recommendation 10 remains open pending receipt of evidence of the actions taken to improve the quality and management of task orders.

Time management needs to be improved

52.   Time management of consultants is essential to achieve the objectives of the contract and obtain best value for money. OIOS observed that until September 2018, consultants were not asked to submit any timesheets. Thereafter, consultants submitted timesheets which were used to certify the invoices. However, OIM did not review timesheets against the activities planned in the task orders. OIOS' analysis showed that one consultant had charged more than the normal working capacity in three different months (considering 22 working days with 8 working hours per day). Although it may be assumed that the consultant worked overtime, the lack of proper oversight in reviewing the timesheets raises concern that the time charged may be excessive or unjustified.

Process of invoice management needs strengthening

53.   Signed contracts need to be complied with by the parties to avoid any potential conflict regarding the deliverables, performance or invoice payments.

54.   The consultancy firm for a project submitted 54 invoices against 12 task orders. OIM paid 36 invoices, withheld payment for the remaining ones, and requested a credit note from the consultancy firm. OIM did not provide any feedback to the vendor when the work packages were completed, and the deliverables were received. Withholding of invoices without providing any explanation led to a dispute which had to be resolved in consultation with the Office of Legal Affairs. Inadequate review of timesheets, combined with absence of description of activities and clear deliverables with specific timelines, also contributed to the dispute. This was exacerbated by lack of timely monitoring of key performance indicators for work packages and absence of performance evaluation of the vendor.

> **(11) OIM should strengthen contract management by: (i) effectively monitoring the timesheets of consultants against the activities assigned in the task orders; (ii) preparing a comparative analysis of deliverables against the targets; (iii) providing timely feedback on vendor performance; and (iv) ensuring that invoices are paid only after the related deliverables have been signed off.**
>
> *OIM accepted recommendation 11 and stated that it will establish a vendor management function that will oversee the contract management and vendor performance review process, including enforcing timesheets for all consultants, analyzing deliverables against targets, and submit evidence along with each invoice payment request. This effort will be done on a regular basis with the vendor to ensure timely feedback and corrective actions.* Recommendation 11 remains open pending receipt of evidence of measures taken to strengthen contract management.

IV. ACKNOWLEDGEMENT

55.   OIOS wishes to express its appreciation to the management and staff of OIM for the assistance and cooperation extended to the auditors during this assignment.

(*Signed*) Eleanor T. Burns
Director, Internal Audit Division
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STATUS OF AUDIT RECOMMENDATIONS

**Audit of the information and communications strategy and implementation of the Target Operating Model
in the Office of Investment Management of the United Nations Joint Staff Pension Fund**

Rec. no.	Recommendation	Critical[1]/ Important[2]	C/ O[3]	Actions needed to close recommendation	Implementation date[4]
1	OIM should periodically update its ICT strategy document and apply version control for the Target Operating Model documents reflecting new requirements and changes in scope, timelines, and estimated costs to enable effective monitoring of their implementation.	Important	O	Receipt of the updated ICT strategy and version control for TOM documents.	31 December 2021
2	OIM should strengthen ICT governance mechanisms and project management by expanding the scope of the Programme Management Office and Change Advisory Board to all OIM projects and initiatives with an ICT component.	Important	O	Receipt of evidence that the scope of the PMO and CAB has been expanded to all projects and initiatives with an ICT component.	31 March 2022
3	OIM should strengthen ICT governance by: (i) increasing the awareness of the ICT Steering Committee members about their responsibility for the ICT strategy and Target Operating Model; (ii) empowering project managers and project boards to make decisions on issues that do not require escalation to the ICT Steering Committee; and (iii) allocating subjects such as information security, crisis management and business continuity to sub-committees of the ICT Steering Committee.	Important	O	Receipt of evidence of the measures taken to strengthen the ICT governance.	31 March 2021
4	OIM should: (i) ensure that its implementation of data governance, data warehouse and data quality operations are aligned to the United Nations system-wide data strategy; and (ii) re-initiate the suspended data management projects, as appropriate, with adequate resources and update their project plans accordingly.	Important	O	Receipt of evidence of the measures taken to address the issues relating to OIM's data management programme	31 March 2021
5	OIM should document and periodically update a detailed resource plan for its ICT projects identifying the internal and external resources required for successful implementation of the Target	Important	O	Receipt of the detailed resource plan, updates and forecasts to mitigate the impact of any shortfall in resources for ICT projects under the TOM.	31 March 2021

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	Operating Model, as well as forecasts to mitigate the impact of any shortfall in resources.				
6	OIM should strengthen its project management practices by: (i) maintaining a risk register and documenting the issues relating to each project; (ii) preparing appropriate risk responses and actions to be taken; and (iii) empowering project managers to manage project risks within their authority and escalate the others either to project boards or the ICT Steering Committee, as necessary.	Important	O	Receipt of evidence of the measures taken to strengthen project management practices.	31 March 2021
7	OIM should strengthen its project management practices by consistently using the appropriate templates for all projects and initiatives with an ICT component.	Important	O	Receipt of evidence of the consistent use of appropriate templates for all projects and initiatives with an ICT component.	31 December 2021
8	OIM should establish a consistent procedure to identify a change, initiative or project, depending on its materiality and nature, as well as the process for their review and approval.	Important	O	Receipt of procedures defining a change, initiative or project, and the process for their review and approval.	31 March 2021
9	OIM should address the weaknesses in its internal processes relating to procurement and implement appropriate measures to improve its efficiency and effectiveness.	Important	O	Receipt of evidence of the actions taken to address the weaknesses and improve the efficiency and effectiveness of internal processes relating to procurement.	30 June 2021
10	OIM should improve the quality and management of task orders by ensuring that: (i) each task order is associated with only one project and phase; (ii) the objective and scope of tasks are clearly defined; (iii) expected outcomes, deliverables, milestones, and	Important	O	Receipt of evidence of the actions taken to improve the quality and management of task orders.	31 March 2021

[1] Critical recommendations address those risk issues that require immediate management attention. Failure to take action could have a critical or significant adverse impact on the Organization.

[2] Important recommendations address those risk issues that require timely management attention. Failure to take action could have a high or moderate adverse impact on the Organization.

[3] Please note the value C denotes closed recommendations whereas O refers to open recommendations.

[4] Date provided by OIM in response to recommendations.

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	timeframes are clearly indicated and synchronized with OIM work plans; and (iv) closure reports are documented, identifying gaps and issues in a timely manner.				
11	OIM should strengthen contract management by: (i) effectively monitoring the timesheets of consultants against the activities assigned in the task orders; (ii) preparing a comparative analysis of deliverables against the targets; (iii) providing timely feedback on vendor performance; and (iv) ensuring that invoices are paid only after the related deliverables have been signed off.	Important	O	Receipt of evidence of measures taken to strengthen contract management.	30 June 2021

APPENDIX I

Management Response

UNITED NATIONS   NATIONS UNIES

INTEROFFICE MEMORANDUM   **MEMORANDUM INTERIEUR**

To: Fatoumata Ndiaye,
Under-Secretary-General Office of Internal Oversight Services
Eleanor T. Burns, Director Internal Audit Division, OIOS

DATE: December 10, 2020

Through: Pedro Guazo
Representative of the Secretary-General
for the investment of UNJSPF assets

Signature: _____
Pedro Guazo (Dec 11, 2020 11:08 EST)

FROM: Bill Wilkinson
Deputy Director, Chief Operating Officer
Rajiv Prabhakar, Chief Information Systems Section
Office of Investment Management/UNJSPF

Signature: *William J Wilkinson*
William J Wilkinson (Dec 11, 2020 10:51 EST)

Signature: *Rajiv Prabhakar*
Rajiv Prabhakar (Dec 10, 2020 11:35 EST)

SUBJECT: Draft report on an audit of the information and communications strategy and implementation of the Target Operating Model in the Office of Investment Management of the United Nations Joint Staff Pension Fund (Assignment No. AT2020-801-02)

Governance mechanisms and practices relating to management of the information and communications technology programme need to be strengthened

1. OIM acknowledges receipt of the draft report on an audit of the information and communications strategy and implementation of the Target Operating Model in the Office of Investment Management of the United Nations Joint Staff Pension Fund (Assignment No. AT2020-801-02).

2. OIM would like to take this opportunity to thank the Office of Internal Oversight Services and staff for their comprehensive effort including the on-going collaboration during the thorough review and analysis, and the detailed findings, observations and recommendations.

3. OIM has included an action plan with target dates and the titles of the individuals responsible for implementing the recommendations in the attached Appendix I.

C.C.: Ms. Isabela Perle Munch, Deputy Director Risk and Compliance
Ms.Maria Tsimboukis, Compliance Officer
Mr. Eduardo Hilzinger, Information Systems Officer
Mr. Julian Le Philippe, Programme Management Officer

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Rec. no.	Recommendation	Critical[1]/ Important[2]	Accepted? (Yes/No)	Title of responsible individual	Implementation date	Client comments
1	OIM should periodically update its ICT strategy document and apply version control for the Target Operating Model documents reflecting new requirements and changes in scope, timelines, and estimated costs to enable effective monitoring of their implementation.	Important	Yes	Chief IT for ICT Strategy COO for TOM strategy	Q4 2021	OIM/IS section will coordinate with the OIM 1Y/3Y/5Y strategic business planning in order to refresh the TOM strategy alongside with the ICT strategy, making sure it considers the uniqueness of OIM processes for staffing, sourcing, etc.
2	OIM should strengthen ICT governance mechanisms and project management by expanding the scope of the Programme Management Office and Change Advisory Board to all OIM projects and initiatives with an ICT component.	Important	Yes	COO / RSG	Q1 2022	The COO will start the dialogue and provide a suggested plan to the RSG and senior management to discuss the need and the steps to implement an Enterprise Programme Management Office (EPMO) for the entire organization.
3	OIM should strengthen ICT governance by: (i) increasing the awareness of the ICT Steering Committee members about their responsibility for the ICT strategy and Target Operating Model; (ii) empowering project managers and project boards to make decisions on issues that do not require escalation to the ICT Steering Committee; and (iii) allocating subjects such as information security, crisis management and business continuity to	Important	Yes	(i) COO (ii) PMO (iii) InfoSec Officer	(i) Q1 2021 (ii) Q1 2021 (iii) Q4 2020	(i) The chair of the ICT SC will prepare a presentation for the members to raise awareness of their responsibility. (ii) OIM will ensure that a Project Initiation Document (PID) will be produced for each project, clearly defining the Project Board with relevant staff at the appropriate level. (iii) OIM will schedule separate sessions for the Crisis Management Team (CMT) sub-committee, the

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[1] Critical recommendations address those risk issues that require immediate management attention. Failure to take action could have a critical or significant adverse impact on the Organization.

[2] Important recommendations address those risk issues that require timely management attention. Failure to take action could have a high or moderate adverse impact on the Organization.

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	sub-committees of the ICT Steering Committee.					Information Security (InfoSec) sub-committee and the Business Continuity Disaster Recovery (BCDR) working group.
4	OIM should: (i) ensure that its implementation of data governance, data warehouse and data quality operations are aligned to the United Nations system-wide data strategy; and (ii) re-initiate the suspended data management projects, as appropriate, with adequate resources and update their project plans accordingly.	Important	Yes	Head of Business Applications and Data team	Q1 2021	OIM will define a Data strategy document aligned with the UN system-wide data strategy. OIM will re-initiate the Data Warehouse RFP with PD, re-establish the Data Governance working group, and start the adequate recruitment.
5	OIM should document and periodically update a detailed resource plan for its ICT projects identifying the internal and external resources required for successful implementation of the Target Operating Model, as well as forecasts to mitigate the impact of any shortfall in resources.	Important	Yes	Chief IT	Q1 2021	OIM will prepare a monthly resource plan, weekly time allocation and annual leave calendar for the team. OIM will prepare a proper document for each project including a clear list of critical staff, and proper budget allocated for additional resources to mitigate the impact of any shortfall.
6	OIM should strengthen its project management practices by: (i) maintaining a risk register and documenting the issues relating to each project; (ii) preparing appropriate risk responses and actions to be taken; and (iii) empowering project managers to manage project risks within their authority and escalate the others either to project boards or the ICT Steering Committee, as necessary.	Important	Yes	PMO	Q1 2021	OIM will update its project documentation template to incorporate a risk register at the project level, including the appropriate risk responses and triggers.
7	OIM should strengthen its project management practices by consistently using the appropriate templates for all	Important	Yes	COO / PMO	Q4 2021	OIM will make sure that the proper templates (i.e. Business Case, Project Initiation Document, Progress Report and Closure Report) are used

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	projects and initiatives with an ICT component.					consistently for all projects. This will be further enforced by the EPMO once recommendation 2 is implemented.
8	OIM should establish a consistent procedure to identify a change, initiative or project, depending on its materiality and nature, as well as the process for their review and approval.	Important	Yes	COO / PMO	Q1 2021	OIM will create a procedure defining a change, initiative or project in the IT PMO Charter. OIM will review the TOR of the relevant committees to define the process for project review and approval.
9	OIM should address the weaknesses in its internal processes relating to procurement and implement appropriate measures to improve its efficiency and effectiveness.	Important	Yes	Senior Programme Management Officer	Q2 2021	OIM will create an internal process relating to procurement and create a set of measures.
10	OIM should improve the quality and management of task orders by ensuring that: (i) each task order is associated with only one project and phase; (ii) the objective and scope of tasks are clearly defined; (iii) expected outcomes, deliverables, milestones, and timeframes are clearly indicated and synchronized with OIM work plans; and (iv) closure reports are documented, identifying gaps and issues in a timely manner.	Important	Yes	Head of Business Applications and Data team	Q1 2021	OIM will update the task order template to ensure that it covers only one project and phase, that objective and scope of tasks are clearly defined, that expected outcomes, deliverables, milestones, and timeframes are clearly indicated and synchronized with OIM work plans. OIM will also create a closure report at the end of each engagement.
11	OIM should strengthen contract management by: (i) effectively monitoring the timesheets of consultants against the activities assigned in the task orders; (ii) preparing a comparative analysis of deliverables against the targets; (iii) providing timely feedback on vendor performance; and (iv) ensuring that	Important	Yes	PMO	Q2 2021	OIM will establish a Vendor Management Office function that will oversee the contract management and vendor performance review process, including enforcing timesheets for all consultants, analyzing deliverables against targets, and submit evidence along with each invoice payment request. This effort will be done on a

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	invoices are paid only after the related deliverables have been signed off.				regular basis with the vendor to ensure timely feedback and corrective actions.