# Internal Audit of Information Technology Management and Support in WFP Country Offices

Office of the Inspector General
Internal Audit Report AR/22/21

December 2022

# Table of Contents

# I. Executive summary

## Information Technology Management and Support in WFP country offices

1.   As part of its annual workplan, the Office of Internal Audit conducted an audit of information technology management and support in WFP country offices that focused on: governance and risk management, resources management, service delivery, and locally developed and procured systems. The audit covered the period from 1 January 2021 to 30 June 2022 and also looked at previous events and transactions where necessary.

2.   WFP operates in 115 countries with a field presence in 673 locations. It relies on its people to work worldwide, especially in difficult conditions with high risks to security and safety. The Technology Division aims to weave digital technology into WFP's core business activities to improve WFP programmes and operations in the field and empower those it serves, helping accelerate WFP's journey to zero hunger. Adequate information technology resources, effective governance and risk management are fundamental to ensuring reliable information technology operations are delivered effectively and cost-efficiently.

3.   The audit focused on the adequacy and operating effectiveness of controls, governance mechanisms, and risk management frameworks related to information technology management within WFP country offices.

## Audit conclusions and key results

4.   Based on the results of the audit, the Office of Internal Audit reached an overall conclusion of **some improvement needed.** The assessed governance arrangements, risk management and controls were generally established and functioning effectively but needed improvement to provide reasonable assurance that the objectives of the audited entity/area would be achieved. Issues identified by the audit were unlikely to significantly affect the achievement of the objectives of the audited entity/area. Management action is recommended to ensure that identified risks are adequately mitigated.

5.   WFP's Technology Division is recognized as a valuable partner by all stakeholders consulted during the audit fieldwork. The Technology Division was preparing a new strategy to guide WFP's acquisition, implementation, use, and management of data and information technology. This strategy is expected to align with WFP's strategic plan and to be in place by early 2023.

6.   Information technology staff across the 15 country offices selected for the audit were adequately trained, knowledgeable, and dedicated to supporting WFP operations. Regional operations, enabled by regional information technology officers and headquarter technology units, provided consistent assistance to support digital transformation initiatives.

7.   The decentralized nature of technology in WFP has increased effectiveness and allowed the development of local technology solutions, increasing WFP's agility in responding to operational needs. Conversely, decentralization has led to inconsistencies in the management of information technology, misaligned roles, responsibilities, and authority between the Technology Division and country offices. As a result, country-level priorities regularly override technical standards, minimum recommended staffing capabilities and technologies, compromising information technology services quality, and increasing information technology security risks and costs. The realignment of the roles, responsibilities, and authority of the Technology Division and field operations over technology investments and capabilities should be prioritized to improve information technology process standardization, technology integration, and information technology security.

8.   The information technology functions in country offices and regional bureaux were not generally staffed or supported by local information technology-specific governance mechanisms to provide strategic advice to management, resulting in the misalignment between Country Strategic Plans and information technology initiatives. Country business technology roadmaps, key to aligning technology and country strategies, were not consistently completed or monitored to guide local technology development and acquisition decisions.

9.  The audit observed discrepancies in the number of information technology staff, roles, and skills across regions and country offices with similar profiles and levels of responsibility and support needs. The Technology Division's field target operating model, identifying the minimum recommended information technology staffing structures did not garner management support and was therefore not fully implemented.

10.  The Technology Division has strengthened services management by deploying an information technology service management tool. It is building upon adopting the Information Technology Infrastructure Library to improve its service delivery. The audit identified further improvement opportunities in the design, provision, and management of information technology services.

11.  The Field Software Development Network Directive, issued in December 2020, established the criteria and tools needed to guide software development and acquisition activities in country offices. The audit identified opportunities to improve Directive-related monitoring, compliance, and reporting processes.

## Actions agreed

12.  The audit report contains one high-priority and five medium-priority observations. Management has agreed to address the reported observations and to work to implement the agreed actions by their respective due dates.

## THANK YOU!

13.  The Office of Internal Audit would like to thank managers and staff for their assistance and cooperation during the audit.

# II. Audit context and scope

## WFP Information Technology Objectives

14.  Information technology (IT) plays a crucial role in WFP operations connecting staff with each other and with beneficiaries, cooperating partners, and other stakeholders. WFP's inherent technology goals include the availability to business users of technology and data needed for day-to-day operations, ensuring optimal services and support is provided without interruption efficiently and effectively.

15.  In the field, WFP IT staff develop and implement technical products and keep WFP data and information secure. Information and telecommunications technology and services are the backbone of emergency operations and are supported by approximately 1,300 IT personnel worldwide, of which 87 percent work in country offices. IT expenses by field operations, outside IT Per Capita costs,[1] totalled USD 96.4 million[2] from 1 January 2021 to 30 June 2022.

## IT Management and Support in WFP Country Offices

16.  The Technology Division (TEC) supports WFP staff and operations through three main channels: user services, business solutions and IT partner services. TEC has the lead role in establishing IT policy, procedures and solutions. It monitors the application of relevant policies, standards and management practices in WFP headquarters and the field.

17.  TEC's day-to-day operations are managed by a Chief Information Officer who is supported by Chiefs of sections covering the TEC domain's four major components. These include (a) strategic services – covering business engagement, architecture, governance; (b) enabling services – covering resource management, advocacy, and engagement; (c) digital and data services and foundational technologies services – covering infrastructure, emergency preparedness and response; and (d) information security.

18.  The country offices are grouped into six regions, with regional bureaux providing oversight and support services. Oversight and support for IT are provided by Regional IT Officers (RITOs) located in the regional bureaux, who then advise IT Officers in the field on the development and acquisitions of IT.

19.  IT Officers in country offices support field operations by (a) managing technology services and the support of local infrastructure, (b) implementing enhancements to adapt to changes in the operational landscape, (c) enabling seamless and secure communication and collaboration, and (d) protecting WFP information assets by applying the organization's information technology policies and priorities in their day-to-day work.

## Objective and scope of the audit

20.  The objective of this audit was to provide assurance on the adequacy and operating effectiveness of controls, governance mechanisms and risk management frameworks related to the management of IT operations in the field.

21.  This audit did not include an assessment of WFP's Fast IT and Telecommunications Emergency and Support Team processes. How digital technologies and data are used by WFP operations in the field was also not in the audit scope as the matter was covered by a recent WFP evaluation, which assessed whether the organization is

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1 The IT Per Capita rate covers corporate services, global connectivity and platform services. It excludes start-up implementation costs and other IT capital expenditures.

2 This figure may not include per-capita expenditures on IT and staff costs, and only represents those asset and project expenditures recorded under the correct general ledger accounts of ' IT expenditures (likely to be understated given frequent incorrect expenditures coding in the field).

equipped to use the most appropriate digital technologies to achieve its objectives under constrained conditions.[3]

22. The audit fieldwork included meetings in WFP headquarter in Rome, visits to the Sudan, Palestine, Madagascar, and Guatemala country offices, and to the regional bureaux located in Nairobi, Dakar, and Bangkok. Online surveys and interviews were also conducted with the following country offices: Afghanistan, Barbados, Democratic Republic of the Congo, Ivory Coast, Ethiopia, Iraq, Nicaragua, Senegal, Somalia, Syria, and Tanzania.

23. In performing the preliminary risk assessment, the audit team consulted key stakeholders at headquarters, country offices, and regional bureaux on the perceived risks, reviewed relevant documentation, and considered the findings of previous audit and advisory work.

24. Based on the audit risk assessment, the audit scope covered the following four lines of enquiry:

- **Line of enquiry 1 Governance and risk management**: How is IT in the field aligned with country offices' operational and programmatic objectives and priorities? Are there well-defined corporate and local mechanisms for governance, risks, and management of the IT function in WFP country offices?

- **Line of enquiry 2 Resources management**: Are country and regional offices staffed with the right and adequate level of IT capability, infrastructure, and skills to support WFP programmes' objectives? How are IT budget, funding, and investments managed in the field?

- **Line of enquiry 3 IT service delivery:** How are IT services defined, measured, and reported? Are there clear operations and performance standards developed to facilitate the management of IT services? Are there established key performance indicators to define expectations and measure the effectiveness of IT services delivery?

- **Line of enquiry 4 Locally developed systems:** Are processes and policies in place to detect and monitor shadow IT risks and guarantee the confidentiality, integrity and availability of WFP data and information?

25. The audit considered the Control Objectives for Information and related Technology and Information Technology Infrastructure Library (ITIL) standards, as well as WFP's policies, procedures, guidelines and frameworks for technology in WFP as part of this audit.

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[3] January 2022 Strategic Evaluation of WFP's Use of Technology in Constrained Environments; Centralized Evaluation Report Volume I; OEV/2020/002.

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# III. Results of the audit

## Audit work and conclusions

26. The six observations arising from the audit are summarized below. They are grouped into sections corresponding to the Lines on Enquiry identified in paragraph 24. Table 1 below outlines the extent to which audit work resulted in observations and agreed actions.

27. The issues identified in this report are mainly rooted in WFP IT governance, strategic direction and organizational allocation of roles, responsibilities, and authority for the management of IT resources.

**Table 1. Overview of line of enquiry coverage, observations, and priority of agreed actions**

| Line of enquiry | Priority of issues/agreed actions |
|---|---|
| **Line of enquiry 1: Governance and risk management** | |
| Observation 1: Roles, responsibilities and authority | *High* |
| Observation 2: Strategy | *Medium* |
| **Line of enquiry 2: Resources management** | |
| Observation 3: Structures and skills | *Medium* |
| Observation 4: Budget planning and management | *Medium* |
| **Line of enquiry 3: IT services delivery** | |
| Observation 5: Services management | *Medium* |
| **Line of enquiry 4: Locally developed or procured systems** | |
| Observation 6: Shadow IT | *Medium* |

### A. Line of enquiry 1 - How is IT in the field aligned with country office operational and programmatic objectives and priorities? Are there well-defined corporate and local mechanisms for governance, risks, and management of the IT function in WFP country offices?

28. Alignment between business and IT means that the vision and objectives of both are understood and are aligned with each other and the strategy of the organization. When an organization does not maintain effective governance over its IT functions and operations, it can lead to negative results, including weak performance and business interruptions.

29. WFP has adopted a decentralized model (like most Unites Nations agencies) to manage information technology to support its programme and operations. IT solutions are also acquired and developed by various WFP divisions and country offices to serve the data and information needs of internal and external stakeholders, following this decentralized governance mechanism. Decentralized IT in WFP allows for greater customization of solutions and improved responsiveness to business unit needs.

30. Part of the RITO's oversight mission is to ensure that IT governance is correctly implemented at the field level, that minimum standard controls of the IT function are embedded in the country office activities, compliance with IT organizational rules, and that regional and organizational IT strategy are correctly implemented.

31. By adequately identifying and analysing potential IT vulnerabilities within an enterprise IT network, country offices can better prepare for IT threats and work to minimize the impact of unintended events, should they occur. The procedures and policies implemented with an IT risk management program can help guide future decision-making while focusing on the country office strategic goals.

32. The audit reviewed IT strategies, governance, and management policies and guidelines, including local IT alignment with country strategic plans (CSPs) and the roles and responsibilities of stakeholders involved in IT management. It also examined the support and oversight provided by RITOs.

## Observation 1: Strategy

33. IT strategic planning defines the overall direction of an organization's IT programme. It links ongoing and planned IT initiatives to long-term IT, security, and business goals and priorities. It also facilitates efforts to measure progress relative to established goals and expectations. IT strategic planning further helps to ensure resources are directed toward business priority areas.

34. *WFP technology strategy:* At the time of the audit reporting, TEC was facilitating the preparation of a new technology strategy for WFP to establish an authoritative framework to guide, coordinate and manage IT operations and investments coherently.

35. *IT strategic planning:* There was a misalignment between CSPs and WFP's IT and digital initiatives. IT planning documents in the country offices sampled showed inconsistencies and gaps in preparing IT investment plans, and business technology roadmaps to guide country-level technology decisions. These plans and roadmaps are needed ahead of IT solution implementation to ensure they support programmatic objectives and country offices' operations and to prevent misalignments with WFP-level technology goals and architecture. While several IT projects and initiatives were identified at the county-level, none of the CSP documents reviewed outline current and planned IT projects and initiatives, including the estimated level of effort and resources needed to support them.

36. *Local IT governance:* The acquisition, development, and use of technology by country offices, sometimes tied to significant local investments and programmatic objectives, was only indirectly addressed by existing local governance committees for procurement and asset management. These governance arrangements were inadequate for decision-making, prioritization and monitoring of IT projects, risks and performance management, and alignment of IT resources to programmatic needs and IT security objectives.

37. *RITOs' strategic role:* While RITOs actively support country offices in addressing IT issues and oversee compliance with corporate rules and standards, they do not consistently participate in the alignment of technology capabilities and investments to the CSPs, to ensure these are coherent and effective. One exception was noted in the Regional Bureau for Eastern Africa, where, in 2022, a consulting firm was hired to identify the IT initiatives needed to support the CSPs of the nine country offices in the region. As noted in paragraph 33, RITOs' recommendations are not binding and are regularly disregarded by the country office management.

Underlying cause(s):  Absence of a corporate IT strategy; local IT functions not recognized as strategic partners and pillars of the country offices' CSP; underinvestment in regional capacity to support the formulation of country-level IT strategies; and absence of local IT governance.

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**Agreed Actions** [Medium priority]

The Technology Division will:

(i)    Complete and issue WFP's global IT strategy 2023-2026.

(ii)   Issue guidance to support the progressive development of roadmaps at regional and country levels as appropriate to implement the global IT strategy in support of the country strategic plans.

(iii)  Establish terms of reference for regional and country office IT governance bodies independent of existing committees.

**Timeline for implementation:**

31 December 2023

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## Observation 2: Roles, responsibilities and authority

38.  TEC is responsible for supporting and enabling the development of centralized technology solutions and setting the normative guidance for the implementation by country offices. Country offices control the resources needed for implementation and decide whether IT spending should be prioritized. This misalignment between responsibility and authority puts the achievement of corporate-wide technology objectives, the implementation of projects and standards, and information security at risk.

39.  Decentralized roles, such as the RITO, report to the regional management team but do not have the authority to mandate the implementation of projects or standards on country offices, acting instead in an advisory role. The RITOs' decisions and recommendations are not binding. As a result, these were regularly superseded and deprioritized by country offices' management.

40.  Further, the country office management teams made decisions on IT matters outside their areas of expertise, sometimes undermining IT performance, IT security, and WFP's corporate digital transformation goals. In addition, due to the absence of reporting lines to TEC, country offices' management teams were not accountable for their decisions, with TEC and RITOs having no recourse to enforce the consistent implementation of corporate IT initiatives or standards.

41.  This absence of accountability was highlighted in OIGA's internal audit of WFP's network and telecommunication infrastructure issued earlier in 2022.[4] Network devices identified as obsolete and reaching their end-of-service-life by TEC were not replaced as management deemed obsolete equipment not a priority, thus increasing the likelihood of IT security vulnerabilities being exploited.

42.  The absence of an agreed framework defining the roles, responsibilities, and authority between TEC and country offices adversely affects IT governance and risk management, leading to low process standardization, technology integration, and IT security gaps.

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4 Internal Audit of WFP's Network and Telecommunications Infrastructure in WFP AR-22-10 (May 2022).

43.  At the time of the audit fieldwork, TEC was selected as one of the WFP divisions to pilot project COSMOS,[5] which intends to provide increased functional guidance, support, and oversight from global functional teams, clarifying roles and responsibilities, and where specialized skills and expertise can be leveraged by country offices.

Underlying cause(s): WFP's unclear delegation of authority, reporting lines, and decentralized resource management model, leading to weak accountability for the management of IT resources and use of technology by country offices.

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**Agreed Actions** [High priority]

The Technology Division, in consultation with the Digital Business and Technology Committee, will:

(i)   Establish a policy framework clarifying the roles and responsibilities in managing IT resources between the Technology Division, regional bureaux, and country offices, including workforce planning, IT service delivery, performance management, and control of IT budgets.

(ii)  Formulate the level of authority to be assigned to the Technology Division and the Chief Information Officer in the management of IT field resources.

**Timeline for implementation:**

31 December 2024

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## B.    Line of enquiry 2 - Are country offices and regional bureaux staffed with the right and adequate level of IT capability, infrastructure, and skills to support WFP programmes' objectives? How are IT budget, funding and investments managed in the field?

44.  IT resources management is critical for WFP to ensure country offices are optimizing and allocating resources to the right initiatives, that fundings is aligned to strategic plans, and that investments translate into value for WFP and its beneficiaries. Adequate planning and budget management processes should be in place to aid in the management of resources and management decision-making.

### Observation 3: Structures and skills

45.  Following the Office of Internal Audit report on IT in the field in 2019, TEC established the target operating model (TOM) for technology support, integrating digital technologies and operational capability assessed requirements to help country offices identify the structures and financial resources required to provide technology support to WFP programmes.

46.  The TOM did not gain corporate and country-level support. IT resources were rarely considered during the annual strategic planning processes. The country office managers interviewed found the recommended TOM structures too heavy to implement given their available financial resources. Out of the 15 country offices sampled by the audit team, only four had implemented the TOM. When country offices could not establish minimum digital and operational capabilities, the TOM needed to include either redirecting support from country offices to regional bureaux or identifying outsourcing alternatives. Small country offices with limited funding were unable to implement the TOM.

47.  Management at the country and regional levels stated that the roles and terms of reference of Business Engagement Managers (BEMs), Business Transformation Officers, Digital Services Leads, and Data Leads were sometimes perceived as overlapping and needed clarification and streamlining to make IT structures leaner and facilitate the advancement of IT initiatives and support.

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5 Project COSMOS (Country Office Support Model Optimization & Simplification) was established to improve the effectiveness and efficiency of country office support, to enable country offices to focus their efforts on delivering operations to meet growing beneficiaries' needs, particularly given the challenging global outlook.

48.  The Human Resource functions at country and regional levels did not use the TOM as a reference during organizational realignment exercises. At the corporate level, the Human Resources Division (HRM) had yet to use the TOM model to align workforce planning strategies for IT personnel in field operations.

49.  As a result, there were significant discrepancies in the number, grades, and profiles of staff in the IT functions of country offices with similar profiles and technology support needs, sometimes resulting in significant gaps in capacity to support operations with the right technologies and personnel. These factors were also noted to increase the IT security and business continuity risks, especially in medium and small country offices.

Underlying cause(s): Technical complexity in defining technology objectives and required capabilities of country offices; TOMs not checked for practical implementation or in consultation with HRM; competing priorities for resources at the field level; limited authority and no resources available to IT personnel; and insufficient management awareness and clarity regarding different TEC roles (refer to agreed actions for observation 1).

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**Agreed Actions** [Medium priority]

The Technology Division will:

(i)    Pilot the "Global Functional Teams" model through the Country Office Support Model Optimization and Simplification project and document results for consideration on the corporate way forward.

(ii)    Implement strategic IT workforce planning in close collaboration with the Human Resources Division.

**Timeline for implementation:**

30 June 2024

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## Observation 4: Budget planning and management

50.  Starting in 2022, IT Per Capita costs were charged to the relevant position funding source. The per capita rate was endorsed by the Technology Investment Committee and shared with the Digital Business and Technology Committee for review and endorsement by the committee and the Leadership Group.

51.  The expectation is that per capita costs related to non-PSA-funded positions are factored into CSPs. However, the IT budgets and resource plans for the sample countries were not formally documented or clearly linked to the country offices' business technology roadmaps or other country-level strategies.[6] These links were needed to identify the baseline technologies, staffing, and financial resources required to align technology spending with programmatic objectives.

52.  In 14 out of 15 country offices sampled, the audit did not find evidence of a structured process to define, review, and approve IT budgets and monitor IT expenditures. It was not possible to determine whether IT budgets were optimally allocated and used, or whether budget revisions were needed to respond to changing conditions.

53.  *Procurement and expenditures tracking:* the technical release of IT material group purchase orders serves as a control used by the RITOs to prevent the proliferation of unauthorized software and hardware. The audit found that country offices circumvent this control by splitting purchase orders, hiring consultants for software development activities, issuing purchase orders without the technical release, and then asking for clearance after receiving goods or services. This resulted in WFP's inability to identify, measure, and control IT spending by field offices.

54.  TEC confirmed that a functional review of regional office budgets is now a standard step in the management planning process. The practice was initiated for the 2023 budget cycle and is planned to continue from the 2024 budget cycle onward. TEC indicated it would align its practices with the corporate process.

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Underlying cause(s): Undefined budget and performance management objectives for IT resource management; absence of processes and tools for IT budget planning and management; outdated monitoring budgeting templates and guidelines; unclear expectations of senior managers regarding their involvement in overseeing the preparation of IT budget and managing expenditures; and misalignment between the TEC and country office level management's responsibility, accountability and authority for technology resources and decision making.

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**Agreed Actions** [Medium priority]

The Technology Division, with the assistance of the Corporate Planning and Performance Division, will:

(i)   Develop refined guidance and inputs for the country portfolio budget guidelines on the "Communications and IT Services" and "Telecommunication/IT Equipment" costs estimation process.

(ii)  Develop IT-specific business case templates to support the country and regional offices in the rollout of local/regional IT strategy roadmaps.

**Timeline for implementation:**

31 December 2023

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## C.   Line of enquiry 3 - How are IT services defined, measured, and reported? Are there clear operations and performance standards developed to facilitate the management of IT services? Are there established key performance indicators to define expectations and measure the effectiveness of IT services delivery?

55.   The ITIL is a set of IT service management practices used to guide the design and risk management for IT service delivery. TEC has informally adopted ITIL practices across the organization, aligning itself to international best practices standards for IT service management.

56.   The audit found that the staff in WFP's headquarters and country offices were well-trained in applying ITIL services management best practices. In 2020, TEC deployed an IT service management tool, an IT and enterprise service management platform, to help improve service to users, increase process digitalization and automation, and provide a platform for further digital transformation in WFP. At the time of the audit, the IT service management tool had been deployed, and employees were trained in WFP headquarters, 86 country offices and the six regional bureaux.

57.   The audit performed tests of key controls in the implementation and adoption of the IT services management process in country offices.

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### Observation 5: Services management

58.   The design of IT services for country offices and establishment of IT practices, processes required improvement and supporting policies to ensure quality and consistent service delivery, increased user satisfaction, and cost-effective service provisions. The deployment of the IT service management tool, needed to be supported by a defined IT services management strategy determining a vision, expected results, and measurable performance patterns for IT services management.

59.   *IT services catalogue:* end-user service catalogues were sometimes incomplete or did not correctly identify the IT services being provided to field users, leading to gaps in IT support and decreasing the ability to accurately measure the resources spent or needed to deliver IT help to end users.

60.   *ITIL framework:* IT services management was not appropriately designed and managed as per the ITIL framework. While many staff were trained on ITIL V4, IT services management was not yet aligned with business priorities or tracked through success metrics as required by the framework.

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61. *Incident management:* the process at headquarters, regional, and country levels were not mature enough to enable continuous improvement. The country offices sampled had not yet designed, implemented, or monitored service level key performance indicators and could not identify IT service delivery improvement opportunities.

62. *IT service requests:* IT requests were not all registered in the IT service management tool. In some cases, the audit found similar monthly service ticket numbers in small and large country offices. Local IT teams had no visibility on escalated tickets to the global service teams. Operation-level agreements among TEC branches were not established to improve service delivery in support of country offices.

63. *IT service management tool:* there were recurring shortcomings with the IT service management tool's reporting capabilities and limited enabled features. The IT service management tool was not configured with GEMS (WFP assets management tool), so it could be used as a configuration management database tool to track assets at the service desk/call request levels.

Underlying cause(s): Informal processes at headquarter and field levels to design, deliver, manage, and improve IT services in country offices; delay in implementing IT services management policies and guidelines across WFP; insufficient of resources to focus on IT services delivery requirements; and IT service management process across WFP with limited visibility and analysis of different service support levels.

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**Agreed Actions** [Medium priority]

The Technology Division will:

(i) Establish and implement incident management guidelines.

(ii) As part of the design of the Portfolio Management Function envisioned as part of the global IT strategy 2023-2026, review problem management as a cross-cutting practice.

(iii) Refine existing IT service catalogs including clear entry points for accessing services by country offices as part of the Country Office Support Model Optimization and Simplification project.

(iv) Define a roadmap to improve reporting and feedback to users in the IT service management tool.

**Timeline for implementation:**

31 December 2024

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## D. Line of enquiry 4 - Are processes and policies in place to detect and monitor shadow IT risks and guarantee confidentiality, integrity and availability of WFP data and information?

64. Technology increases the effectiveness and efficiency of WFP operations in constrained environments. The number of IT literate workforce and growing demand for digital solutions substantially increased the number of IT initiatives executed both in headquarters and field offices.

65. The field software development network framework (FSDN), launched in December 2020, clarifies the criteria under which country offices can develop software outside existing applications. The FSDN directive (TEC2020/002) establishes a framework for country offices to effectively partner with TEC on software development that ensures the safety, integrity, and quality of WFP's technology landscape, systems, and data.

66. The audit would like to highlight that the FSDN represents a significant shift in how local technologies are developed and used. It is expected to improve information security, provide timely solutions to solve country-level needs and increase the efficient and effective use of technology-dedicated resources.

67. The audit reviewed the implementation of the FSDN directive in sampled countries and how this is supported by the regional bureaux and headquarters, both for new IT initiatives and legacy applications. Contracts and agreements with IT suppliers for development activities were also evaluated, as well as the presence of structured processes for change management and data protection.

68. The existence of a centralized, comprehensive, and updated register of IT solutions developed across the organization is fundamental to the FSDN directive's implementation. TEC requires all IT applications to be registered in WFP's IT assets inventory system - GLASS.

## Observation 6: Shadow IT

69. None of the sampled countries had a complete record of their locally developed applications in GLASS, WFP's central repository for IT assets, limiting view and oversight of the IT ecosystems by the RITOs and BEMs. While the decentralized nature of WFP operations allows for efficiency in operations, technology projects were also initiated and managed by corporate divisions outside of TEC's knowledge, creating a need for additional IT resources and capabilities in country offices.

70. *FSDN oversight*: The applications listed in GLASS did not consistently follow the FSDN directive. Countries sampled by the audit did not have a roadmap to assess and eventually discontinue or migrate their legacy applications, as required by the FSDN Directive. In two instances, it was not possible to identify the deployed application following the record in the GLASS register.

71. *Transition to the FSDN:* The country offices sampled by the audit reported complex and lengthy processes to transition local applications into the corporate infrastructure. For example, a country-developed system for output monitoring (to be used by a region) was decommissioned by TEC due to non-compliance with FSDN principles. However, no alternative solution was provided to fulfil the country needs.

72. At the time of the audit reporting, TEC was planning a comprehensive review of the FSDN policy, to simplify and strengthen the governance and process around software development at WFP, as well as to improve the policy's ability to serve country office needs.

Underlying cause(s): Monitoring, compliance, and reporting mechanism for the FSDN not established; cultural resistance and long adoption period associated with the FSDN; and significant efforts, lengthy processes, and absence of resources to identify suitable corporate replacements to non-eligible field-developed software.

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**Agreed Actions** [Medium priority]

The Technology Division will review the software development network framework directive and will issue revised guidance on IT solutions development and management at the country office level.

**Timeline for implementation:**

30 June 2024

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# Annex A – Agreed action plan

The following table shows the categorization, ownership and due date agreed with the audit client for all the audit observations raised during the audit. This data is used for macro analysis of audit findings and monitoring the implementation of agreed actions.

The agreed action plan is primarily at the corporate level.

| # | Observation (number / title) | Area | Owner | Priority | Timeline for implementation |
|---|---|---|---|---|---|
| 1 | Roles, responsibilities and authority | Governance and risk management | TEC | **High** | 31 December 2024 |
| 2 | Strategy | Governance and risk management | TEC | **Medium** | 31 December 2023 |
| 3 | Structures and skills | Resources management | TEC | **Medium** | 30 June 2024 |
| 4 | Budget planning and management | Resources management | TEC | **Medium** | 31 December 2023 |
| 5 | Services management | IT services delivery | TEC | **Medium** | 31 December 2024 |
| 6 | Shadow IT | Locally developed or procured systems | TEC | **Medium** | 30 June 2024 |

# Annex B – Definitions of audit terms: ratings & priority

## 1    Rating system

The internal audit services of UNDP, UNFPA, UNOPS and WFP adopted harmonized audit rating definitions, as described below:

**Table B.1: Rating system**

| Rating | Definition |
|---|---|
| **Effective / satisfactory** | The assessed governance arrangements, risk management and controls were adequately established and functioning well, to provide reasonable assurance that issues identified by the audit were unlikely to affect the achievement of the objectives of the audited entity/area. |
| **Some improvement needed** | The assessed governance arrangements, risk management and controls were generally established and functioning well but needed improvement to provide reasonable assurance that the objective of the audited entity/area should be achieved.<br><br>Issue(s) identified by the audit were unlikely to significantly affect the achievement of the objectives of the audited entity/area.<br><br>Management action is recommended to ensure that identified risks are adequately mitigated. |
| **Major improvement needed** | The assessed governance arrangements, risk management and controls were generally established and functioning, but need major improvement to provide reasonable assurance that the objectives of the audited entity/area should be achieved.<br><br>Issues identified by the audit could negatively affect the achievement of the objectives of the audited entity/area.<br><br>Prompt management action is required to ensure that identified risks are adequately mitigated. |
| **Ineffective / unsatisfactory** | The assessed governance arrangements, risk management and controls were not adequately established and not functioning well to provide reasonable assurance that the objectives of the audited entity/area should be achieved.<br><br>Issues identified by the audit could seriously compromise the achievement of the objectives of the audited entity/area.<br><br>Urgent management action is required to ensure that the identified risks are adequately mitigated. |

## 2    Priority of agreed actions

Audit observations are categorized according to the priority of agreed actions, which serve as a guide to management in addressing the issues in a timely manner. The following categories of priorities are used:

**Table B.2: Priority of agreed actions**

| | |
|---|---|
| **High** | Prompt action is required to ensure that WFP is not exposed to high/pervasive risks; failure to take action could result in critical or major consequences for the organization or for the audited entity. |
| **Medium** | Action is required to ensure that WFP is not exposed to significant risks; failure to take action could result in adverse consequences for the audited entity. |
| **Low** | Action is recommended and should result in more effective governance arrangements, risk management or controls, including better value for money. |

Low priority recommendations, if any, are dealt with by the audit team directly with management. Therefore, low priority actions are not included in this report.

Typically audit observations can be viewed on two levels: (1) observations that are specific to an office, unit or division; and (2) observations that may relate to a broader policy, process or corporate decision and may have broad impact.[7]

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7 An audit observation of high risk to the audited entity may be of low risk to WFP as a whole; conversely, an observation of critical importance to WFP may have a low impact on a specific entity, but have a high impact globally.

## 3    Monitoring the implementation of agreed actions

The Office of Internal Audit tracks all medium and high-risk observations. Implementation of agreed actions is verified through the Risk Management Division's system for the monitoring of the implementation of agreed actions. The purpose of this monitoring system is to ensure management actions are effectively implemented within the agreed timeframe to manage and mitigate the associated risks identified, thereby contributing to the improvement of WFP's operations.

The Office of Internal Audit monitors agreed to actions from the date of the issuance of the report with regular reporting to senior management, the Independent Oversight Advisory Committee and the Executive Board. Should action not be initiated within a reasonable timeframe, and in line with the due date as indicated by Management, the Office of Internal Audit will issue a memorandum to management informing them of the unmitigated risk due to the absence of management action after review. The overdue management action will then be closed in the audit database, and such closure will be confirmed to the entity in charge of the oversight.

When using this option, the Office of Internal Audit continues to ensure that the office in charge of the supervision of the unit who owns the actions is informed. Transparency on accepting the risk is essential and the Risk Management Division is copied on such communication, with the right to comment and escalate should they consider the risk accepted is outside acceptable corporate levels. The Office of Internal Audit informs senior management, the Independent Oversight Advisory Committee and the Executive Board of actions closed without mitigating the risk on a regular basis.

# Annex C – Acronyms

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| **BEM** | Business Engagement Manager |
| **COSMOS** | Country Office Support Model Optimization and Simplification Project |
| **CSP** | Country Strategic Plan |
| **FSDN** | Field Software Development Network |
| **GEMS** | WFP's Assets Management Tool |
| **GLASS** | IT Asset Inventory System |
| **HRM** | Human Resources Division |
| **IT** | Information Technology |
| **ITIL** | Information Technology Infrastructure Library Standards |
| **RITO** | Regional Information Technology Officer |
| **TEC** | Technology Division |
| **TOM** | Target Operating Model |
| **USD** | United Stated Dollar |
| **WFP** | World Food Programme |