

# For information

# **Governing Body**

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Programme, Financial and Administrative Section

**PFA** 

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# Final report on the implementation of the Information Technology Strategy 2018-21

**Summary:** At its 331st Session (October–November 2017), the Governing Body approved the ILO Information Technology (IT) Strategy for the period 2018–21. The IT Strategy 2018–21 established outputs, key deliverables, indicators and targets for three outcomes identified in the Strategy. The Office provides an update of progress on an annual basis. This document covers the fourth year (2021) of the Strategy period.

Author unit: Information and Technology Management Department (INFOTEC).

**Related documents:** GB.331/PFA/5; GB.334/PFA/3; GB.338/PFA/INF/2; GB.341/PFA/INF/2.

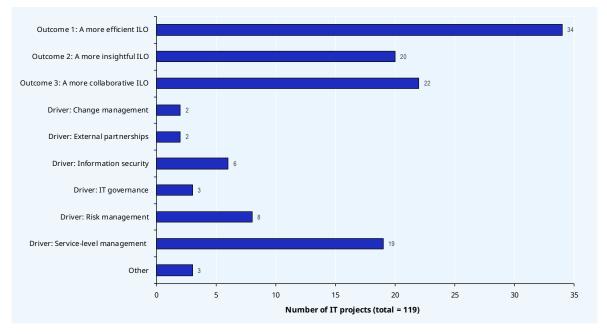
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# Introduction

1. The Information Technology Strategy 2018–21 ("the IT Strategy") <sup>1</sup> established a vision and road map to leverage rapidly evolving technologies to more effectively support the delivery of Office-wide reforms, strategies and initiatives. Underpinning the IT Strategy is the delivery of a modern digital workplace. The Strategy is structured around three outcomes and six crosscutting drivers. During this reporting period, further acceleration of digital technologies and applications was required in response to the global COVID-19 pandemic.

2. The Office has made measurable progress towards achieving the outcomes identified in the IT Strategy: 119 projects were carried out in the Strategy's fourth year (2021). <sup>2</sup> A breakdown by Strategy outcomes and drivers is shown below.





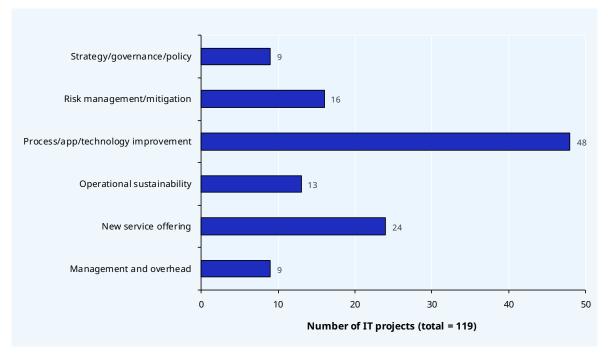
**3.** Of the 119 projects undertaken, 72 (60 per cent) focused on providing new service offerings or major improvements to benefit ILO staff and constituents. The graph below provides a breakdown by category of projects carried out in 2021.

<sup>&</sup>lt;sup>1</sup> GB.331/PFA/5.

<sup>&</sup>lt;sup>2</sup> For a list of the projects, see: Summary of IT initiatives in 2021.

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**4.** This progress report highlights some of the key IT projects completed and delivered in 2021, grouped by outcome, output and cross-cutting driver of the IT Strategy. Progress against outcome indicators is reported on a biennial basis. <sup>3</sup>

# Strategy outcome 1: A more efficient ILO

5. Outcome 1 of the IT Strategy highlighted the need to leverage advances in technology in order to better support users of ILO IT services in their daily work, with the goal of improving staff productivity, morale and work-life balance. The outputs focused on strengthening mobile working, reducing administrative overheads and costs, enhancing and modernizing ILO applications, improving the user desktop experience and ensuring the high availability of IT services, both on the premises and remotely. Specific emphasis was placed on improved accessibility and reliability of IT services in all ILO locations.

# Output 1.1. Increased scope and availability of IT services "on the go"

6. In preparation for the implementation of the Microsoft Teams communications hub, Skype for Business was replaced by the Microsoft Teams client as the standard application for chatting and video conferencing. This provided additional enhancements enabling better group chats, threaded conversations, more dynamic meetings and video conferencing and easy intuitive calling and provided a platform for content collaboration using Microsoft 365 applications. Given that many staff have spent significant amounts of their work time teleworking, this was an opportune response to the demand for richer collaboration tools and easier information-sharing beyond traditional hierarchical organizational structures. The retirement of Skype for Business completed the move away from an on-premises communications deployment to a cloud-based solution.

<sup>&</sup>lt;sup>3</sup> See the progress report on outcome indicators for 2020–21.

- 7. In response to a growing need for more hybrid meeting possibilities, the Office implemented a Microsoft Teams Meeting Room solution for meeting rooms in the headquarters building. This comprised of integrated audio-visual equipment managed through a dedicated tablet in the rooms. The solution transformed the meeting rooms into collaborative spaces that can be managed through the Microsoft Teams interface and provides access to collaboration features with which staff were already very familiar.
- **8.** OneDrive is a key product provided in the Microsoft 365 productivity suite. Moving data to OneDrive has provided staff with more data storage possibilities. It has also enhanced business continuity, as documents are securely stored on the staff member's laptop and can be worked on even if there is no internet availability. Documents are synchronized into the Microsoft 365 cloud when the staff member is able to connect the laptop to the internet. This has been particularly helpful for staff working from home in locations with poor or intermittent connectivity.
- **9.** Many ILO staff members request access to their official Office 365 licence on their personal devices. The Office implemented Mobile Application Management to enable staff to use the Microsoft Office applications (Word, Excel, PowerPoint and Teams) for personal use, while continuing to protect access to any ILO data.
- **10.** A pilot was conducted to determine whether DocuSign could be used for ILO staff to electronically sign documents to be sent outside of the Organization. Staff from ten different business areas at headquarters and in field offices participated in this pilot. Demonstrations of different use cases and workflows were organized, and the users were given access to the DocuSign test environment.
- 11. Hundreds of people have received documents for signature or for information and almost 50 different templates have been created. The pilot community is already signing and sending documents to external stakeholders. Feedback is being coordinated to determine the appropriateness of DocuSign to meet the full digital signature requirements of the Office. This is expected to be completed by the first quarter of 2022.
- **12.** The Office also implemented technology to make subscribed information resources available seamlessly to ILO officials working outside the headquarters building, from home and in the field offices.

#### Output 1.2. A more enriched and secure desktop experience

13. The deployment of laptops to replace desktop computers was a cornerstone of the Office's business continuity during the pandemic. However, because they are so portable, laptops are easily stolen or lost, which potentially exposes the Office to data confidentiality breaches if the equipment falls into the wrong hands. To mitigate this risk, the Office implemented disk encryption across all ILO laptops. This initiative, in conjunction with the implementation of OneDrive, ensures that staff data is protected from theft. In the event that an Office laptop is stolen, staff productivity can be quickly re-established because a copy of the data is readily available in the cloud as soon as the staff member reconnects with a replacement device.

# Output 1.3. More "fit-for-purpose" administrative applications

**14.** To enable external parties such as constituents and other agency partners to access ILO solutions and collaborate in a secure manner, the Office implemented the ILO extranet. This capability allows the Office to share information effortlessly with ILO partners and facilitates cooperation on project tasks as a single coherent team.

- **15.** The project to upgrade the Integrated Resource Information System (IRIS) made significant progress in 2021 and remains on schedule for completion in 2022. This upgrade will ensure the long-term sustainability of this key system.
- 16. Although the roll-out of IRIS to all ILO regions was completed in 2019, additional requests to implement IRIS for additional project locations continued into 2021. Having access to IRIS enables projects to process their own IRIS transactions rather than relying on the services of country offices. The ability to carry out administrative and programmatic activities independently provides for greater controls and efficiency, as processing time is reduced. In 2021, the Office completed the implementation of IRIS for 17 additional project locations.
- 17. A project for capturing key information about staff missions (Mission Reporting) was initiated in 2021 and is scheduled for completion in 2022. The solution will enable ILO staff to consistently store mission reports and minutes of key meetings in a single repository, which can be searched and referenced by ILO staff to enhance knowledge-sharing across the Office.
- **18.** The digitization of documents, tools, repositories and templates was a key enabler for the successful running of the fully virtual meeting of the Committee of Experts on the Application of Conventions and Recommendations, held in November–December 2021. The automation of the Committee's processes was a major business process improvement and required a concerted and collaborative effort across the three portfolios at headquarters. Enhancements to further streamline the processes were completed in 2021.
- 19. The International Labour Standards Department's process for collecting data from Member States under the follow-up to the ILO Declaration on Fundamental Principles and Rights at Work was automated in 2021. This digitization initiative automated a previously manual process which was prone to errors. In 2022, the Office will invest additional efforts to enable better data analysis and to streamline the issuance of the final report.
- 20. In 2020, a digitization project was implemented to enable the Office to manage a repository of beneficiaries of training programmes provided by the Skills and Employability Branch across the world. The Service Tracker was successfully used in Bangladesh, the Republic of Montenegro, the United Republic of Tanzania and Turkey. It has since garnered interest from various governmental and UN organizations and is being further enhanced so that independent versions of the tracker can be provided to each organization that has an agreement with the ILO. These enhancements are expected to be completed by the end of March 2022.

# Strategy outcome 2: A more insightful ILO

21. Outcome 2 of the IT Strategy highlighted the need to enhance the configuration, structure and dissemination of ILO data to enable better-informed decision-making, more accurate and timely reporting, and improved overall operational effectiveness. To achieve the expected benefits of outcome 2, outputs focused on exploiting big data, building data warehouses, developing personalized dashboards and implementing modern electronic records and web content management systems.

# Output 2.1. Improved quality and use of ILO data

**22.** The ILO Working Group on Transparency approved the work plan associated with the first milestone towards achieving full compliance with the International Aid Transparency Initiative (IATI) Standard. The IATI Standard is widely recognized by over 800 organizations, with the goal of improving the transparency of aid, development and humanitarian resources in tackling

poverty. Planned enhancements include the capture and mapping of project donor codes and geographical locations and the identification of humanitarian projects in IRIS. The publishing of ILO data in accordance with the IATI Standard will also be automated, which will facilitate more frequent reporting. The milestone is 90 per cent completed and is scheduled for finalization in early 2022.

# Output 2.2. Enhanced and actionable business intelligence

- **23.** In continued response to the COVID-19 pandemic, an application was created to capture data related to ILO staff vaccination status. This information can then be leveraged by the Administration to coordinate the response to issues pertaining to the return to work and the ILO workplace.
- 24. To affectively address the need to generate ILO financial statements and analytical reports using underlying IRIS data, the Office implemented the Hubble software. This will assist in the preparation of the ILO's financial reports, in reporting to the Governing Body, the Independent Oversight Advisory Committee and the International Labour Conference, and in future ongoing quarterly or monthly financial reporting for internal analysis and reporting to regional offices.

# Output 2.3. More fit-for-purpose web-based dashboards

- 25. The Office implemented the Employment Policy Gateway to provide a worldwide source of information on national employment policies and strategies to promote youth employment. This content is aimed at governments, social partners, research institutions, practitioners and other development stakeholders. The Gateway enables users to search existing national policies and strategies for employment promotion by region, country and themes. This allows comparisons of national policies across countries and supports research and analysis on existing policy instruments.
- 26. In 2020, a Forced Labour Observatory database was created to capture information on forced labour systems. In 2021, data visualization was added and will be published on the ILO public website in early 2022. <sup>4</sup> This will increase awareness of the Protocol of 2014 to the Forced Labour Convention, 1930, illustrate national policies and action plans on forced labour and provide greater insight into the national statistics.
- 27. In 2021, the Outcome-Based Workplan dashboard was created and published for ILO staff to support the implementation of the biennial programme and budget. This tool has greatly increased the transparency of ILO programming within the Office, enabling staff to monitor the strategic use of resources and progress towards the delivery of programme and budget commitments.
- **28.** In 2020, a procurement planning application was implemented. In 2021, a dashboard was created to provide a view of Office-wide procurement plans to external partners and international organizations in the United Nations system. Staff members can also view the procurement plans that are relevant to their respective department or country office.

### Output 2.4. Better managed enterprise content

**29.** Throughout 2021, the Office undertook an extensive overhaul of metadata in the Labordoc digital repository to align it with international standards. The highlight of this work was the

<sup>&</sup>lt;sup>4</sup> After the launch, it will be available at: http://www.ilo.org/flodashboard.

- publishing of over 12,000 articles from the *International Labour Review* in a dedicated portal in the three official languages, in celebration of the publication's centenary.
- **30.** The first 80 years of ILO publications were originally only released in print. To increase the visibility of these publications, the Office now publishes content and digital assets from the Labordoc digital repository to Google and Google Scholar.
- **31.** An analysis of a number of information systems, including the website, the intranet, publications and Labordoc, was undertaken to create a common taxonomy of document types. This will improve knowledge-sharing and bring clarity, coherence and focus to the Office's management of publications. A business taxonomy was also integrated into the existing subject taxonomy, to enhance discoverability of content on the intranet.

# Strategy outcome 3: A more collaborative ILO

**32.** Outcome 3 of the IT Strategy highlighted the need for staff, constituents and external partners to leverage advances in technology to exchange ideas more freely, work in virtual teams and collaborate more effectively to deliver on the ILO's mandate. To achieve the expected benefits of outcome 3, outputs focused on delivery of fully integrated digital products to better support knowledge-sharing, teamwork and communities of practice.

# Output 3.1. Enriched collaboration tools in support of substantive delivery

- **33.** Microsoft Teams is a pillar of the ILO's digital strategy for enhancing collaboration with internal staff members and with external partners. It enables a shared, virtual work environment between remote and local users. In addition to the chat and meeting capabilities, it also enables document co-authoring, document management, enhanced search and integration with dozens of third-party applications and services.
- **34.** The first stage of the Microsoft Teams global collaboration roll-out commenced in 2021 and has been successfully completed in three field offices and four departments at headquarters. Roll-out to an additional four field offices and two departments is in progress. The roll-out will continue in 2022.

# Output 3.2. An intranet that is tailored to the needs of staff based on their role and preferences

**35.** To address risks associated with legacy intranet sites, an initial migration exercise was undertaken and completed in 2021. The intranet was also redesigned and rebranded, with a new home page and revised navigation to simplify access for users to key applications and services. Additional services to enrich content to inform and support daily staff operations will be introduced in 2022.

# Output 3.3. An improved website that more effectively promotes the ILO's purpose and contribution to the world of work

**36.** The ILO Development Cooperation Dashboard is a public-facing tool to visually track, analyse and display ILO projects, donors and strategic objectives. The dashboard allows constituents and ILO staff to view the projects that the ILO is working on, the sponsors of the projects and what the Office intends to achieve with these projects. In 2021, additional features were added to the dashboard to enable enhanced filtering of departmental and thematic content related to development cooperation projects.

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37. The ILO Skills and Lifelong Learning Knowledge-Sharing Platform was enhanced in 2021 to support content in non-official languages through automatic translation. Access for external users has been provided, which allows them to contribute thoughts and ideas. Additional improvements include new content notifications, richer country profiles and members-only spaces for event organizers and participants. Search and filtering features were also improved to help users find relevant resources and to improve overall user experience.

**38.** A web-based portal, the Labour Provisions in Trade Agreements Hub was created to assist researchers, stakeholders and constituents engaged in trade and labour market issues. The portal provides an analytical toolkit on key decent work indicators, a source for labour provisions in trade agreements and a platform to disseminate information and findings of research and related activities on trade and decent work projects.

# Synergies and cross-cutting drivers

# Information security

- 39. Identity theft (whereby a malicious third party steals a username and password in order to impersonate a user virtually) is an easy, low-risk, high-reward crime and a threat to all people who regularly use the internet for work or personal interest. Staff in international organizations are a very visible and easy target for this type of activity. Multi-factor authentication is a process whereby a user is prompted during sign-in for a second form of identification in addition to the password. It is the most effective way to protect the organization and the individual from such attacks. During 2021, the roll-out of multi-factor authentication was completed for all ILO staff.
- **40.** In order to integrate information security with enterprise cloud computing technologies, the Office implemented a cloud-based security data management and analytics platform in 2020. The migration of client-based protection software to ILO laptops and servers was successfully completed in the first quarter of 2021. This migration enabled the Office to benefit from managed information security services and a 24/7 security operation centre for incident detection and response. This service is particularly important for ILO field offices and project offices that work outside of the core working hours of headquarters.
- 41. Cybersecurity risks have been identified as strategic ILO risks by the Risk Management Committee. It is therefore important to continuously measure the ILO's exposure to factors of cybersecurity risks. To monitor the evolution of cyberthreat actors who target international organizations, the Office has reinforced collaboration with UN partners through the Common Secure platform of the United Nations International Computing Centre. In addition to peer-to-peer sharing of threat intelligence, the ILO has established an automated exchange of the indicators of compromise. This reduces the time taken to detect potential security incidents and puts cyber-risk in the organizational risk context.
- **42.** A second factor of cyber-risk is measuring the vulnerabilities of information systems, their associated processes and system usage. A process for vulnerability management has been established in accordance with industry standards and best practices. Automated vulnerability scanning of internet-exposed information systems was implemented to enable monitoring of risk exposure and reduce the likelihood of exploitation of critical vulnerabilities. The results of vulnerability scanning are fed to the IT change and configuration management processes, and to the software development process.

# IT governance

**43.** In response to the ISO 27001 auditors' recommendations for process improvements, the Office began implementing dashboards to view key performance indicators on information security, complemented by key risk indicators. This will contribute to risk-based decision support for all business owners and data owners, facilitating the monitoring of compliance with ILO policies and the data protection requirements of donors and implementation partners.

# Service-level management

- 44. The technology to replace the current end-of-life Service Desk ticketing system has been selected. The new system provides workflow management to enable requests to move smoothly across the Organization, better visibility for staff to track the status of their requests, and improved data analysis capabilities. Relevant articles from the knowledge base will be displayed as staff type their requests for assistance, which should enable them to find solutions to many issues without needing additional assistance. The knowledge base has been installed and the ticketing system will be live at headquarters in the first quarter of 2022 and in the field later in the year.
- **45.** A pre-imaging service for Office laptops destined for field locations was implemented in 2021. The equipment no longer needs to pass through a supporting country office for preparation before being delivered to the end user (who may be working on a project in a different country or town). The Office anticipates that, once supply chain difficulties associated with electronic goods are finally resolved, this service will significantly reduce the time needed to deliver equipment to staff in remote locations.
- **46.** A new emergency notification system was implemented in 2021. This solution provides critical notification services for staff in the event of a crisis. It has proved extremely useful as a supplementary means of contacting staff about changes in workplace presence during the pandemic.

#### Change management

- **47.** In response to the pandemic, the Research4Life partnership quickly updated its global training and capacity-building activities. In 2021, the Office contributed to four Research4Life massive open online courses (MOOCs): three in English and one in French. These were attended by 2,637 participants from low- and middle-income countries.
- **48.** In collaboration with the Cornell University Law Library and Research4Life partners, the Office also coordinated webinars for researchers in low- and middle-income countries to enable them to be more successful when looking for legal information.
- **49.** To accompany the implementation of the Microsoft 365 collaboration suite in 2021, the Office increased its offering of end-user training sessions dedicated to information technology. A total of 239 virtual information sessions were held, 117 of which in English, 68 in French and 54 in Spanish.
- **50.** Teleworking continued to be a feature of the Office's working practices in 2021, and created additional reliance on online tools and information. The Information Technology Management Department's intranet was updated on a daily basis. This appears to have been useful to staff members, who accessed its pages 188,000 times over the year. The Office also developed 106 video tutorials to allow staff to work through specific new technology topics at their own pace. These videos were also widely accessed (21,260 views).

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# **External partnerships**

**51.** A number of senior ILO IT professionals continued to participate in various UN committees, advisory boards and networks in 2021, including:

- United Nations System Chief Executives Board for Coordination: Digital and Technology Network
- United Nations Enterprise Resource Planning Special Interest Group
- United Nations International Computing Centre: Management Committee and Advisory Group
- United Nations International Computing Centre: Common Secure network
- United Nations Disability Inclusion Strategy Working Group
- United Nations Information Security Special Interest Group
- United Nations Library and Information Network for Knowledge-Sharing
- 52. In accordance with the Office's commitment to the Research4Life partnership, ILO staff were responsible for managing the Global Online Access to Legal Information (GOALI) programme and participated with other agencies in the management of services offered to build research capacity and deliver research and academic content to users in low- and middle-income countries. In 2021, the Research4Life content portal was upgraded, which enhanced the user experience. The ILO works together with the four other agencies in the partnership the World Health Organization (WHO), the Food and Agriculture Organization of the United Nations (FAO), the World Intellectual Property Organization (WIPO) and the United Nations Environment Programme (UNEP) as well as the libraries of Cornell University and Yale University.

#### Risk management

- **53.** The ILO's IT risk register was updated in 2021. Each risk identified was subject to an impact assessment to determine the probability and potential consequences of associated risk events. A significant number of remedial actions were implemented to ensure that any remaining risk was within acceptable levels (low or medium) for all 14 identified risks.
- **54.** The Programme and Budget for the biennium 2022–23 includes a provision of US\$4.5 million for the improvement of the ILO intranet (for example, to enrich content and enable collaboration features) and the implementation of an Office-wide electronic records management system. <sup>5</sup> These will enhance the overall management and sustainability of critical ILO data.

<sup>&</sup>lt;sup>5</sup> Programme and Budget for the biennium 2022–23, para. 57.