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WINGS II VALUE ASSESSMENT



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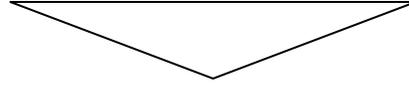
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Should you have any questions regarding matters of dispatch of documentation for the Executive Board, please contact Ms I. Carpitella, Administrative Assistant, Conference Servicing Unit (tel.: 066513-2645).

* Performance and Accountability Management Division

DRAFT DECISION*



The Board takes note of “WINGS II Value Assessment” (WFP/EB.A/2011/6-F/1).

* This is a draft decision. For the final decision adopted by the Board, please refer to the Decisions and Recommendations document issued at the end of the session.

INTRODUCTION

1. On the recommendation of the External Auditor, the Board requested the Secretariat to review the WFP Information Network and Global System II (WINGS II) to demonstrate whether the investment in WINGS II represented money well spent.¹ The Secretariat proposed that the assessment compare the value of the investment in WINGS II against corporate results and indicators at the end of 2010, when WINGS II would have been rolled out throughout WFP for a full calendar year.²
2. The assessment was coordinated by the Performance and Accountability Management Division, assisted by a consultant. The assessment team worked with managers to assess and validate information collected from various sources in order to prepare this report on its findings and conclusions.

BACKGROUND

Timeline

3. In 2005 the Secretariat commissioned a study to recommend the strategy and scope of and upgrade of its enterprise resource planning (ERP) system – WINGS. The study recommended that the upgrade be business-led rather than purely technical.³ The External Auditor also recommended a business-led upgrade in its report to the Board.¹
4. Given WFP's need to expand its system to cover more of its core business processes, the decision was made to upgrade to the latest version of the system software: this enabled more orderly introduction of new functionality and avoided the need for future large-scale upgrades. It also introduced additional risks to the project, such as new software modules.
5. Work on the WINGS II project started in March 2006. Original plans changed significantly following Board approval in June of a proposal for WFP to adopt International Public Sector Accounting Standards (IPSAS) by 2008.⁴ The WINGS II project team was given responsibility for designing and implementing IPSAS-compliant processes and systems. A review of WFP's core business processes carried out in preparation for IPSAS meant that several major process changes were integrated into WINGS II, which resulted in a substantial increase in the scope of the project. This made the design much more complex and challenging, but promised to lead to a fully integrated set of processes, systems and data.
6. In November 2006 the Board approved the increased scope and the addition of a solution to support the monetary valuation of stock and an upgrade of the human resources systems earlier than originally planned. Linking the project timeline to WFP's commitment to introducing IPSAS by 2008 led to trade-offs such as not having time to measure the performance baseline of its main processes or to compare WFP performance to that of other organizations at the start of the project. The introduction of IPSAS also meant that

¹ "Report of the External Auditor on the Upgrade of the WFP Information Network and Global System" WFP/EB.A/2005/6-B/1/Rev.1.

² "Final Update on the WINGS II Project" (WFP/EB.1/2010/6-G/1).

³ The study was carried out by Accenture, a management and technology consulting firm.

⁴ "Second Progress Report on the Implementation of International Accounting Standards" (WFP/EB.A/2006/6-I/1). The High-Level Committee on Management had recently approved adoption of IPSAS by the United Nations system organizations.

WINGS II needed to go live in all country offices simultaneously; to allow the training necessary at that scale, an electronic self-tutoring system (the e-Guide) had to be developed and rolled out.

7. To meet IPSAS requirements the WINGS II project owners decided to defer implementation of a fully integrated solution and instead to implement an interim custom-developed solution that combined SAP⁵ with existing Commodity Movement Processing and Analysis System (COMPAS) data for inventory stock accounting.
8. At the end of 2007 the design of WINGS II was completed. The objectives of the project had been to: i) introduce industry-standard information systems that are as free from customization as possible, enabling easier and cheaper future upgrades in response to WFP's evolving needs; and ii) redesign WFP's business processes to permit the use of industry-standard information systems and to make reforms such as the integration of supply-chain processes, the use of a new business model and the adoption of IPSAS.
9. The pragmatic decisions made by WFP senior management to defer certain improvements included in the original scope of the 2009 Edition⁶ proved to be wise and cost-effective: they avoided incurring additional costs and ensured that IPSAS was implemented on time. In July 2009 the 2009 Edition of WINGS II – with an integrated set of IPSAS-compliant business processes – went live in 159 offices in 91 countries simultaneously.

ASSESSMENT METHODS

10. The team assessed the benefits of WINGS II using standard industry key performance indicators and performance indicators identified by WFP units. The team used the recently developed corporate performance framework with its five management dimensions⁷ to determine the extent to which WINGS II contributes to corporate performance.
11. Quantifiable benefits included: i) effectiveness improvements, which have the potential to generate cost savings or cost avoidance; and ii) productivity improvements, which allow business units to deliver higher-value activities with the same workforce, as when less employee time is spent gathering and collating data and more is spent performing higher-value analysis work.
12. Benchmark data was used to convert percentage effort savings into monetary terms. After comparing the benchmark data from public-sector organizations and logistics companies, it was decided to use the more conservative benchmarks from the public sector.
13. In areas where benefits could not be easily quantified, qualitative benefits were assessed through consultation with business process managers.

⁵ SAP is an enterprise application software.

⁶ See "Update on the WINGS II Project" (WFP/EB.1/2008/6-E/1).

⁷ i) Securing resources; ii) Stewardship; iii) Learning and innovation; iv) Internal business processes; and v) Operational efficiency.

QUANTIFIABLE BENEFITS

Benefits

14. The annual recurring benefits – cost savings or cost avoidance – that WFP should realize as a result of the 2009 Edition of WINGS II are estimated to be US\$11.55 million. This includes direct cost savings and the indirect cost savings derived from performing higher-value work at no additional cost.

Costs

15. The investment cost of the 2009 Edition of WINGS II was US\$56.5 million, comprising all costs associated with project implementation: process re-engineering, components related to information technology (IT) and even the cost of replacing staff seconded to work on the project.⁸

Return on Investment

16. Based on the costs and estimated annual benefits the WINGS II investment will be paid back within five years of its introduction. This compares favourably with the annual depreciation cost of the WINGS II intangible asset, which is being amortized over six years.

QUALITATIVE ASSESSMENT

17. The following paragraphs provide examples of the qualitative benefits identified by business process managers. Annex I provides a comparison of actual benefits against the expected benefits listed in the “Final Update on the WINGS II Project”;⁹ Annex II shows the impact of WINGS II on selected management results.

Finance

18. Policies and standards required by IPSAS are now embedded in day-to-day corporate processes and systems. Before WINGS II, the compilation of the annual financial accounts required 80 percent of effort to be spent on data collection and consolidation and only 20 percent on analyses; now the balance is reversed. The availability of reliable data has made it possible to produce financial statements more frequently, on a quarterly basis. The first and second quarter statements include financial highlights and key performance indicators; for the third quarter, a full set of financial statements accompanied by notes, is submitted to management and reviewed by the Office of Internal Audit.
19. WINGS II has also improved financial controls. Expenditure posting is more timely and there has been a 25 percent reduction in invoice errors, a 10 percent reduction in payment delays and a 30 percent reduction in vendor duplication. The financial dashboard made available to all country directors each month shows a 10–20 percent reduction in outstanding open items.

⁸ When many organizations report on the cost of their IT projects, they include only the cost of the IT contractor.

⁹ WFP/EB.1/2010/6-G/1.

Procurement and Logistics

20. Managers have faster access to inventory information that is more frequently updated and more accurate; this enhances management of the global supply chain, facilitating improved procurement, commodity tracking by value and management of stocks. There has been a 30 percent reduction in the number of discrepancies between physical stock and system stock, and a 40 percent reduction in the manual effort involved in report production.

Contribution Management and Programming

21. WINGS II has enabled a 25 percent improvement in the accuracy of contribution forecasts in relation to actual contributions, and made it easier to identify unspent balances and shortfalls, allowing better matching of funding needs with confirmed contributions.
22. Increased visibility of the status of advances and related contributions has facilitated requests for repayment from projects, decreasing the time for effecting repayment from one or two months to one or two days for 55 percent of the advances made. As a result more working capital is available for advances to other projects and effort saved in processing repayment can be devoted to processing the more complicated repayment scenarios. Overall, there has been a 50 percent increase in the speed with which outstanding loans are revolved or repaid, which improves the food pipeline and the on-time availability of food for beneficiaries.

Human Resources

23. The creation of a single, global human resources system has improved the visibility and consistency of employee master data, providing reliable information for planning and managing WFP's global workforce. For the first time the data for locally recruited field employees is maintained in the WFP corporate system, which now holds information pertaining to all types of WFP employee categories and contract types.
24. Data centralization and standardization has made the application of human resources business processes more consistent throughout WFP. The effort required to compile global employee data has decreased drastically. The repository now holds information on 15,000 employees, an increase from the 2,500 covered in the previous system, and field offices are no longer required to compile employee data each quarter.
25. The existence of a reliable, regularly updated global human resources data repository is an advantage during emergencies: information on employees and their dependants can be provided immediately, freeing managers to focus on logistics and programming issues. The benefits of this were evident following the earthquake in Haiti and during civil strife in Côte d'Ivoire, when all the employee information was readily available in Headquarters; in contrast, compiling and verifying such information was laborious and slow following the bombing in Pakistan. Availability of data has also enhanced the ability to measure and report on such indicators as gender balance and geographical diversity.
26. By introducing greater integration of human resources, finance, budget and travel processes, WINGS II makes it possible to define duties and lines of authority more clearly. WINGS II replaced numerous WFP applications used to collect and maintain staffing data, thereby reducing the costs of maintenance and upgrades of those applications.

Travel

27. Before WINGS II, WFP used one travel system for employees based in Headquarters and a different system for field-based employees. Significant effort was required to collect data on overall travel-related expenditures. WINGS II greatly facilitated analysis of, and reporting on, WFP's total travel expenditures, allowing WFP to detect potential problems and identify savings that could be realized by, for example, rationalizing the use of travel agencies.
28. The new solution is more automated, with greater operational controls over such aspects as daily subsistence allowance, which is now calculated automatically, reducing human error. Reimbursements for travel charges are integrated with Accounts Payable and can be deposited directly into employees' bank accounts. The system helps to ensure consistent compliance with WFP travel rules and allows prompt remedial action when necessary.
29. Including a CO₂ emissions counter in the travel system makes it possible for WFP to monitor and manage its carbon footprint. WINGS II is the first ERP system in a United Nations agency to include carbon footprint monitoring.

Information Technology

30. The assessment team estimated that improved system design and documentation, along with the 43 percent fewer customizations, will reduce the cost of future enhancements by 10 percent and reduce the time required to implement enhancements and new functionality by 10 percent; it is expected to require 15 percent less effort to support and maintain.
31. For most units WINGS II allows greater ease of access to business information required to support decision-making. This is a result of the combination of a more integrated, consistent and reliable database with more powerful reporting tools for users. The benefits are increasing as the scope of the data covered by the system expands.

Initial Implementation Challenges

32. A few business areas report negative impacts from some of the changes introduced, including having to make more effort to achieve the same results. This may be attributed in part to the time required to adjust to the standard functionality that replaced the custom-built functionality in the previous version of WINGS. It is envisaged that with time these initiation challenges will be overcome and the expected benefits will eventually be realized.

WINGS II WITHIN THE WIDER UNITED NATIONS SYSTEM

Reference Model for the United Nations System

33. In recognition of its leadership in adopting IPSAS and an ERP system, WFP was elected to chair the SAP Special Interest Group of United Nations funds and programmes in 2009-2010, during which it promoted system-wide initiatives aimed at saving time and money through the use of common solutions. WFP shares the WINGS II processes and technical solutions with other United Nations agencies that seek its guidance when they adopt IPSAS or embark on ERP projects. To save time and money, the Department of Peacekeeping Operations and the Department of Field Support, among others, are planning to adopt WINGS II business process models and system configurations instead of developing their own custom solutions. WFP staff are collaborating with the United Nations Secretariat on its administrative reform initiative "Umoja".

Functionality for United Nations Human Resources

34. WFP invested in developing a human resources functionality suited to the United Nations agencies. The functionality is so heavily in demand that SAP is planning to include it in the standard software, the first tranche of which is expected to be released by mid-2011. This will reduce costs for WFP and other United Nations agencies.

FUTURE BENEFITS

35. The 2009 Edition of WINGS II provides a foundation for building incremental business improvements, many of which have a high value/cost ratio, with a rapid payback of the investment. Some examples of these improvements are:
- the carbon emissions calculation system, a new electronic tool that can record the total amount of carbon dioxide or “greenhouse gas” emissions from all flights booked by WFP, giving a way to measure and track the effect WFP travel has on the environment;
 - a new, better integrated supply chain management solution to be piloted in 2011, which is expected to bring significant additional benefits; the costs were included as part the WINGS II 2009 Edition;
 - a new Treasury Management System being implemented as an extension to WINGS II, the investment in which will be recouped within one year from implementation, based on an improved rate of return on cash balances, savings on bank and investment management fees, and improved value for money on foreign exchange conversions; these savings will be allocated to the General Fund and project budgets; and
 - an integrated version of the common payroll system for locally recruited field employees – which depends on employee data fed from the WINGS II human resources module – will be ready to be rolled out by mid 2011; initially it will replace the stand-alone system already used for 60 percent of such employees, eliminating duplication of data entry between the corporate and local payroll systems. The integrated version of the payroll system will be rolled out to all countries to replace the current local payroll systems.
36. A new governance structure for WINGS II has been introduced since the release of the 2009 Edition, comprising a Management Information Systems Steering Committee and an Executive Management Council. They are responsible for assessing potential business improvements on the basis of the strength of the business cases and ensuring that additions and enhancements to WINGS II are done in a manner that minimizes risks and complexity, while maximizing the benefits to WFP.

CONCLUSIONS

37. The assessment concludes that the investment in the 2009 Edition of WINGS II was money well spent. On the basis of a highly conservative estimate of the quantitative benefits, the WINGS II investment will be paid back within five years from its introduction.
38. The 2009 Edition was a complex, high-risk project; a number of difficult decisions needed to be taken during the project to ensure that it was delivered as early as possible. Implementation of WINGS II in 2009 contributed to an unqualified audit opinion for the IPSAS-compliant financial statements and was on balance the best approach for a results-based organization such as WFP.
39. The fact that WFP has achieved IPSAS compliance since 2008 and at the same time addressed other change initiatives with high returns on investment shows that the trade-offs made by the Secretariat between functionality, project costs and the project timeline were well managed.
40. Although there are some areas where the potential benefits have not yet been fully realized, the benefits now being enjoyed are in line with the expected benefits described in the final update on WINGS II.
41. It has been a full year since WINGS II was introduced. A powerful, integrated set of new tools is available to managers to improve accountability and performance. The 2009 Edition of WINGS II created a solid foundation for the future, and supports the implementation of further high-value improvement projects.

ANNEX I

WINGS II 2009 EDITION – ACTUAL VERSUS EXPECTED BENEFITS	
EXPECTED BENEFITS	BENEFITS REALIZED DURING 2010
<ul style="list-style-type: none"> Strengthened information available for decision-making at senior management level Strengthened accountability through improved financial controls and monitoring at all levels of management, including at the country office level Reduced risk of unfunded staff cost variance Reduced time and effort spent on compilation and generation of donor and other corporate reports 	<ul style="list-style-type: none"> Almost all areas reported significant improvements in access to information to support decision making Financial controls are stronger and the financial dashboard is showing a 10–20% improvement in long outstanding open items. Staff cost variance analysis is still performed manually. A specialized report to facilitate the analysis is yet to be developed. Substantial reduction in the time and effort, with people now spending most of their effort on value added analysis rather than data collection and compilation.
<ul style="list-style-type: none"> Increased clarity and visibility of relationships between resources, outputs, outcomes and Strategic Objectives 	<ul style="list-style-type: none"> Project Planning & Performance Module is still in pilot phase.
<ul style="list-style-type: none"> Better resource utilization through improved resource requirements and mobilization planning Improved accuracy and integrated corporate access to contribution forecasts Greater management accountability for actual resource consumption compared to forecast 	<ul style="list-style-type: none"> There has been an estimated 25% improvement in forecasting accuracy (forecast v actual contribution), with better corporate access to forecast information. Improved visibility, allowing better matching of funding needs with confirmed contributions.
<ul style="list-style-type: none"> Faster and wider access to advanced financing facilities, leading to reduction in pipeline breaks and more timely delivery of food aid to beneficiaries 	<ul style="list-style-type: none"> The new approach for advance processing has decreased the time for effecting repayment from one to two months to one to two days for at least 55 percent of the advances, resulting in available balances for further advances. The number of outstanding loans revolved or repaid has increased by approximately 50%.
<ul style="list-style-type: none"> Optimization of global inventory Better information about stock levels Optimization of delivery lead time 	<ul style="list-style-type: none"> Supply chain information is now available in the corporate system, providing a consistent set of inventory information to all layers in all locations. Lead times per pipeline stage have improved by an estimated 5%.
<ul style="list-style-type: none"> Reduction in the manual work of collecting and consolidating information to support IPSAS-compliant financial reporting 	<ul style="list-style-type: none"> IPSAS policies and standards are now embedded in the day-to-day corporate processes and systems. Before WINGS II, this was a very manually intensive process, with 80% of the effort spent on gathering data. The amount of time spent on data collection and consolidation has now reduced, allowing people to spend the majority of their time on high value added tasks.

WINGS II 2009 EDITION – ACTUAL VERSUS EXPECTED BENEFITS	
EXPECTED BENEFITS	BENEFITS REALIZED DURING 2010
<ul style="list-style-type: none"> Improved workforce planning, management and reporting through better availability of information related to the entire workforce Strengthened oversight of the decentralized human resources function through real-time visibility of human resources actions and consistency of data across human resources, budget, payroll, finance and travel processes Standardization of human resources terminology and rules and processing of human resources actions Minimal reliance on supplemental systems 	<ul style="list-style-type: none"> With the introduction of a single, global human resources system, there has been a dramatic improvement in the availability of reliable data. The single, global repository of human resources data has improved the visibility and consistency of information, allowing human resources to more effectively manage and control the global human resources within a decentralized organization. Greater consistency in how human resources processes and rules are applied. The amount of effort to compile employee data has dramatically reduced and is no longer reliant on the consolidation of data from local systems.
<ul style="list-style-type: none"> Reduced costs for processing payrolls for locally recruited field employees Improved controls 	<ul style="list-style-type: none"> This benefit has not yet been fully realised. The integrated version of PASport is due to be released in mid 2011 replacing the stand-alone version and will reduce the amount of duplication and effort. The solution will then be rolled out to remaining counties reducing local payroll costs and improving controls.
<ul style="list-style-type: none"> Enhanced potential for negotiating reductions in air travel costs Optimized, global picture of official travel 	<ul style="list-style-type: none"> The new system has allowed an estimated savings in air ticket costs. The organization now has, for the first time, a clear global picture of travel allowing the organization to analyse where money is spent and target actions for reduction. The system also allows the organization to monitor and manage its carbon footprint without the need for additional costs
<ul style="list-style-type: none"> Improved clarity and visibility of assignment of responsibility and accountability within the programme 	<ul style="list-style-type: none"> The more formal organizational management approach has reduced the number of non-standard roles and increased segregation of duties.

WINGS II 2009 EDITION – ACTUAL VERSUS EXPECTED BENEFITS	
EXPECTED BENEFITS	BENEFITS REALIZED DURING 2010
<ul style="list-style-type: none"> • Reduced costs of future system upgrades • Reduced time and effort for implementation of improvements and addition of new features • Easier identification of opportunities for further improvements • United Nations system-wide benefits: <ul style="list-style-type: none"> – reduced costs of SAP projects for other agencies through availability of United Nations functionality in the standard version of SAP – opportunity for more solutions and services shared across agencies 	<ul style="list-style-type: none"> • The improved architecture and documentation, plus 43% fewer customization is expected to reduce the cost of the next upgrade by 10%. • For the same reasons, the implementation of new improvement projects is expected to be 10% faster and less costly, with 15% less effort to provide training and support. • The additional United Nations functionality developed by WFP as part of the project will progressively be included within the standard version of SAP, allowing other agencies to access the functionality. The first tranche of new functionality is planned to be released by SAP during the second quarter of 2011. • Since the successful release of WINGS II, WFP has made its process and technical solutions available to other UN agencies undertaking ERP and IPSAS implementations. The UN Secretariat and the UMOJA project are seeking to adopt WINGS II solutions instead of implementing solutions from scratch.

ANNEX II

IMPACT ON DIMENSIONS WITHIN CORPORATE AND HQ DIVISIONS' MANAGEMENT RESULTS FRAMEWORK	
Dimension	Improvements
Securing Resources	<ul style="list-style-type: none"> There has been a 50% improvement in the ease of reporting on compliance to contractual delivery period, which will enable improved vendor selection and management, leading to an increase in food, goods & services orders delivered within the contractual delivery period
Stewardship	<ul style="list-style-type: none"> Better compliance with IPSAS and financial statement requirements, with less efforts spent in low value activities (80% of the effort is now spent on data analysis instead of preparing data for reporting, compared to 20% in the past) More compliance with food, goods and services contract terms and conditions, with regards to the delivery time Higher quality inventory reporting (+20% of reconciled data) and with increased frequency, as reports are produced automatically without time and effort spent compiling and reconciling data Vendor duplication reduced by about 30% Greater responsiveness in responding to technical needs and business queries
Learning & Innovation	<ul style="list-style-type: none"> Increased of 10–15% of best business practices enabled and better business process description that enable business users to work in accordance to designed processes, improving their effectiveness and reducing rework Increased the number of streamlined processes based on automated production and enabled segment reporting Increased the number of management statements and analyses that were submitted within deadline Extended the number of key financial ratios and highlights included in the reports Dramatic reduction in the number of reports prepared manually
Internal Business Processes	<ul style="list-style-type: none"> Reduced the errors in business process data (e.g. reduction by 25% of open items due to errors) Improved compliance of payments in accordance with contract terms and conditions, risk reduction of extra payments and their accuracy More frequent financial management reporting enabled by integrated Segment and Business Area dimension which improves the minimum monthly closure process
Operational Efficiency	<ul style="list-style-type: none"> Changes in business processes enabled annual plans and give Donors more accurate information related to projects needs and contribution forecasting and allocation Business process innovation on shipment management and compliance with the delivery time at discharged ports Better operational data insight of operational processes