

# WIPO



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**WORLD INTELLECTUAL PROPERTY ORGANIZATION**  
GENEVA

## **PROGRAM AND BUDGET COMMITTEE**

### **Twelfth Session**

**Geneva, September 11 to 13, 2007**

#### **PROPOSAL FOR THE IMPLEMENTATION OF AN ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM**

*Document prepared by the Secretariat*

1. At the eleventh session of the Program and Budget Committee (PBC), (June 25 to 28, 2007), the Secretariat submitted a proposal for the implementation of an enterprise resource planning (ERP) system at WIPO (document WO/PBC/11/11).
2. Having noted the proposals contained in document WO/PBC/11/11, as well as the comment of the Audit Committee that adequate IT systems are required at WIPO to support the effective implementation of the new Financial Regulations and Rules of the Organization, the June session of the PBC requested the Secretariat to provide to it, at its September session, additional information on the estimated cost of the project, as well as on the experiences of other UN agencies in the implementation of such ERP projects, with a view to enabling the Committee to make recommendations to the September 2007 session of the General Assembly (document WO/PBC/11/17).
3. To follow up on such request, the Secretariat has elaborated a comprehensive project proposal for the implementation of an enterprise resource planning (ERP) system at WIPO. This project proposal is attached.
4. The attention of the Committee is drawn to the fact that the attached project proposal is based, and expands on, the initial proposals contained in document WO/PBC/11/11, as follows:
  - (a) The introduction and background section has been updated to highlight the essential elements of management reform and change that will be enabled by the ERP project.

These elements will be reflected in a management vision document that will guide the design and implementation of the system. The delivery of such a management vision document would be the first key deliverable of the project and has been reflected in the project deliverables section.

(b) The project's expected benefits have been further elaborated and the relevant section includes an explanation of how the Secretariat will address the quantification of benefits.

(c) The section on implementation has been updated to give a more comprehensive overview of the key strategies that will drive the project.

(d) The project timeline section includes an initial assessment by the Secretariat of the priority of the functional areas within the scope of the project.

(e) The section on project organization has been updated to include a description of the roles and responsibilities of the Project Board and key entities within the project structure. A diagrammatic representation of the project structure has been included.

(f) The section on estimated costs and proposed source of funding has been expanded to include more detailed explanations of the cost elements, a further elaboration of the relevant assumptions and some valuable insights obtained from other agencies.

(g) Additional information on ERP projects of other UN agencies including UNDP, UNHCR, and WMO, as requested by the Program and Budget Committee, has been provided in Annex I to the attached document.

*5. The Program and Budget Committee is invited to:*

*(i) take note of the information contained in the present document;*

*(ii) recommend to the Assemblies of the Member States to approve the implementation, in the biennia 2008/09 and 2010/11, of an enterprise resource planning (ERP) system at WIPO as per the project proposal contained in annex to the present document.*

[Project Proposal for the Implementation of an ERP System follows]

**PROJECT PROPOSAL**

**FOR THE IMPLEMENTATION OF**

**AN ENTERPRISE RESOURCE PLANNING (ERP) SYSTEM**



## TABLE OF CONTENTS

I.	INTRODUCTION AND BACKGROUND.....	6
II.	EXPECTED PROJECT BENEFITS.....	8
A.	REGULATORY FRAMEWORK AND FINANCIAL MANAGEMENT.....	8
B.	PRODUCTIVITY IMPROVEMENTS.....	9
C.	IT IMPROVEMENTS.....	9
D.	STAFF DEVELOPMENT.....	9
III.	PROJECT SCOPE.....	9
A.	HUMAN RESOURCE MANAGEMENT AND PAYROLL.....	10
B.	FINANCE AND BUDGET.....	10
C.	PROCUREMENT.....	10
D.	ENTERPRISE REPORTING.....	11
E.	PUBLICATIONS SALES.....	11
F.	TRAVEL MANAGEMENT.....	11
IV.	PROJECT KEY DELIVERABLES.....	11
V.	KEY ELEMENTS OF THE STRATEGY.....	11
A.	ERP PRODUCT STRATEGY.....	12
B.	APPLICATION HOSTING STRATEGY.....	12
C.	APPLICATION MANAGEMENT STRATEGY.....	12
D.	IMPLEMENTATION STRATEGY.....	12
VI.	PROJECT PHASING AND TENTATIVE TIMELINE.....	14
VII.	PROJECT ORGANIZATION AND GOVERNANCE.....	15
A.	PROJECT BOARD.....	15
B.	EXECUTIVE SPONSOR.....	15
C.	PROJECT MANAGER.....	16
D.	EXTERNAL IMPLEMENTING PARTNER.....	16
VIII.	ESTIMATED PROJECT COSTS AND UNDERLYING ASSUMPTIONS AND PROPOSED SOURCE OF FUNDING.....	16
A.	UNDERLYING ASSUMPTIONS.....	17
B.	SUMMARY EXPLANATIONS AND KEY ASSUMPTIONS.....	18
(a)	Application Hosting.....	18
(b)	Software acquisition and maintenance.....	18
(c)	Project Personnel.....	18
(d)	User Back-Filling Resources.....	18
(e)	Training.....	19
(f)	External Implementing Partner(s).....	19
(g)	Staff Missions.....	19
C.	PROPOSED SOURCE OF FUNDING.....	19
IX.	REPORTING MECHANISM.....	19
ANNEX	.....	20
A.	OVERVIEW OF INTERACTIONS UNDERTAKEN WITH OTHER AGENCIES.....	20
B.	SUMMARY OF INFORMATION OBTAINED FROM UNDP PROJECT.....	20
C.	SUMMARY OF INFORMATION OBTAINED ON UNHCR PROJECT.....	21
D.	PRELIMINARY INFORMATION RECEIVED FROM WMO.....	22

## I. INTRODUCTION AND BACKGROUND

6. Between 1999 and 2001, preparations began in WIPO for a project which would provide a much needed integrated administrative information management system (AIMS) that would include finance, payroll, human resource management, budgeting, procurement, enterprise reporting, travel and program management. This system was to be built around an Enterprise Resource Planning (ERP) software package. It was decided at the time however, to adopt a phased approach to this project with the initial scope limited to Finance and Budget Reporting functionality, with the other functionalities to be addressed only after the successful introduction of a core financial and budget control and reporting system. The main reasons driving this approach were the limited experience and success within the United Nations (UN) system of implementing large scale ERP systems at the time, and the marked absence of proven and stable implementations within the UN system of the human resource and payroll modules.

7. The AIMS project was approved as part of the 2002/03 Program and Budget, with a budget of 9.9 million Swiss francs, and an additional 1 million Swiss francs for start up and post-implementation costs. The project was undertaken and completed on-time and within budget.

8. The full benefits of ERP systems, it must be emphasized, are realizable only if they are used in an integrated manner across the targeted sectors such that data is captured and validated once by the originating source and is made available for further processing by downstream functions with workflow and approval hierarchies being effectively managed. The administrative and resource management functions of the Organization, which were out of scope for the first phase of the project, have remained largely unsupported by mainstream IT systems and have therefore continued to have a strong need for an integrated system with functional modules to support their high priority information system needs.

9. In 2006, the External Auditor conducted an assessment of the AIMS system and recommended that it be extended to other resource management and administrative areas of the Organization including Publications, Procurement and Human Resources Management (the final report of the External Auditor was circulated internally on March 16, 2007).

10. Further, as outlined in document WO/PBC/11/7 Rev., compliance with the International Public Sector Accounting Standards (IPSAS) will need the support of integrated and enhanced IT systems within the Finance Department and the Office of the Controller.

11. The implementation of the Human Resource Strategy, submitted in its preliminary version to the WIPO Assemblies in 2006 (document A/42/10, Annex V), will also need IT support for processes such as performance management, management of competencies and skills, online recruitment, etc. The preliminary strategy and the need for such an ERP system have also been endorsed by the Desk to Desk Assessment Final Report, which was received by the Secretariat on June 27, 2007 and made available on the website of WIPO as of July 2, 2007.

12. The final report emphasizes that the implementation of the system should be based on the re-engineering of several major business processes and organizational restructuring. The study has concluded that any delays in decision making with respect to the launching of the planned ERP project would delay several aspects of the Organizational Improvement program

recommended by it including the realization of associated benefits. The Secretariat would wish to highlight at this stage that it does not endorse the quantified headcount savings associated with the implementation of the ERP system in the Desk-to-Desk Assessment Report. It is of the opinion that the estimation of such savings must be substantiated on the basis of an in-depth analysis of the process changes that will be implemented. The Desk-to-Desk Assessment report does not contain such an in-depth analysis which would substantiate the headcount savings estimated. (For more information, please refer to document WO/GA/34/12).

13. Finally, the most important factor pointing to the need to implement an ERP project at WIPO is the planned introduction of new the Financial Regulations and Rules at WIPO, as submitted for the consideration of this Committee in document WO/PBC/12/6. It is to be stressed that after reviewing, at its March 2007 session, the proposed new Financial Regulations and Rules, the Audit Committee stated that, to be effective, these proposed new Financial Regulations and Rules should be supported by the establishment of new and automated processes (document WO/AC/4/2, paragraph 21). Such establishment of new and automated processes can only be achieved through the implementation of a full Enterprise Resource Planning (ERP) system in line with what several UN system agencies have undertaken in recent years.

14. The new Financial Regulations and Rules (WO/PBC/12/6) would form the pillars for a more comprehensive reform of the Organization's regulatory framework and financial management practices. The vision for such reform will be crystallized and documented at the start of the ERP project. The vision will include central policy papers on the assignment of responsibility, authority and accountability and the use of budget as a management tool. Additional vision papers will be developed for functional areas namely, financial management, human resource management and procurement and contracts management. These vision papers will guide the design work undertaken by the project. They are intended as living documents which will need to be kept updated to reflect any significant changes to the policies or principles as the project is implemented.

15. The ERP system functionality will enable the following major changes that are proposed through the Revised Financial Regulations and Rules:

(a) Establishment of the principles of accountability of all employees of the Organization, the codification of a system of checks and balances and the principle of financial segregation which will be supported by the re-engineered business processes and practices, approval hierarchies and streamlined workflow inbuilt within the procurement, financial, travel, human resources and global payroll systems;

(b) Incorporation of the new regulatory framework for the procurement of goods and services which will be supported by the implementation of the purchasing system; and

(c) Incorporation of the concepts of Results-Based Budgeting which will be supported by the implementation of the enterprise planning and management (including budgeting) system.

16. Finally, the proper deployment of an ERP system, supported by the necessary process and organizational changes, is expected to permit considerable efficiency gains in several areas of work of the Organization.

17. For all these reasons, it is hereby proposed that WIPO should embark on the implementation of an ERP project with a view to implementing, like most agencies of the UN system have now done, a harmonized and integrated resource management system.

18. The main elements of the proposed project are elaborated in Chapters II to VIII, below. A preliminary cost estimate for the project, with its underlying assumptions, is provided in Chapter IX.

## II. EXPECTED PROJECT BENEFITS

19. Quantification of benefits from the ERP system implementation is challenging and based on our interactions with other agencies, most organizations have had limited success with this. However, the consistent message that the Secretariat received is that there should be a very high focus on benefits tracking (from specific system functionality deployed) for each business area to ensure that the implementation is on track and is meeting business objectives. One example of such benefits would be the savings from automating budget checks which are currently carried out manually by the Office of the Controller based on paper files received. This functionality will free up resources for more value adding analytical tasks that need to be performed in a best-practice based budget management environment.

20. The principal difficulty in establishing estimates of quantified benefits is the limited availability of accurate and reliable baseline data (owing to manual or semi-manual processes currently in existence) that would enable the progressive measurement of benefits. The Secretariat intends to include benefits tracking as a key element of the project approach where business owners would identify such benefits linked to functional capabilities within the system. The Project Board would be then responsible for monitoring progress on benefits realization (please see below).

21. The principal benefits of implementing an ERP system for the Organization may be summarized as follows.

### A. Regulatory Framework and Financial Management

- The establishment of re-engineered and automated processes which are essential for the effective implementation of the new Financial Rules and Regulations and the approved new human resource strategy;
- the establishment of a basis for comprehensive and coherent internal control and accountability framework based on user roles, automated approval procedures and workflow;
- compliance with IPSAS through enhanced functionality and system upgrade within Finance and Budget areas; and



- establishment of an integrated and harmonized management reporting system that will provide high quality, reliable and consistent management information.

#### B. Productivity Improvements

- Realization of efficiency gains in all sectors within the scope of the project through simplification, streamlining and automation, in particular in those areas which are poorly supported by IT systems today;
- reduced manual and paper work throughout the Organization through automated workflow and approval processes; and
- the provision of a standard tool set which will disseminate up-to-date financial information to Program Managers for the purpose of budget tracking; thus eliminating the need for parallel, manual or semi manual records to be maintained within each Program.

#### C. IT Improvements

- The retirement of a patchwork of legacy and departmental systems that are complex and expensive to maintain, and the establishment of a standard, unified IT platform for the key administrative and resource management applications; and
- the outsourcing of infrastructure and application hosting by building on the existing arrangement with the United Nations International Computing Centre (UNICC), will result in 24/7 support of the system and a disaster recovery capability.

#### D. Staff Development

- ERP system implementations serve as an excellent platform or vehicle for training and professionalization of staff, (as users adapt to best practice based processes), higher data discipline and more value added analytical tasks facilitated by the improved availability of data. This has been the experience of other agencies who have undertaken such implementations (please see below).

### III. PROJECT SCOPE

22. The project is proposed to address the most urgent and essential information management needs of those business areas which were deferred under the phased approach adopted for AIMS, by binding them together on the existing ERP platform, providing thereby the integration with the finance and budget system that is necessary if the full benefits of such a system are to be realized. These areas are described below.

#### A. Human Resource Management and Payroll

23. The current SIGAGIP and Human Resource Access (HR Access) systems which were implemented around 2000 are struggling to keep pace with user requirements, in particular with respect to reporting and management information. The implementation of the Human Resource Strategy submitted in its preliminary form to the WIPO Assemblies in 2006 (document A/42/10 Annex V) and in its final form to the present (2007) session of the Assemblies, will depend extensively on the enhanced utilization of IT systems. The functionality of such a system would need to include payroll, benefits and entitlements administration, recruitment and career development, personnel data management, post management, staff welfare management, performance management, absence management and, potentially, facilities such as self-service\*.

#### B. Finance and Budget

24. The Finance Department will have to implement changes to accounting standards and procedures to comply with the International Public Sector Accounting Standards (IPSAS) by 2010, which reinforces the need for certain functionalities and the implementation of key system modules, such as asset management. A detailed definition of IPSAS requirements and their implications will be undertaken prior to the design and implementation of the system.

25. At present, the Office of the Controller (which is also responsible for the preparation and monitoring of the budget of the Organization) has an absolute lack of structured IT system support for the preparation of the biennial budget of the Organization. This is currently undertaken using spreadsheets which are limited in functionality and structure. A strong and urgent need has been identified for a system that supports budget preparation and management. This system would need to be integrated with the finance (general ledger module) system, for budget journals, and the human resource management modules for position management. The Office of the Controller will also be a central player and stakeholder in the deployment of the purchasing system and the human resources management and payroll system.

#### C. Procurement

26. Presently, there is a marked absence of structured IT support for this business area. As a result there is considerable manual effort and duplication of data (with the Finance Department and the users of the services of the Procurement and Contracts Division (PCD)) for the purpose of keeping parallel departmental records within spreadsheets and local databases. Furthermore the new WIPO procurement processes and procedures established in 2006 have placed higher demands on PCD staff in terms of workload due to the highly manual methods of working. The implementation of a reliable IT system is therefore expected to result in efficiency gains. The main functionality required by PCD includes vendor management, contract management, purchase requisitions, purchase order management, management reporting and possibly re-ordering and inventory management.

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\* PeopleSoft Employee Self-Service pertains to system facilities within the HR Management modules that enable employees to access and maintain certain elements of personnel data in a fully secure manner. Such facilities help to decentralize the workload and reduce the overall administrative workload within HRMD.

#### D. Enterprise Reporting

27. The fundamental shortfalls of the current suite of systems is the absence of integrated reporting tools which can extract data from systems across the Finance Department, Budget Section and Human Resource Management Department (HRMD) and present such data in a harmonized manner for management purposes. The proposed system must address this shortcoming through the implementation of a well structured reporting system that can extract and present data from multiple areas.

#### E. Publications Sales

28. This business area is currently supported by a homegrown, Access-based system, modified over several years and with a complex interface with the existing AIMS. The overheads and effort incurred for maintaining the system and its interfaces appear, however, to be disproportionate to the revenues that the system brings. There is therefore a need to implement a simpler and more structured basic sales order processing, e-bookshop, inventory and billing system which will interface to the accounts receivables module of AIMS.

#### F. Travel Management

29. There is a need to support the WIPO Travel Unit with a system that integrates with Finance and the contracted travel agent's system.

30. The proposed system will be used by approximately 120 direct users across the administrative sectors within the scope of the project. Additionally, workflow and document approval processes will potentially impact all employees of the Organization.

### IV. PROJECT KEY DELIVERABLES

31. The project's key deliverables will be the following:

- a document containing a clear management vision statement for key areas (paragraph 14 above), which will guide the design and implementation of the system;
- the re-engineering of key administrative and resource management processes across the Organization, to align them with the new Financial Regulations and Rules; and
- a robust and integrated administrative information and resource management system to support the re-engineered processes, using the standard PeopleSoft ERP solution with minimum customization and adopting the best practices inbuilt in the software.

### V. KEY ELEMENTS OF THE STRATEGY

32. The project will be implemented with full consideration of the key success factors for ERP implementations and of the lessons learnt by other agencies of the UN system. The implementation strategy will comprise a number of key elements, as detailed below:

A. ERP Product Strategy

33. Given the significant investment that WIPO has already made in the PeopleSoft product suite (for AIMS) which is now used by several Organizations (including the International Fund for Agricultural Development (IFAD), the United Nations Development Programme (UNDP), the United Nations High Commissioner's Office for Refugees (UNHCR), and the Red Cross), and WIPO's conscious effort to consolidate application and technical platforms, the most prudent way forward is to extend the ERP implementation (AIMS) using the PeopleSoft product suite to the maximum extent possible. Any use of an alternative software solution for particular processes would only be justified in cases where the PeopleSoft Suite does not include a workable solution. It may, at this point, be noted that Oracle Corporation, which has acquired PeopleSoft, have provided documented input on their strong and clear commitment to the continued support and extension the PeopleSoft product line.

B. Application Hosting Strategy

34. WIPO has recently succeeded in arranging to host the PeopleSoft Financials Applications at the UNICC. This has been done initially for the development environments being used for the upgrade to Version 8.9. Once the upgrade is completed successfully, the production environments will be hosted by the UNICC in an arrangement that includes 24/7 support and a disaster recovery capability. The most appropriate application hosting strategy would therefore be to build further on the initial agreement with the UNICC. It may be noted that several UN Organizations across Geneva and in other locations are currently using the ERP application hosting services of the UNICC, among them the World Meteorological Organization (WMO) (Oracle applications), the United Nations High Commissioner for Refugees (UNHCR) (PeopleSoft applications), and the United Nations Development Programme (UNDP) (PeopleSoft applications).

C. Application Management Strategy

35. Drawing from the experience of establishing an internal support structure which included a combination of internal and external resources and the cost of re-training internal resources, the strategy will be to develop a very small core functional team for internal user and application support, and enter into more flexible and more cost-effective contracting arrangements with external support service providers, as appropriate. Several UN Organizations are adopting this approach. This also presents opportunities for WIPO to collaborate with other Geneva based agencies that have tendered for, and are entering into, such support arrangements.

D. Implementation Strategy

36. The challenges presented by the full implementation of the PeopleSoft ERP ought not to be underestimated and need to be addressed through the following key elements:

- Senior management would actively sponsor and steer the implementation;

- While IT has a crucial role in the overall implementation of the project, this must be primarily a business-driven, as opposed to an IT-driven process. The implementation of the system will be based on clear and well documented vision statements for key subjects such as Responsibility, Accountability and Delegation Structure, Budget Management, Financial Management, Procurement Management and Human Resources Management;

- A “minimum customization” approach should be adopted for the implementation. As previously mentioned, the income modules of AIMS have been customized considerably owing to business needs and the manner in which the legacy systems within the PCT sector and the international registry for trademarks and industrial design operate. However, the cost of developing and maintaining customizations is prohibitive and for the future it would be imperative that such needs are reviewed by senior management with rigor, and undertaken only upon full justification. Amidst the functionality required in the next phase, a potential need for customization could arise in the HR/Payroll areas from the rules within the UN Common System and WIPO’s own interpretation and application of these rules. In all other areas, it would not be unreasonable to expect that user procedures and processes can be adjusted and streamlined to align themselves to the practices within the package.

- A formal project structure will be needed, including a Project Board comprising key stakeholders and IT. This typically must include Program Managers in charge of the main business areas within scope, who will be responsible for driving the change required within their respective areas, and who will need to take policy and other decisions that will facilitate the smooth implementation in their sectors.

- The Project Manager will be a key role which must be undertaken by someone who has had recent successful experience in similar large scale ERP deployment projects.

- The project will be undertaken with substantial assistance from a qualified External Implementing Partner. This approach has been widely adopted within projects in other UN agencies since the skills, methodology, experience and track record of having implemented ERP systems is fundamental to the success of the project. This external implementing partner will be selected through an open international tender.

- Strong user involvement will be needed for the project to complete the project successfully. The participation of full-time users who are knowledgeable about their business areas and information needs (relieved partially, substantially, or fully, as appropriate, from their current duties) is imperative for the success of the project.

- A thorough detailed planning, scoping and preparation phase will precede the implementation, focusing on the development of a detailed project plan, finalizing the scope based on the business process requirements, and potentially preliminary training of certain key team members.

- The project will be managed and executed based on a robust and proven methodology (for example Prince2). WIPO management and staff will be trained on the essential elements of the methodology that are relevant to their roles.

- Risk management is seen as a key element of the approach. Key risks and mitigation measures will be identified. They will be assessed and prioritized based on their probability of occurrence and potential impact. The project risk register will be continuously monitored and updated by the Project Board.

## VI. PROJECT PHASING AND TENTATIVE TIMELINE

37. At this stage it is envisaged that the project timeline will be the following.

- 2007 – Establishment of the Project Board (to be appointed by the Director General).
- Appointment of the Project Manager (by the Director General).
- Prioritization of the modules by the Project Board and development of a project plan.

The preliminary and tentative plan for implementation phases is the following:

- Phase I: Human Resources, Payroll, Procurement and Finance
- Phase II: Travel, Publication sales, Budgeting and Enterprise Reporting

2007/First Quarter 2008 – Detailed planning and preparation, development of the management vision document, infrastructure and organizational arrangements and software acquisition, tendering and recruitment of project personnel, as appropriate;

2008 – Design of a core set of Phase I modules;

2008 and 2009 – Deployment of Phase I modules;

2009/2010 – Design and deployment of Phase II modules; and

2010/2011 – Post implementation review and system stabilization.

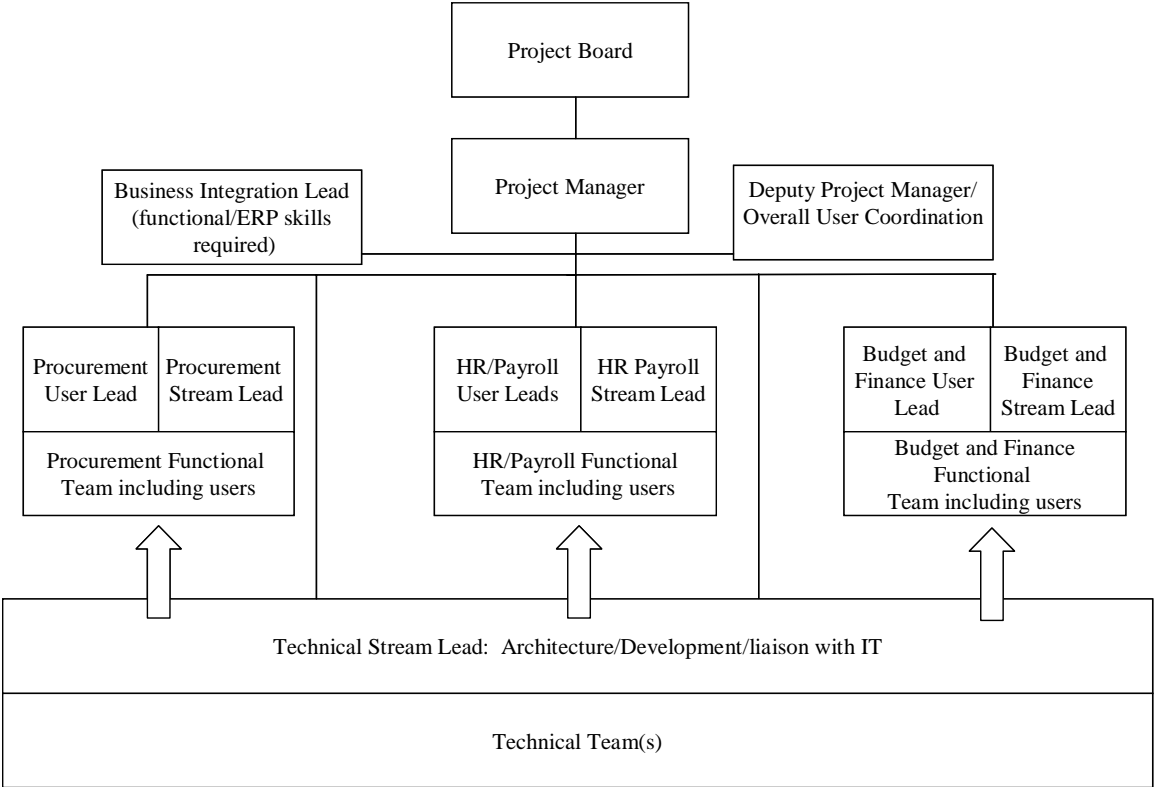
38. Our understanding from other UN agencies who have undertaken similar projects is that the proposed scope is similar to what other organizations have undertaken in their first wave of implementation. However, it has been clearly highlighted to us that while such a first implementation results in all key transactions processing and business processes being supported, several parts of the ERP functionality within these modules are typically only implemented after the first wave has been stabilized and adopted fully by the Organization. It is not uncommon for organizations to have a second wave of implementation that deploys some of the more sophisticated business capabilities within the already implemented modules of the ERP system. Such a second wave also typically encompasses consolidation functionality such as data warehousing or portals through the implementation of additional modules, as appropriate.

39. WIPO management endorses such an approach that focuses on the urgent and essential functionality required in the first wave.

VII. PROJECT ORGANIZATION AND GOVERNANCE

40. The overall indicative project organization for the implementation of the project is set out in Chart I below. In essence, the project will be run by WIPO with external assistance from an External Implementing Partner.

Chart 1. Project organization and governance



41. The entries appearing in the diagram are further defined and described below.

A. Project Board

42. The Project Board must comprise senior management members from the key functional areas that form part of the scope of the project. The Board will have the responsibility for the successful implementation of the ERP project and must therefore be delegated authority to make key policy and process decisions that will guide the implementation.

43. The Board will deliver the management vision documents which will guide the implementation of the project. Given the cross-functional nature of the project and the decisions that would need to be taken, it is imperative to have a single Executive Sponsor who will chair the Board and who is delegated the authority to take decisions that are necessary for effective implementation the project.

B. Executive Sponsor

44. The Executive Sponsor, supported by the Board, will have responsibility for ensuring that the management vision is effectively implemented, the project scope is controlled, project

risks are monitored and mitigated, customization is minimized, and that the project is delivered on time and within budget. In most other UN agencies that the Secretariat has interacted with, the executive responsibility of the project lies with the senior official in charge of all management and administrative functions.

C. Project Manager

45. The Project Manager would be a WIPO official who will be delegated responsibility for the day-to-day execution of the project by the Project Board. The responsibility for management of the project will lie with WIPO.

D. External Implementing Partner

46. An External Implementing Partner will be hired to bring in the business process and PeopleSoft functional and technical expertise necessary for the project. The project manager of the External Implementing Partner will report to the WIPO Project Manager.

47. In addition to the resources brought in by the External Implementing Partner, there would be a need for a strong internal core project team in each functional area and to support the project management stream. This core team will include at least one user lead for each functional area who is knowledgeable about the business requirements and is authorized to take decisions on behalf of users. Operational level users will need to be assigned to the core team on a substantial basis. Other users will be drawn in for various activities throughout the duration of the project such as training, user acceptance test planning and testing.

48. The project structure will include a Project Management Office which would provide the necessary support to the project manager for project administration, establishment of project standards and procedures including their enforcement, and project reporting.

## VIII. ESTIMATED PROJECT COSTS AND UNDERLYING ASSUMPTIONS AND PROPOSED SOURCE OF FUNDING

49. The cost of the project is estimated on a preliminary basis at 20.7 million Swiss francs, which will be further refined through a detailed planning and scoping exercise. The Secretariat wishes to draw the attention of the Program and Budget Committee to the fact that this estimated cost does not include a contingency factor. Based on experiences of other UN agencies, this estimate appears to be tight. Delivering an ERP project of the proposed scope within budget requires very strict project management, scope control and deployment based on standard functionality as opposed to undertaking customizations. The quality and availability of data in legacy systems is another major factor that could lead to delays and cost overruns.

50. The Secretariat is of the opinion that it would be prudent to include a contingency factor of 10 %, bringing up the preliminary estimate to 22.8 million Swiss francs, and to subsequently refine and validate the cost estimate through the detailed scoping and planning phase. This contingency factor could be reduced or eliminated as appropriate after the detailed scoping and planning has been completed, at which time the Secretariat would have a considerably more refined cost estimate prepared with a higher degree of confidence. The



Secretariat will also take advantage of the experience of other UN agencies, such as WMO and UNHCR, to obtain an independent review of the cost estimates.

51. The table below shows the estimated project costs and the underlying assumptions for these. As shown, the high-level preliminary cost estimate for the project is 20.7 million Swiss francs (22.8 million Swiss francs if a 10% contingency is included). This cost estimate is based on WIPO’s own initial experience of implementing the PeopleSoft Finance and Budget reporting system (AIMS) and the implementation experiences and input from other UN system organizations which have undertaken similar implementations. It will be further refined and detailed for the different phases and the different categories of costs including software license acquisition, application hosting, and external and internal implementation resources.

Chart 2. WIPO enterprise resource planning (ERP) project preliminary cost estimate  
(in thousands of Swiss francs)

Cost Element	2007*	2008	2009	2010	2011	Total
Application hosting		900	700	700	700	3,000
Software Acquisition & Maintenance**	870	483	225	225	225	2,028
Project Personnel	132	924	924	924	396	3,300
User Back-Filling Resources	36	588	588	372	36	1,620
Training	72	120	120	150	72	534
External Implementation Partner(s)		2,975	3,400	2,550	1,275	10,200
Staff Missions	30					30
<b>Total</b>	<b>1,110</b>	<b>5,990</b>	<b>5,957</b>	<b>4,921</b>	<b>2,704</b>	<b>20,712</b>

\* An amount of approximately 800 thousand Swiss francs for 2007 have already been included in the Revised Budget for 2006/07 for the initial preparatory phase of the project. However, based on the expectation that approval will be obtained only in October, some or all of these costs may only be incurred in later years.

\*\* This line has been updated for the cost of of the software modules for sales order processing and inventory management required for the implementation of the Publication Sales system.

A. Underlying Assumptions

52. The above cost estimate is driven by four overarching assumptions, which, if not held true, would result in a need to increase the estimate. These are:

(a) A clear and well documented management vision will be delivered and available prior to the commencement of the work of the External Implementing Partner. The non availability of this key deliverable at the right time would result in the need for the External Implementing Partner to assist WIPO in defining the policies and business processes, which will involve a much higher effort than has been considered in this cost estimate;

(b) The effort estimates and therefore costs of internal and external resources are based on a “minimum customization” approach. This will imply important changes to policies and business processes to adapt the Organization’s way of working to the best practices and functionality within the ERP software package. However, if the Project Board is for any reason unable to ensure the effective enforcement of this approach, user requests for customizations may explode, and the project effort estimate, and therefore cost, will be commensurately higher;

(c) The effort and costs of any specific enhancements for the implementation of functionality required for IPSAS are not included in this estimate. The PeopleSoft ERP software and its modules are fully compliant with the principles of accrual accounting. Any specific requirements or functionality due to WIPO's business requirements or prescribed functionality due to the application of the UN's harmonized policies for IPSAS implementation will only become known following completion of an assessment planned to be carried out over the following months of 2007 (and which may extend to the first quarter of 2008).

(d) The estimation of effort and therefore cost of the External Implementing Partner's services has been prepared on the assumption that temporary internal project resources will be hired (these appear in Chart II as "project personnel"). Such internal temporary project resources are typically hired at considerably lower costs (60% lower) than external resources. However, if for any reason the project is unable to attract and hire such internal project resources, these resources would need to be supplied by the External Implementing Partner and the costs would increase commensurately.

## B. Summary Explanations and Key Assumptions

53. Summary explanations and key assumptions for the costing used in Chart 2 are provided below.

(a) Application Hosting: In accordance with the Application hosting strategy, the applications will be housed and hosted on outsourced infrastructure managed by and at UNICC, building upon the current hosting arrangement for AIMS (the PeopleSoft financial system). Application hosting costs are tentatively based on the current costs of AIMS hosting with UNICC. A more precise estimate will be prepared by obtaining a budgetary quotation from UNICC. Such an estimate will need to be based on more precise information to be provided by WIPO in databases required, number of users, application modules and their phasing, the number of environments (development, test, production etc) and the volume of transactions;

(b) Software acquisition and maintenance: In accordance with the product strategy and the initial investment already undertaken for AIMS, the ERP system at WIPO will be based on PeopleSoft Enterprise suite of modules. Software acquisition costs have been estimated based on a budgetary quote from Oracle PeopleSoft (P/S) and include the following modules: Human Resources, Payroll, Self Service H/R, e-Recruitment, Planning and Budgeting, Internet Expenses, Asset Management and Business Intelligence Suite for Enterprise Reporting<sup>1</sup>. Software Maintenance costs are estimated at 22% of the license costs;

(c) Project Personnel: Project personnel costs relate to temporary project personnel who will be recruited for the duration of the project as described in paragraph 52 (d). Project personnel are estimated at an average monthly cost of 11,000 Swiss francs;

(d) User Back-Filling Resources: Building on our own experience of implementing AIMS, and that of other agencies we have consulted, business areas would need to assign key users who are knowledgeable about their business processes to the project for various

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<sup>1</sup> Note: WIPO already owns the Procurement module.

activities during the design and implementation phases. This budgeting line refers therefore to the cost of replacing user resources who are released to work on the project, by temporary resources in order to allow routine business operations to continue smoothly during the project timeline;

(e) Training: The cost of PeopleSoft training is based on the assumption that the arrangement with Oracle through UNICC for training in Geneva will continue. Functional/process training of users will be undertaken by project resources and through the train-the-trainer approach. The agencies we have consulted have emphasized that training is a key success factor of the implementation of ERP systems and its costs are prone to underestimation. Therefore, this estimate will be carefully reviewed and refined in the detailed planning and scoping phase. The training costs do not include the use of any off-the-shelf tools or productivity kits such as UPK (User Productivity Kit offered by Oracle Corporation);

(f) External Implementing Partner(s): In our own experience during the AIMS project and in that of other agencies, the role of an External Implementing Partner is critical in a successful ERP implementation and represents a considerable portion of the costs. The External Implementing Partner(s) will bring in the much needed expertise for designing, configuring and implementing the system and will be selected through an open international tender. The External Implementing Partner costs have been estimated on the basis of approximately 6,000 man-days and a daily average cost of 1,700 Swiss francs has been assumed. The distribution of external manpower costs across years will depend on the detailed project plan. WIPO is currently in the process of recruiting a consultant to study the implications of IPSAS compliance. While PeopleSoft is IPSAS-compliant, there may be some modifications required to the manner in which the current financial system is configured and used; and

(g) Staff Missions: Initial discussions with other UN agencies (described in more detail in the Annex to this document) have been very valuable and the Secretariat is of the opinion that more detailed information and insight may be obtained through a limited number of staff missions to such agencies. One to two staff missions are planned during the preparatory phase to visit organizations that have undertaken similar projects.

### C. Proposed Source of Funding

54. It is proposed to fund the ERP project from the available reserves (see document WO/PBC/12/4).

## IX. REPORTING MECHANISM

55. The Secretariat will provide progress and financial reports of the project to the Program and Budget Committee on a regular basis.

## ANNEX

### SUMMARY OF ERP PROJECT INFORMATION OBTAINED FROM OTHER UN AND RELATED AGENCIES

#### A. Overview of Interactions Undertaken with Other Agencies

1. The Secretariat has undertaken extensive informal consultations, with exchanges of information and experience, with UNHCR (located in Geneva), and UNDP via telephone and conference calls. A preliminary exchange has also taken place with WMO and more detailed discussions will take place in late August/early September.

2. The Secretariat is pleased to inform the Program and Budget Committee that the agencies it has contacted have been very responsive and cooperative and have shared very valuable information. They have also indicated the ability and willingness to collaborate further during WIPO's implementation of the ERP system for the sharing of customizations and other material, as applicable.

#### B. Summary of Information Obtained from UNDP Project

3. UNDP has undertaken its ERP implementation (called Atlas) in two phases. The first phase was undertaken between 2002 and 2005, with the go-live in January 2004. This phase included the implementation of the financial, procurement and asset management modules of PeopleSoft, HR and Global Payroll modules for the country offices and general service staff. Phase 2, which is currently underway, seeks to deploy several improvements in the areas of project management, financial management, e-recruitment, payroll for international professional staff, e-procurement and strategic sourcing.

4. The total cost of the UNDP ERP implementation as provided to the Secretariat, is 57.6 million United States dollars for phase 1 (up to March 2005), and an approximate 11 million United States dollars for phase 2.

5. It is to be noted that, while the scale and complexity of UNDP's implementation is not comparable to that of WIPO's, many of the lessons learnt would be applicable to the WIPO environment. WIPO had previously collaborated with UNDP for the finalization of its own agreement with PeopleSoft in 2002 for the acquisition of the software licenses and the information and documentation provided at the time had proved to be very useful.

6. UNDP has shared with us a comprehensive document on the summary of the implementation of phase 1 and their lessons learnt, the cost information, the governance structure, extracts of their risk and issue logs, and, most importantly, some valuable information on benefits tracking. UNDP has stated that while it has been challenging to quantify benefits, they have made extremely serious efforts to identify specific benefits related to functionality deployed that would accrue to business areas. These benefits have been tracked throughout the project and the results summarized in the document provided to the Secretariat.

7. UNDP has explicitly stated its willingness to cooperate with WIPO in downstream activities, including the sharing of any customizations required for the UN requirements that WIPO may deem relevant. It has undertaken such collaboration with UNHCR in Geneva, which has also implemented PeopleSoft.

8. UNDP's project governance structure is far more complex than what would be required for WIPO due to the multi-agency nature of their project. However, in essence, they have emphasized the need for a strong and empowered Executive Sponsor, a Project Board, change management and a strong and proven project methodology (Prince2). In phase 1 of their implementation, which had many challenges and a very aggressive timeframe, the executive responsibility for the project lay with the Assistant Secretary General in charge of administrative and management functions. This enabled driving the adoption of coherent policies and the effective implementation of the system.

### C. Summary of Information Obtained on UNHCR Project

9. UNHCR has had a similar project to that of UNDP, starting in 2002. The first phase included the implementation of the supply chain and financial modules (from 2002 to 2004) and the second phase, currently underway, includes the implementation of global payroll and human resource management modules of PeopleSoft.

10. The governance of the project in UNHCR comprised two layers. The top level committee (IT Governance Board) includes directors (at D2 level) chaired by the Deputy High Commissioner. UNHCR's Chief Information Officer reports to this board, which meets three to four times a year. The second layer is the Business Owners Committee, which comprises Directors from IT and the business areas concerned by the ERP deployment, the project managers and some section heads as required.

11. UNHCR has provided overall project cost information from 2004 as follows:

2004 – 20.4 million United States dollars  
2005 – 29.7 million United States dollars  
2006 – 20.1 million United States dollars  
2007 – Budget of 6.3 million United States dollars  
2008 – Budget of 1.2 million United States dollars

These costs include software license, hardware/hosting, implementing partner, training and staff (directly assigned to the project) costs.

12. UNHCR has recently demonstrated to us its procurement system and provided a comprehensive overview of its human resources management and global payroll project. Several important elements of its implementation approach were discussed during these sessions, including the approach to setting up an item catalog for procurement and that for conversion of historical data from the legacy payroll system.

13. Some of the key elements learned include:

- the importance of the involvement of the Business Owners throughout the project;

- the need to adhere to the best practices within the ERP software;
- the need for key users who know the business processes thoroughly to be assigned to the project and their daily responsibilities back-filled by short-term resources;
- the importance of user training; and
- the need for the Organization to take primary responsibility for the implementation of the project as opposed to entrusting this to the External Implementing Partner.

14. UNHCR is currently planning the implementation of IPSAS including the cost component and the Secretariat expects to have further discussion with them on this subject once they have completed this work.

15. Finally, UNHCR has expressed its willingness to share its experience during the course of WIPO's project as required. This could potentially include sharing of customizations, in particular, those related to the human resources and global payroll modules.

D. Preliminary Information Received from WMO

16. WMO has provided initial information on its project and more detailed discussions will take place with them later in August. The Organization went live with Oracle E-Business Suite Applications in January 2006 with Finance and Procurement, followed by HRMS and Payroll in June, and with e-Procurement and Portal in September.

17. The overall direct costs for the latest wave of its ERP Implementation, as provided, were approximately 3 million Swiss francs. Its governing bodies have approved a further 4 million Swiss francs for the implementation of IPSAS starting in 2008.

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