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INFORMATION TECHNOLOGY STRATEGIC IMPLEMENTATION PLAN

Document prepared by the International Bureau

1. During its third session, held on June 14 and 15, 1999, the SCIT Plenary approved the "SCIT Strategic Information Technology Plan into the Twenty-First Century" (please see paragraphs 10-12 of document SCIT/3/4).
2. Annex 1 to this document contains an executive summary of an IT Strategic Implementation Plan, whereas the entire Implementation Plan is reproduced as Annex 2 (in the English language only). Both documents have been prepared by the International Bureau in accordance with the above-mentioned decision by the SCIT Plenary.
3. *The SCIT Plenary is invited to discuss and approve the IT Strategic Implementation Plan.*

[Annexes follow]

INFORMATION TECHNOLOGY STRATEGIC IMPLEMENTATION PLAN

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MESSAGE FROM THE DIRECTOR GENERAL

In order for WIPO to respond fully and successfully to the challenges ahead, it will need to shepherd a transformation of working methods and procedures within the International Bureau (IB) and use decision-making processes that are results-oriented. This implies a fundamental change in the time-honored way of doing things. This information technology strategic implementation plan is one of the management techniques I will use to ensure that our transition to the next generation of business processes is transparent, predictable and measurable.

Internal procedures will need to be both simplified and kept in line with advances in information technology. Time and resources will need to be devoted to the identification of appropriate computer-based tools, their integration into administrative procedures, and the appropriate training of staff.

The management structure within the International Bureau will need to be rendered more horizontal in order to capitalize on the talents and creativity of all staff. Some of the tools that have already been implemented include strategic planning and results-oriented budgeting, a new system of internal evaluation and oversight of quantifiable activities and their results, and the modernization of administrative procedures.

The enhancement of capability of the International Bureau of WIPO, through the introduction of simplified procedures and a modern management structure, will allow better communications with Member States. This will be done through various meetings, including the Standing Committee on Information Technology (SCIT). The International Bureau will also utilize information technologies effectively to drive a number of important business projects, which will need the continued full support and participation of Member States and WIPO's other constituencies.

One example of WIPO's Information Technology Strategic Implementation Plan is WIPONET. This state of the art project will be a vehicle for strengthening the relationship among WIPO's constituencies through the creation of a global information network that unites operationally the world's intellectual property offices. It will promote international cooperation by providing fast, low-cost communications. It will facilitate access to intellectual property data, and could be used to foster the protection and improve collective management systems of copyright, and enforce intellectual property rights in the digital environment. Moreover, it will establish the architectural foundation to promote further streamlining and automation of the basic business functions of intellectual property offices worldwide.

The challenges we face are complex and will take many years to complete, but WIPO is committed to the success of its strategically important information systems. We intend to assess our progress continuously to ensure that our information technology resources remain balanced with and support fully the achievement of our most important priorities. We also recognize that the cooperation of all Member States is critical to the transparent implementation of our new strategies. Your ideas for improving the management of WIPO's information technology resources are most welcome. I look forward to your continuous support as we proceed with the implementation of these critically important information technology projects over the next five years.

Kamil Idris
Director General
WIPO

EXECUTIVE SUMMARY

As the new millennium begins, WIPO and its Member States must be prepared to communicate and transact business functions in a rapidly evolving environment that will be driven in considerable measure by information technology. The advent of electronic commerce, combined with a never-ending need to streamline and automate work processes for maximum gains in efficiency and effectiveness, present two fundamental information technology challenges: the mitigation of risk and the opportunity for improvement. WIPO's responses to these challenges are embodied in this Information Technology Strategic Implementation Plan.

This plan builds upon the foundation of information technology that has enabled WIPO to meet the challenges of the past two decades, and it establishes new strategic directions for transforming WIPO's core business processes. The major information technology strategies that will be employed include:

- integrated project planning methods that leverage capital investments,
- coordinated system development approaches based on life cycle management concepts,
- reliance upon open systems and industry standards-based hardware, software and data repositories,
- security policies and procedures that protect information, and
- information dissemination policies that promote the exchange of data and encourage worldwide access to intellectual property information at the lowest possible cost.

The long-term success of the information technology program will be influenced significantly by teamwork among many key players: WIPO's leaders, the Standing Committee on Information Technologies, WIPO's program managers and information technology project managers, the technical staff of the Information Technology Division, and the vendor community that will provide the products and services that will create the next-generation information technology architecture. The roles of these individuals and bodies, and the close interaction they must have, are set forth in this plan. Additionally, we describe some of the organizational changes that have been made to enhance the delivery of services to the internal and external clients of WIPO's IT Division.

WIPO has established a five-year planning horizon for the period 1999 – 2003. As indicated in the following timetable, the planned implementation schedule is an aggressive one:

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Project	1999	2000	2001	2002	2003
Project 1 (Automated IPOs)	Begin collection of requirements and complete business case analysis.	IB will propose to SCIT, list of items to be required under the Minimum Modernization Standards	IB – Review & adjust automation plan under Nationally Focused Action Plan.		
Project 2 (Changeover Assistance)	GlobalPat CD Rom distribution. Develop strategy and draft list of participants for the IP optical disk collections.	Begin provision of CD-ROM data collections and complete assessment.			
Project 3 (PCT Impact)	Complete assessment. Select systems developer and begin reengineering of PCT processes.	Complete Basic system. Stage 1:- Communication on request. Stage 2 – Electronic Image Dossier.	Stage 3 – Replacement of CASPIA. Stage 4 Replacement of CASPRO. Begin PCT RO Project.	Begin PCT Electronic Document Exchange Project.	Deploy Pilot Systems.
Project 4 (Finaut 2000 ERP)	Assessment (Business Case).	Select ERP solution and complete prototype design of core system.	Design and prototyping of replacement system.	Build & Test.	Production System Support.
Project 5 (Other Administrative Support Systems)	Task Force established in May '99. Begin Preparation of Business Case.	Establish simplified & streamlined approval processes, internal communications & routine procedures.	Establish modern records management system. Establish computerized operations system. Establish pilot systems for artificial intelligence in Languages Department.		
Project 6 (MAPS/DMAPS 2002)		Prepare Business Case. Analysis of Platform Options.	Decide whether to migrate MAPS/DMAPS to the WIPO Standard Architecture.		
Project 7 (Copyright Support System)		Conduct Business Case analysis and feasibility study.			
Project 8 (WIPONET)	Complete WIPONET Technical Development Strategy.	Select vendor. Establish management framework and begin implementing Internet connectivity.	Continue the installation of IPO equipment and software security infrastructure and end user training.	.	

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Project	1999	2000	2001	2002	2003
Project 9 (IPDL – Intellectual Property Digital Libraries)	Agree on clear strategic program/organizational structure at SCIT plenary meeting.	Develop office-specific assistance plans and begin performance measurements.	SCIT assesses program progress/next steps.		
Project 10 (Web Site Development Support)		Establish Team – to assume a continuous responsibility for Management and Administration of the WEB Program.	Create overall design.		
Project 11 (Y2K)	Complete tests of mission-critical mainframe, network and small systems. Conduct independent verification and validation/(IV & V).	Monitor actual performance, activate contingency plans, as required, for the PCT, Madrid and Hague operational systems.			
Project 12 (CLAIMS (Classification Automated Information System))	Establish project team to develop a business case analysis and project plans.	Identify work plan, criteria, management plan, strategy, software frameworks, requirements, specifications, and acquire IT components and services.	Develop classification databases and user operational processes. Conduct pilot projects to test. Develop system maintenance operations.	Complete acceptance testing, transitional activities and Initiate operational phase.	
Project 13 (WIPO Academy Distance Learning Program)	Establish project team.	Develop Business Plan.			
Project 14 (IT Infrastructure Improvement)	Information to be inserted.				

Figure 1

Finally, this strategic plan is consistent with the approved budget for the current biennium and the budget that will be presented to the General Assembly for the next biennium. The following graph depicts the projected allocation of funds according to major investment categories:

**Aggregated Information Technology Investment Level
for 1998 - 2001
(Total Investment of 159 million chf/SFr)**

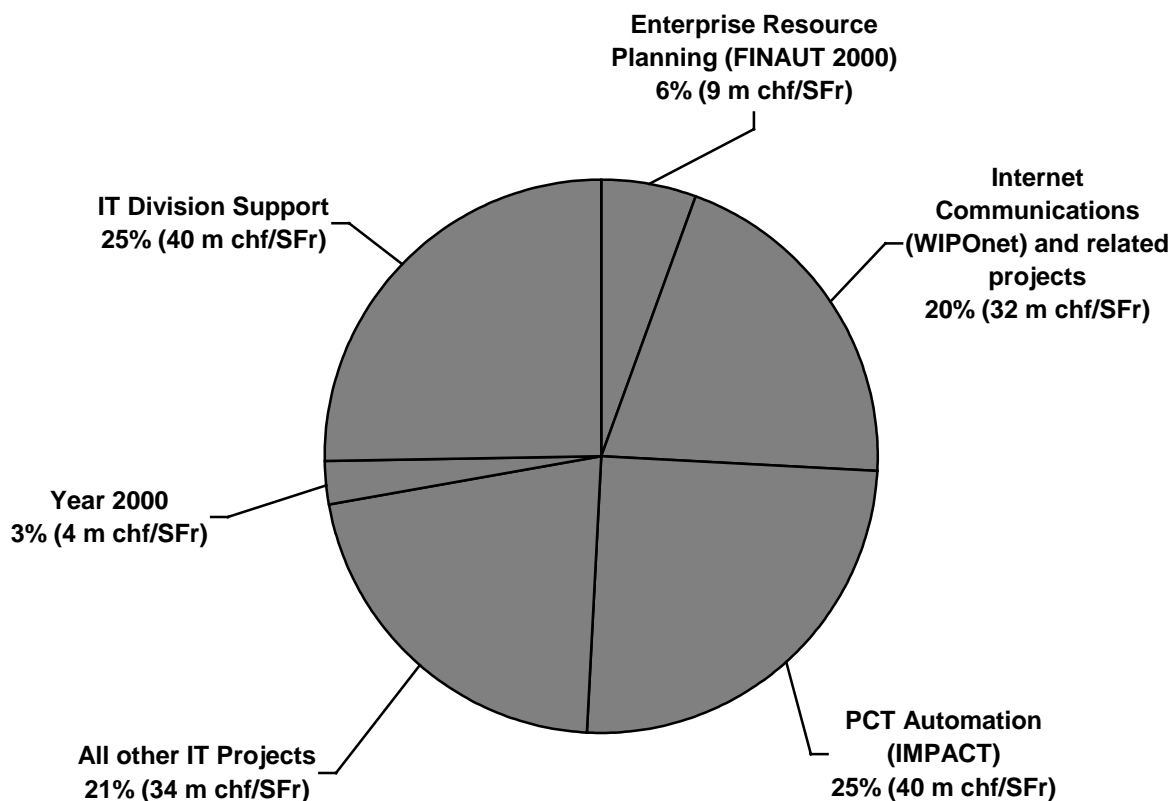


Figure 2

STRATEGIC INFORMATION TECHNOLOGY PLAN OVERVIEW

The Standing Committee on Information Technologies (SCIT) was formed in March, 1998 to establish a forum for discussing issues and to provide guidance for and facilitate coordination in the implementation of the WIPO global information network and the provision of intellectual property information services on the network. At its third plenary session in Geneva on June 14 and 15, 1999 SCIT adopted the strategic information technology plan, incorporated below, and agreed to request the International Bureau (IB) to elaborate a comprehensive and detailed implementation plan covering all major projects resulting from the plan. The remainder of this document, the WIPO Information Technology Strategic Implementation Plan, is the IB's response to that request.

INTRODUCTION

As WIPO approaches the new millennium, the Organization will enter a new era of intellectual property characterized by rapid expansion of demand for new forms of intellectual property protection, greater global coverage and unprecedented growth in the exploitation and use of intellectual property rights.

Intellectual property will no longer be perceived as a distinct or self-contained domain, but rather as an important and effective policy instrument that would be relevant to a wide range of socio-economic, technological and political concerns.

In particular, WIPO and its Member States will face the challenge of adapting to and benefiting from rapid and wide-ranging technological change, particularly in the field of information technology. The latter is the mission of the Standing Committee on Information Technologies (SCIT).

Towards the fulfillment of this mission, the SCIT was established for coordinating and ensuring the delivery of an information technology infrastructure and the policies to facilitate information services for the intellectual property community. SCIT's coordinating role covers activities of intellectual property offices relevant to office automation and to contacts with their applicants or other clients. The ensuring role is to be understood in the context of exchange of intellectual property information among intellectual property offices.

SCIT'S VISION

SCIT's vision is to achieve a global information technology architecture linking intellectual property offices in WIPO Member States, regional intellectual property offices and the International Bureau for the purpose of generating, communicating and distributing information about intellectual property rights and serving intellectual property rights protection for the global economy of the twenty-first century, while aiming at global worksharing.

SCIT'S OBJECTIVES

In implementing this vision the SCIT has set out the following main objectives:

- a) Narrow the information access gap that exists between developed countries and developing countries;
- b) Improve the flow of information concerning intellectual property rights among WIPO Member States, regional intellectual property offices and the International Bureau;
- c) Improve access to and exchange of intellectual property information in terms of costs and access time in accordance with the agreed upon principles;¹
- d) Improve intellectual property information dissemination;
- e) Consider the information needs and filing requirements of applicants and develop electronic services keeping in mind the need to provide benefits to applicants and intellectual property offices, and to other interested circles;
- f) Help guide the International Bureau to leverage information technologies;
- g) Improve the retrieval of intellectual property information through further development of international classifications of patents, trademarks and industrial designs as efficient search tools.

INFORMATION TECHNOLOGY STRATEGIES

To enhance the effectiveness of information technology management, the SCIT will follow several governing strategies based on certain fundamental principles and philosophies for achieving specific goals.

General Strategy

The strategic plan will address several inter-related projects—each can be managed separately, but will be closely coordinated to ensure that inter-dependencies are identified and common information technology and data standards are deployed. Existing technical standards will be adopted wherever practical. The information technology infrastructure is to be managed separately from the application software and the data, recognizing that each component—application software, data, infrastructure—has a distinct life cycle. The International Bureau, with advice from the SCIT, will integrate the management of these components in the planning process.

1 See “Statement of Principles Concerning the Changeover to Electronic Data Carriers for the Exchange of Patent Documents” as published in Part 8.4 of the *WIPO Handbook on Industrial Property Information and Documentation*.

Information Technology Project Management Strategies

Information technology projects will follow an established project management methodology governing the life cycle of the projects.

Information technology projects will be managed as investments. Projects will focus on identifying and producing measurable benefits to the intellectual property community, and will apply risk management principles to mitigate risks.

Evolutionary development and incremental delivery of complete products with measurable results to operations will be emphasized.

Plan costs, schedule performance and quality assurance of each project will be baselined in a management control system to ensure adequate visibility for actual progress, accurate tracking of project costs against target dates and costs, and implementation of high quality systems.

Information Infrastructure Strategies

A robust architecture-information technology infrastructure will be implemented. The International Bureau, with advice from the SCIT, will implement an information technology infrastructure based on open system and de facto industry standards wherever practical.

A secure network will be implemented to interconnect intellectual property offices. At the beginning, a virtual private network and Internet technology will be used.

Information Infrastructure Security Strategies

Appropriate guidelines and policies will be enforced to enable secure maintenance and exchange of information, which will keep in view the significant difference in the present level of utilization of information technology among WIPO Member States.

Security policy will address in particular the issues relating to access, authenticity, confidentiality, integrity, non-repudiation, control, reliability and disaster recovery requirements so that advantages of initiatives such as electronic filing, become available to all WIPO Member States.

Information Technology Application Software Strategies

Production-based open standards will be required to support emerging and evolving information technology.

Software re-use and use of Commercial-Off-The-Shelf software (COTS) will be emphasized on all SCIT projects.

Prototyping will be encouraged to help define and refine functional requirements.

Implementation of products should move rapidly from the prototype to the operational stage whenever feasible.

Data Management Strategies

The SCIT will foster and facilitate increased data sharing by pursuing electronic data interchange agreements among WIPO Member States and other international organizations and bodies.

The SCIT will promote the use of standard data models and all elements from a data repository system that facilitates data sharing and data re-use among WIPO Member States and other interested circles.

Migration Strategies

The SCIT recognizes the fact that implementation of global information projects is likely to have significant impact on the intellectual property offices many of which are paper based and do not have adequate search facilities and tools. Significant changes in the existing work practices of intellectual property offices will be essential, if the full potential of such projects is to be exploited. Therefore, SCIT will facilitate the process of evolving guidelines and training for migration from the existing systems to automated systems, so that migration as far as possible is smooth and painless.

INFORMATION DISSEMINATION STRATEGIES

With a view to achieving the widest possible reach of dissemination of intellectual property information, the SCIT will pursue the use of the latest proven technologies. In this context, information dissemination strategies will be guided and reviewed in the light of the application of the most modern information technology developments while ensuring that the needs of the whole intellectual property community (from the general public to intellectual property offices) continue to be served.

Each intellectual property office will have the responsibility, within the above-defined context, for establishing its own public dissemination policy.

An adjustment of WIPO recommendations and national legal regulations concerning the exchange and usage of industrial property data will need to be considered. Basic rules will need to be elaborated on and regularly reviewed for the international exchange of data in electronic form taking into consideration the “Statement of Principles...”²

With a view to the use of data collections exchanged among intellectual property offices, appropriate conditions will need to be agreed upon within the SCIT.

ORGANIZATIONAL RESPONSIBILITIES

In order to take maximum advantage of information technology projects, all entities within the context of the SCIT will need to refocus some of their program activities.

Standing Committee on Information Technologies

The Standing Committee on Information Technologies should prioritize initiatives to be accomplished and invite the International Bureau to establish project plans. The SCIT should review the progress of projects to help ensure that projects deliver quality products on schedule and within cost estimates. The SCIT has the responsibility of identifying areas of new information technology projects for which extra funding is required.

International Bureau of WIPO

The successful development, deployment and operation of information technologies requires close coordination and partnership between the International Bureau and the WIPO Member States.

The International Bureau will promote the introduction or development of automated processes into such global protection systems as the Patent Cooperation Treaty (PCT), the Madrid Agreement and the protocol relating to that Agreement. For such promotion, coordination will be of prime importance in respect of the core project initiatives, namely PCT automation, WIPONET, IPDL, IPC Reform, Electronic Filing, etc. Such projects will serve to enhance and facilitate modernization and automation of similar systems in developing countries.

The International Bureau will be responsible for drawing up project proposals and plans for recommended SCIT initiatives. In doing so, it will ensure that account is taken when researching such projects of the special needs of developing countries in particular the availability of the necessary information technology infrastructure, training of staff to use and

2 See footnote 1.

maintain the systems, provision of necessary training or reference manuals, and allowance for operational use (ongoing maintenance, consumables, etc.).

In the fulfillment of these plans, the International Bureau will ensure the availability of the committed WIPO resources to implement and maintain the SCIT project initiatives within the approved allocation of the budget.

The International Bureau will also be responsible for ensuring coordination between the activities of the SCIT and other WIPO forums (e.g., the IPC Committee of Experts).

WIPO Member States and Regional Intellectual Property Organizations

Intellectual property offices of Member States and regional intellectual property offices should commit resources to implement previously approved SCIT initiatives. Member States should seek to reduce the current duplication of effort by intellectual property offices through sharing of localized collections of global intellectual property information.

Regional intellectual property offices may act as coordinators for their members to support the objectives set out in this strategic plan.

Other Relevant Organizations

Cooperation with other governmental and non-governmental organizations should be used for acquiring information and receiving advice on relevant SCIT topics.

ASSUMPTIONS AND CONSTRAINTS

The information technology planning decisions are influenced by the SCIT's strategic vision and objectives, as well as by various financial, demographic, and technology assumptions and constraints. Several key assumptions and constraints are as follows.

Dimensioning Requirements, Integration Requirements and Performance Expectations

For the successful implementation of vital programs, it will be the SCIT's endeavor to clearly define any dimensioning and integration requirements along with well-defined performance expectations in the context of WIPO and its Member States. Integration aspects will address the existing applications of WIPO and its Member States with that of the programs under consideration. Performance expectation will have continued upward revisions based on the

needs and aspirations of the intellectual property community and the technological developments.

Financial

Many intellectual property offices will have little or no funding to implement and sustain an information technology program. Developing countries will be provided with assistance through WIPO's Special Reserve Fund (SRF) for funding deployment and ongoing costs of SCIT projects.

Human Resources

Limits on staffing for the development of these initiatives exist at the WIPO Member States and regional organizations in developing countries and at the International Bureau. Required information technology personnel skills, knowledge, and abilities increase as the transition to more complex systems continues. Intellectual property offices and the International Bureau will need to assess the feasibility of increasing the skills of existing staff or adding new staff. The SCIT will address, through properly resourced programs, the shortage of human resources and the lack of expertise and endeavor to ensure that experience will be shared among WIPO Member States to increase the knowledge base of all these countries.

Economic and Geographical Considerations

The SCIT will endeavor to develop programs that assist and provide guidance to countries in order to mitigate limitations imposed by economic and geographic circumstances.

Language Considerations

The need to provide intellectual property information in multiple languages will continue. This need will affect all users of global systems and will be considered in the development, deployment and support of production systems.

International Cooperation

The International Bureau, Member States of WIPO, and regional offices will need to continue international cooperation efforts including, e.g., data exchange, the development of information technology and data standards, common search tools, and cost sharing arrangements in order to maximize benefits of SCIT initiatives. Experience in the above-mentioned areas gained by the intellectual property offices of WIPO Member States, regional intellectual property offices and user groups should be given emphasis.

Technology Environment

There is a wide divergence in the level of technological development of participating intellectual property offices. Therefore, the needs of many of the offices around the world vary considerably.

The SCIT shall endeavor to deploy technology solutions, which take into consideration local needs and preparedness.

DEVELOPING COUNTRIES: SPECIAL ISSUES

Modernization of Infrastructure

The SCIT, as part of its strategic information technologies activities, will define and recommend minimum modernization standards (MMS) to be put in place at the intellectual property office level. These MMS should address a wide range of areas including information technology infrastructure, human resources, training and support, process modernization, etc. The SCIT will complement, to the greatest extent possible, intellectual property offices' efforts to reach the MMS level.

Creation of Knowledge Databases Including Traditional Knowledge

The SCIT recognizes the concern by WIPO Member States regarding the granting of intellectual property rights due to a lack of traditional knowledge being documented in the public domain. The SCIT will take the initiative by including activities in its work program to support WIPO Member States, in particular developing countries in their creation of databases in the area of traditional knowledge available in the public domain so that prior art gets established.

Sustainability

All intellectual property offices will have to dedicate resources to continue operating and maintaining SCIT initiatives after their deployment. This may require ongoing assistance from WIPO in many of the developing countries.

* * *

A project management plan, including a methodology and a time frame (three to five years) for each of the SCIT information technology projects, will have to be established and regularly reviewed by the Committee or a body within the Committee.

STRATEGIC INFORMATION TECHNOLOGY INITIATIVES

INTRODUCTION

To meet the needs of the global economy in the twenty-first century, WIPO must undertake an integrated, fully coordinated portfolio of global strategic initiatives to meet both Member State and customer needs and expectations. Many of these are derived from deficiencies in current operational automated support systems, in the underlying information technology infrastructures that are currently in place and in the management framework of WIPO's information technology program. The current information technology environment is described in Appendix A. Appendix B summarizes the information technology needs in the current situation. Both represent many of the drivers of WIPO's Information Technology Strategic Implementation Plan.

The information flow is not intended to be a one-way flow, but an interactive continuous flow with a progressive enhancement of the value of information. The end user of IP information in this value chain may become a producer of another form of IP information with added value, as new innovative activities will be inspired by using "knowledge information" that will be continuously disseminated throughout this cycle. The needs of the users in the market will be reflected more effectively than ever before, as the way the information is originally generated will have a direct impact on those business functions using WIPONET. In other words, the information flow via WIPONET will lead to integration and consolidation of all relevant constituencies.

The strategic initiatives summarized in this section represent the nucleus of what is required to meet WIPO's needs over the next five years. Each of the initiatives is then further described in terms of specific projects that either have been or will be initiated within the time horizon of the plan. Each project plan addresses the business or functional problems of concern, the approach to be taken in developing technical solutions and an implementation plan. Some project plans are in the early conceptual stage whereas others are quite advanced and well documented. This fact accounts for differences in the presentation style and thoroughness of the various project plans.

The strategies that will govern the management of WIPO's IT program in the realization of this set of initiatives are summarized in the Section entitled "Governing Strategies for Managing Information Technology."

These 14 initiatives reflect WIPO's vision of its future operating mode in a global information network: one that links IP offices in Member States, regional IP offices, the IB, and other IP partner organizations to serve a wide spectrum of intellectual property needs. The global information network concept is aimed at enabling easy, efficient access to current, accurate IP information and promoting the interests of innovation and IP rights protection. All business and support processes will be optimized, using process reengineering and state-of-the-art technology and project management methodologies, to establish an effective foundation for WIPO's future performance. Key IT-based capabilities will be developed for Member State IPOs. IT-based tools will be developed to offer users complete, authoritative IP information that can be accessed in a user-friendly manner. These integrated tools will also provide timely,

accurate information regarding business transactions with IPOs and the IB in convenient formats.

Figures 3 and 4, (pages 16 and 17) illustrate the broad functionality that is envisioned to be phased in over the next five years. The top and bottom blocks of the concept shown in Figure 3 represent the external producers and users of IP Information. The center block represents the global WIPO IP network, implemented through WIPONET on an Internet foundation, and it also identifies the major components of the network. These components, which are further illustrated in Figure 4, show the business initiatives, administrative support initiatives, the global services initiatives and IT Infrastructure project initiatives which are planned.

There are three fundamental operational concepts of this strategic plan. First, IP owners and representatives will interface with the network to submit electronic applications and official inquiries, and receive official electronic correspondence. Second, all public users will be able to search and retrieve IP information in WIPO, IPO Web Sites, and Intellectual Property Digital Libraries at the IB and other IPO locations. Finally, IP information will be provided to meet projected customer needs and to serve the interests of stimulating innovation and invention and of protecting and enforcing IP rights.

At the technical level, operational interfaces between IP Offices and the IB will be through the WIPONET infrastructure, built on the Internet framework. This infrastructure will enable connectivity between external users, Regional and Member State IP Offices, and the IB. The services provided by IPO and IB business systems will be accessible on an interactive basis. Web-based applications are envisioned to include extensions of current WIPO Web sites, providing strategic public relations as well as legal, process, and status information to both internal and external users. Both the IB and IPOs will establish IP Digital Libraries within the WIPONET framework to serve the interests of the public. The WIPO Academy Distance Learning Program will develop distance learning programs and other intra-office communications programs, delivered through WIPONET, to support IPO staff development and to assist users in making effective use of the global IP systems. In addition to the secure virtual private network established through WIPONET, the IB will establish direct, secure data exchange channels with other partner IP organizations, such as the Trilateral Offices.

The IB will provide assistance to IPOs in establishing the infrastructure to provide connectivity to the global IP system, including equipment, software and training. It will also provide assistance and software to automate IPO business functions, where needed.

Within the IB, business process and other support systems are integral to each other and to WIPONET through the basic infrastructure of the Network Office System. IBNOS provides a suite of common tools to system users within the IB, which, in turn, serve as interfaces to the automated support systems. A set of these tools will be installed in all IP Offices by means of IPO local area networks, as part of the basic IPO infrastructure.

Two of the major business process and administrative systems will be replaced by new systems (Information Management for the Patent Cooperation Treaty (IMPACT) and FINAUT 2000 ERP) to meet user needs in processes that have been reengineered. Others will be expanded and converted to operate within a standardized IB IT infrastructure. In addition, new specific function systems will be developed in those areas currently under-served by IT and which are not served by the major automated support systems.

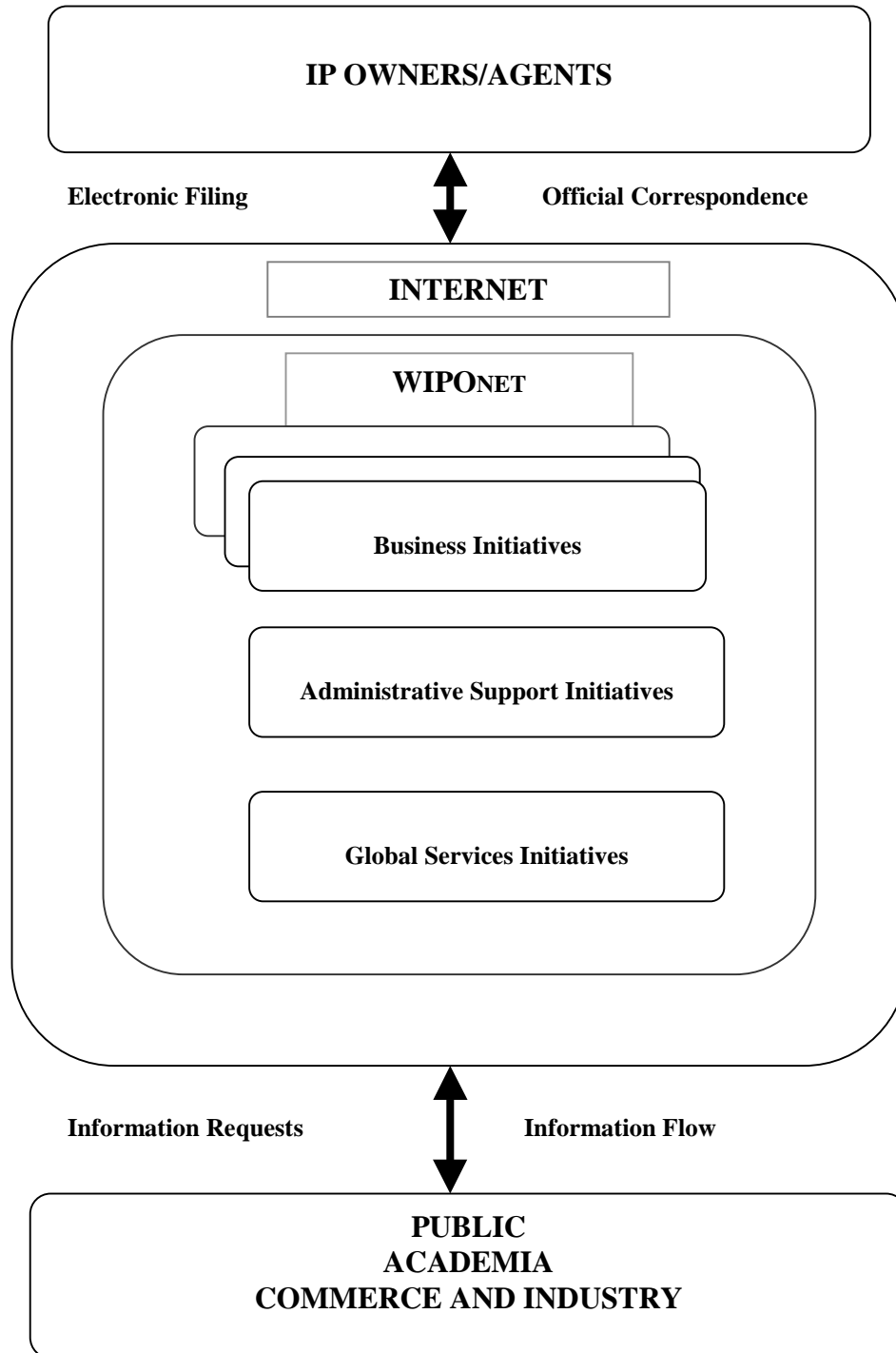


Figure 3. IP Global Network Concept.

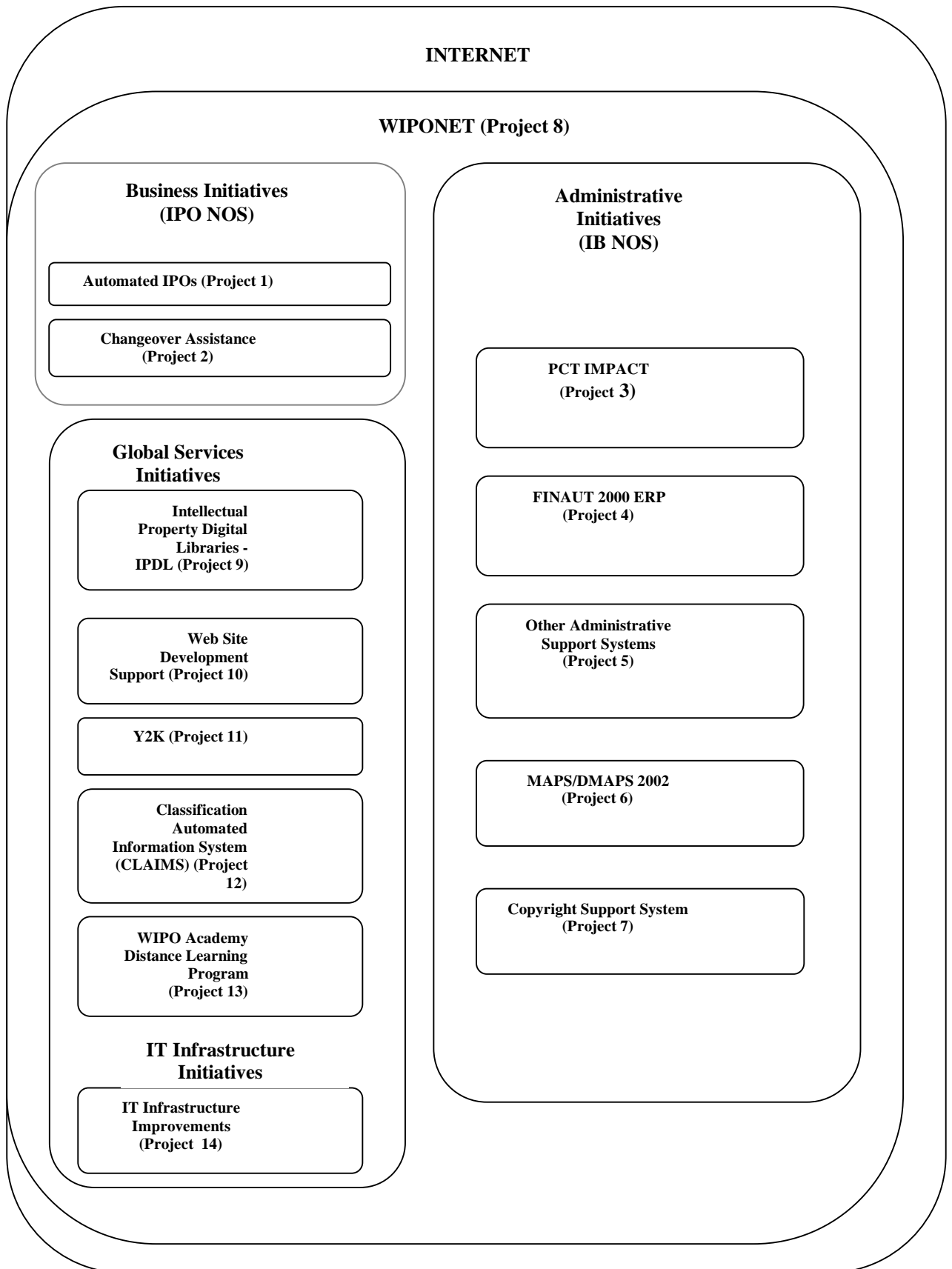


Figure 4. Global Network Concept - IB and IPO Functions and Relationships.

SUMMARY OF INITIATIVES

The conceptual overview shown in Figure 4 identifies the areas in which initiatives have been taken or will be required to realize the vision of leveraging information technology.

These initiatives can be grouped into one of the following categories:

Business Initiatives

Administrative Support Initiatives

Global Services Initiatives

IT Infrastructure Initiatives

An overview of each initiative, grouped into projects that will be undertaken to implement the initiatives, appears below. These projects are described in more detail in the sub-sections that follow.

Business Initiatives

Automated IPO Receiving Office Functions

Automated IPO Business Functions including:

- Development of Minimum Modernization Standards for hardware and software and
- IP Electronic Information Publication.

These initiatives are addressed in **Project 1**, beginning on page 22.

Data carrier changeover assistance for IPOs.

The changeover from paper-based documents and procedures to electronic data carriers needs internationally coordinated, phased implementation by Member States and through WIPO's assistance to small IPOs during the transitional period. The provision of CD-ROM collections of patents and trademark documents to IPOs with insufficient access to the Internet is one example of WIPO's assistance. This will be addressed in **Project 2**, beginning on page 26.

Administrative Project Initiatives

PCT IMPACT. This initiative is addressed in **Project 3**, beginning on page 32.

FINAUT 2000 ERP– This initiative is addressed in **Project 4**, beginning on page 44.

Smaller, single function support systems are addressed in **Project 5**, beginning on page 63.

MAPS/DMAPS 2002 – An analysis of whether to retain the current mainframe-based MAPS/DMAPS architecture or whether it should migrate to a new platform, converted to operate with any necessary enhancements, is to be done in the year 2000. Accordingly, this is not a project to be immediately undertaken, but may be addressed in the future as **Project 6**, beginning on page 74.

Copyright Support System - This is a new project to be defined and initiated after a preliminary business case analysis has been performed, and will be addressed in **Project 7**, beginning on page 74.

Global Services Initiatives

WIPONET – This initiative is addressed in **Project 8**, beginning on page 75.

Intellectual Property Digital Library Systems - including IB and IPO systems and support for:

- enhanced natural language search systems for official UN languages, and
- Local Collections of Intellectual Property Data.

This initiative is addressed in **Project 9**, beginning on page 90.

IB and Member State Web Site Development

This initiative is addressed in **Project 10**, beginning on page 103.

Y2K – This initiative is addressed in **Project 11**, beginning on page 106.

Classification Automated Information System - This initiative is addressed in **Project 12**, beginning on page 115.

WIPO Academy Distance Learning Program including

- Multimedia Course Development System,
- Virtual Classroom Facility, and
- Instruction Delivery and Management Systems;

These initiatives are addressed in **Project 13**, beginning on page 120.

Information Technology Infrastructure Project Initiatives

- IT Infrastructure Improvements – This initiative is required to support the global IP system and is addressed in **Project 14**, beginning on page 125.

CORRELATION OF SCIT OBJECTIVES WITH PROJECT INITIATIVES

	Project	SCIT Objective						
		(a)	(b)	(c)	(d)	(e)	(f)	(g)
1	Automated IPOs	✓	✓	✓			✓	
2	Changeover Assistance	✓			✓		✓	
3	PCT IMPACT		✓	✓		✓	✓	
4	FINAUT 2000 ERP			✓			✓	
5	Other Administrative Support Services			✓			✓	
6	MAPS/DMAPS 2002		✓	✓			✓	
7	Copyright Support System			✓		✓	✓	
8	WIPONET	✓	✓	✓	✓	✓	✓	
9	IPDL(Intellectual Property Digital Libraries) Systems	✓	✓	✓	✓		✓	✓
10	Web Site Development Support	✓	✓	✓	✓		✓	
11	Y2K			✓			✓	
12	CLAIMS (Classification Automated Information System)						✓	
13	WIPO Academy Distance Learning Program	✓	✓	✓			✓	
14	IT Infrastructure Improvements			✓	✓		✓	

Figure 5

- (a) Narrow the information access gap that exists between developed countries and developing countries;
- (b) Improve the flow of information concerning intellectual property rights among WIPO Member States, regional intellectual property offices and the International Bureau;
- (c) Improve access to and exchange of intellectual property information in terms of costs and access time in accordance with the agreed upon principles;³
- (d) Improve intellectual property information dissemination;
- (e) Consider the information needs and filing requirements of applicants and develop electronic services keeping in mind the need to provide benefits to applicants and intellectual property offices, and to other interested circles;
- (f) Help guide the International Bureau to leverage information technologies; **[NOTE: This item affects all other projects, but does not represent a project as such]**
- (g) Improve the retrieval of intellectual property information through further development of international classification of patents, trademarks and industrial designs as efficient search tools

3 See "Statement of Principles Concerning the Changeover to Electronic Data Carriers for the Exchange of Patent Documents" as published in Part 8.4 of the *WIPO Handbook on Industrial Property Information and Documentation*.

GLOSSARY

AIS	Automated Information Systems
BETS	Budget Expenditure Tracking System
BPS	Budget Preparation System
CA	Certification Authority
CASPIA	Computer Assisted System for Processing International Applications
CASPRO	Computer Assisted System for Processing International Applications as Receiving Office
CD Rom	Compact Disc/Read only memory
CFD	Cooperation for Development
CLAIMS	Classification Automated Information System
CLEA	Collection of Laws for Electronic Access
COR	Communications Upon Request
CODIS	Cooperation for Development Information System
COTS	Commercial Off the Shelf Software
CTI	Computer Telephony Integration
DBMS	Database Management System
DIT	Director IT
DTD	Document Type Definition
DVD	Portable data carrier
EASY	Electronic Application System
EDE	Electronic Document Exchange
EDI	
EPO	European Patent Office
ERP	Enterprise Resource Planning
ESCROW	Electronic System for Conflict Resolution on the Web
FAQ	Frequently Asked Questions
FINAUT 2000 ERP	Finance Automation Project
FIT	Fund in Trust
HR-Access	Application for the management of Strategic Human Resources
HSM	Hierarchical Storage Management
IB	International Bureau
IBNOS	International Bureau Network Office System
IMPACT	Information Management for the Patent Cooperation Treaty

IV & V	Independent Verification and Validation
IP	Intellectual Property
IPC	International Patent Classification
IP-CLASS-CD-ROM	International Patent Classification Database
IPDL	Intellectual Property Digital Library
IPER	International Preliminary Examination Report
IPLEX	IP Legislative texts
IPLT	Intellectual Property Laws and Treaties
IPOs	Intellectual Property Offices
IRD	International Registration Department
JOPAL	Journals of Patents Associated Literature
LCM	Life Cycle Management
LDAP	Lightweight directory access protocol
LDCs	Least Developed Countries
MAPS/DMAPS	Madrid Database System
MATCHES	MAPS Assisted Translation and Classification Help for Examiners Subsystem
MECA	Madrid Electronic Communications
MINOS	Marks Information Optically Stored
MIS	Management Information System
MMS	Minimum Modernization Standards
NATURAL	High Level Language
NDS	NetWare Directory Services
NFAP	Nationally Focused Action Plans
NIVLIS	Nice, Vienna & Locarno Information System
NOS	Network Office System
OIOP	Office of Internal Oversight and Productivity
OLAP	Online Analytical Processing
PAMSCAN	Pamphlet Scanning
PCIPI	Permanent Committee on Industrial Property Information
PCT	Patent Cooperation Treaty
PKI	Public Key Infrastructure
PM	Project Manager
PMS	Project Management Systems
QA	Quality Assurance
QoS	Quality of Service
RA	Registration Authority
SCIT	Standing Committee on Information Technology

SGML	Standard Generalized Mark-up Language
SIGAGIP	Application for the management of Personnel & Payroll
SPIDI	System for Publication of International Applications Data & Images
SRF	Special Reserve Fund
TAs	Travel Authorizations
TRM	Technical Reference Model
UPS	Uninterruptable Power Supply
USPTO	United States Patent and Trademark Office
UTP	Unshielded Twisted Pair
VPN	Virtual Private Networks
WIPO	World Intellectual Property Office
WIPONET	Global Information Network
WIPONET SP	WIPONET Support Program

[Annex 2 follows]