

WIPO



H/A/28/2

ORIGINAL: English

DATE: August 15, 2009

E

WORLD INTELLECTUAL PROPERTY ORGANIZATION
GENEVA

SPECIAL UNION FOR THE INTERNATIONAL REGISTRATION OF INDUSTRIAL DESIGNS
(HAGUE UNION)

ASSEMBLY

Twenty-Eighth (17th Ordinary) Session
Geneva, September 22 to October 1, 2009

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM
(MADRID AND HAGUE INTERNATIONAL REGISTRATION SYSTEMS):
STATUS REPORT AND PROPOSED NEXT STEPS

prepared by the International Bureau

I. INTRODUCTION

1. The purpose of the present document is two-fold. It contains a report prepared by the International Bureau on the implementation status of the Information Technology (IT) Modernization Program of the Madrid and Hague IT support systems, as described in documents MM/A/38/4 and H/A/24/2 and summarized in Annex I below. It also lays out how implementation of the Program could be pursued further.

2. Initiation of this IT Modernization Program was approved by the Assemblies of the Madrid Union and the Hague Union in September 2007. The Program was scheduled to be implemented in two phases over a period of four years (2008-2011), with the possible addition of a third phase, for a total estimated cost of some 15.3 million Swiss francs for the three phases. A first status report was presented to the Assemblies of the Madrid Union and the Hague Union in September 2008 and is contained in documents MM/A/40/3 and H/A/26/2.

3. Implementation of Phase I of the program was approved by the Assemblies against an estimated investment cost of 5.028 million Swiss francs, to be financed as follows¹:

– 2.9 million Swiss francs from programs 18 (1 million) and 27 (1.9 million) under the initial Program and Budget for 2008/09 – i.e., programs 6 and 25 under the Revised Program and Budget for that biennium²;

– 2.128 million Swiss francs from the surplus generated by the Madrid Union budget by the end of 2007.

4. The Madrid Union Assembly further approved that any amount of the above-mentioned surplus exceeding the amount necessary to reach the target level of reserves (25 per cent of the estimated biennial expenditure in the 2008/09 biennium (PBE factor)) be kept within the Madrid Union Reserve and Working Capital Funds with a view to contributing to the financing of subsequent stages of the IT Modernization Program³.

II. PHASE I – IMPLEMENTATION STATUS

5. Within the first 18 months of implementation of Phase I (from January 2008 to June 2009), considerable progress has been made concerning several sub-projects, notably Sub-Projects A1, A2, A5, A6, A7, B1 and B5.

(a) Enhancing internal productivity

6. This goal will be achieved with the completion of Sub-Projects A1 to A7⁴. Sub-Projects A1, A2, A5, A6 and A7 will be completed in the course of 2009.

7. Under Sub-Project A1 (Translation), an application aiming at automating the translation of limitations, subsequent designations and final decisions concerning trademark registrations by recycling those parts of the lists of goods and services already contained in the original registration, is being tested. It is planned to be in production as from September 2009.

8. Under Sub-Project A2 (Classification), a web application aimed at assisting users of the Madrid system in composing lists of goods and services containing correctly classified indications is being developed. This e-classification tool will allow users to make searches in a database of acceptable indications of goods and services, validated by the International Bureau. As of May 2009, a prototype of this application is being tested.

¹ Paragraphs 35, 36 and 42 of document MM/A/38/4, and paragraph 14 of document H/A/24/2.

² Financed from the Madrid Union budget for an amount of an estimated 2.441 million Swiss francs and from the Hague Union budget for an amount of an estimated 459 thousand Swiss francs.

³ Document MM/A/38/6, paragraph 41.

⁴ For the content of these sub-projects, reference is made to Annex I, Table 1.

9. Under Sub-Project A5 (Monitoring and Statistics), a web application has been developed to consolidate and rationalize the process of production of statistics relating to the Madrid and Hague systems operations, both for monitoring and general information purposes. The new web application will offer online access to a broader range of statistical data, in addition to the monthly and annual statistics currently made available. This application will also provide for searching facilities by criteria such as year, Office of origin and designated Contracting Party. As of May 31, 2009, this application is being tested. It should be in production as from September 2009.

10. Under Sub-Project A6 (Office automation), which aims at integrating some additional administrative tasks into the MAPS/DMAPS system, new applications have been completed to replace manual or paper based processes by automated applications, such as the implementation of a new printing procedure using OMR (Optical Mark Recognition) technology, the automation of the certified e-mail notification system and the automated creation of certified copies of Hague recordings.

11. Under Sub-Project A7 (IMAPS enhancements), the work done has made it possible, since May 2009, to export documents in PDF format via a web service, allowing better efficiency through improved indexing functions and printing functions. Other developments are on-going, such as the creation of a means to store PDF documents in IMAPS and the planned importation of documents, including faxes and emails, directly into the IMAPS system.

(b) Expanding electronic business with offices, holders and representatives

12. This goal will be achieved with the completion of Sub-Projects B1 to B6 and C5⁵. Some of these sub-projects are dependent on the completion of the implementation of SOA tools (under Sub-Project C3). Nevertheless, wherever possible, their project development has started.

13. Some of the functions of Sub-Projects B1, B2, and B3 will be developed and regrouped under a unique web application. Based upon a WIPO User Center secured account access, holders and representatives will be able to manage and execute selected transactions on their Madrid portfolios electronically, via the Internet. The first version of this web application will be available in the last quarter of 2009 and will be updated upon completion of the development of new web services in 2010.

14. Under Sub-Project B1 (e-Payment; e-Billing), an e-payment facility is now available on the web for regularizing the fees to be paid for any transaction under the Madrid or Hague procedures. Payment can be made via credit card or current account.

⁵ For the content of these sub-projects, reference is made to Annex I, Table 2.

15. Under Sub-Project B5 (e-Communication: WIPO → Holders/Representatives), an electronic version of the *WIPO Gazette of International Marks* was introduced with effect from February 5, 2009 and replaces the paper version of the Gazette – allowing savings for an amount of 200,000 Swiss francs to be realized in 2009. This adds to earlier achievements under this sub-project, including the introduction of a certified e-mail notification system and several enhancements to the ROMARIN database (such as, the indication, since July 2008, where appropriate, that a refusal period has expired and the International Bureau has not recorded any notification of provisional refusal from the Office of a Contracting Party designated in a given registration; and the inclusion in ROMARIN of PDF copies of grants of protection, provisional refusals and final decisions, as from January 2009). Sub-Project B5 is now completed.

(c) Laying the foundations for modification of the system

16. As indicated in the previous status report (document MM/A/40/3), a series of technical sub-projects of Phase I of the IT Modernization Program is aimed at laying the foundations for modification of the system – in particular, Sub-Projects C2 and C3 – which set the architectural basis for the further development of the IT system – and Sub-Project C4 – which aims to run the current MAPS/DMAPS application on a new hardware platform and, thus, achieve substantial savings in operational costs of running the MAPS/DMAPS systems.

17. Progress with the implementation of Sub-Projects C2, C3 and C4 has been hampered by unforeseen difficulties. A fundamental assumption of Phase I of the IT Modernization Program was the rapid identification and engagement of external consultants with extensive ADABAS/Natural experience, who could liberate the WIPO staff experts from their current operational responsibilities. This was in recognition of the fact that considerable Madrid and Hague system business knowledge had been acquired by the WIPO staff members making up the IT team responsible for the ongoing maintenance and support of MAPS and DMAPS since 1996. For efficiency reasons, the same WIPO staff members had, therefore, better be assigned to lead the specific IT Modernization Program sub-projects and liberated from the maintenance and support responsibilities for the duration of the IT Modernization Program. However, the process of identifying and engaging suitably qualified consultants with ADABAS/Natural experience has proven to be much more difficult than presumed. Indeed, to date, only two such consultants could be identified and engaged.

(i) *Architectural basis – implementing a SOA platform⁶*

18. When the previous status report was issued (document MM/A/40/3), the base architectural level of SOA required for the project had been established and the requirements of the request for proposals (“RFPs”) – that would result in the selection of the SOA tools to be implemented – were being written (under Sub-Project C2). Since then, the RFPs have been issued, and the responses have been evaluated. At the time of the preparation of this document, the successful bid was subject to validation by the Contracts Review Committee. Implementation of Sub-Projects C2 and C3 is now scheduled to be completed by December 31, 2009.

⁶ Service-Oriented Architecture: an architecture that uses loosely coupled services to support the requirements of business processes and users.

(ii) *Savings in operational costs of running the MAPS/DMAPS systems*

19. This goal will be achieved with the completion of Sub-Project C4 – Downsizing to UNIX. Under this sub-project, the MAPS/DMAPS systems will be migrated from the IBM mainframe at the UN International Computer Center (“UNICC”) to a UNIX environment. Furthermore, the technical capability will be built for underpinning the e-business strategic evolution as well as the future availability of MAPS/DMAPS 24 hours/day, seven days/week. Due to a longer than expected period of negotiation and validation of the financial figures with the UNICC – to which the actual hosting of the UNIX environment will be outsourced –, the implementation of Sub-Project C4 has been delayed. The migration process as such could only start in June 2009. It is scheduled to be completed by October 2009.

20. The delay in the launch of Sub-Project C4 has resulted in the rescheduling of some other sub-projects due to unresolvable human resource conflicts (see Annex II). In addition, the delay will result in reduced savings in operational costs in 2009, which will partially affect the financing of Phase I activities (it is recalled that Phase I was to be partially financed from reduced expenditure in operation costs under Program 27 (i.e., Program 25 under the Revised Program and Budget for 2008/09) for an amount of 1.9 million Swiss francs). However, the relevance of going ahead with this sub-project still remains, considering the reduced operational costs for the future. The resulting operational savings will be realized in the 2010-2011 biennium.

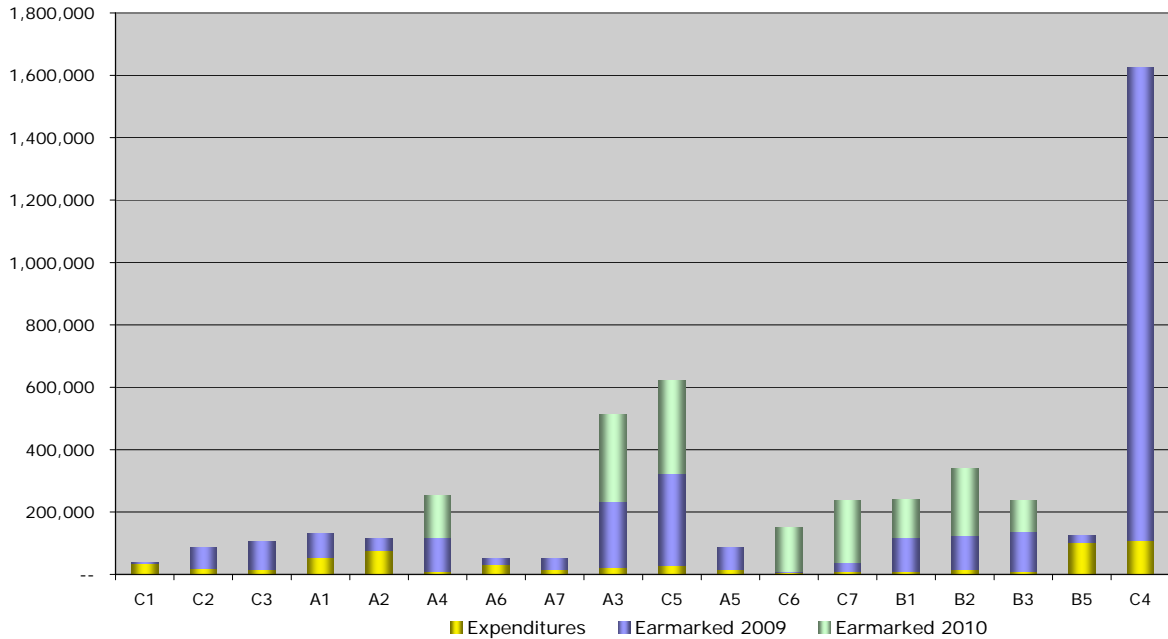
21. Details on the state of play for all sub-projects are reflected in Annex II.

III. PHASE I – BUDGET STATUS

22. The following table and graphic reflect the status of commitments and expenditure concerning the implementation of the IT Modernization Program by the end of June 2009:

Sub-Project Description	Initial Budget	Total Expenditure	Total Earmarked 2009	Total Futures 2010	Balance Based on Expenditures	Balance Based on Earmarked 2009	Balance Based on 2009 + 2010
C1 Project Organization and Change Management	48,000	36,686	37,889	--	11,314	10,111	10,111
C2 Requests for Proposal & POC	48,000	17,803	87,506	--	30,197	(39,506)	(39,506)
C3 SOA & Tools	72,000	16,705	105,509	--	55,295	(33,509)	(33,509)
A1 Translation	124,500	56,566	131,094	--	67,934	(6,594)	(6,594)
A2 Classification	124,500	78,113	114,294	--	46,387	10,206	10,206
A4 Trademark Last Status	240,000	11,517	117,530	135,000	228,483	122,470	(12,530)
A6 Office Automation	48,000	31,803	51,506	--	16,197	(3,506)	(3,506)
A7 IMAPS Enhancements	48,000	16,221	51,424	--	31,779	(3,424)	(3,424)
A3 Irregularity Letters and Notifications	480,000	23,035	235,060	280,000	456,965	244,940	(35,060)
C5 Pilot with an Office (includes B4 and B6)	599,200	28,755	323,766	300,000	570,445	275,434	(24,566)
A5 Monitoring and Statistics	340,000	16,316	87,984	--	323,684	252,016	252,016
C6 Complete Architecture + BPM + Middleware	150,000	7,198	10,956	140,000	142,802	139,044	(956)
C7 DBMS & Technical Enhancements	240,000	11,517	37,530	200,000	228,483	202,470	2,470
B1 e-Payment, e-Billing	240,000	11,517	117,530	125,000	228,483	122,470	(2,530)
B2 e-Modification	336,000	16,124	124,542	215,000	319,876	211,458	(3,542)
B3 e-Status	240,000	11,517	137,530	100,000	228,483	102,470	2,470
B5 Electronic Communication : WIPO -> Holders/Reps.	120,000	103,509	126,515	--	16,491	(6,515)	(6,515)
C4 Downsizing to Unix	1,529,875	109,133	1,625,843	--	1,420,742	(95,968)	(95,968)
Total	5,028,075	604,039	3,524,005	1,495,000	4,424,036	1,504,070	9,070
Total as a percentage	100.00%	12.01%	70.09%	29.73%	87.99%	29.91%	0.18%

MAPS Modernization Project Budget
2008-09



IV. CALENDAR FOR ACHIEVING THE GOALS ESTABLISHED

Phase I

23. Taking into account the status of implementation of the various sub-projects, it is now estimated that Phase I will be completed by the end of 2010, according to the calendar reflected in the graph below.

ID	Task Name	2008					2009				2010				2011	
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
1	C1- Project Organization and Change Management	[Gantt bar: Q4 2008]														
2	C2 - Requests for Proposal and POC	[Gantt bar: Q3 2008]														
3	C4 - Downsizing to Unix	[Gantt bar: Q2 2008]														
4	C3 - SOA and Tools	[Gantt bar: Q3 2008]														
5	A1 - Translation	[Gantt bar: Q4 2008]														
6	A2 - Classification	[Gantt bar: Q2 2008]														
7	A4 – Trademark Last Status	[Gantt bar: Q3 2008]														
8	A6 – Office Automation	[Gantt bar: Q2 2009]														
9	A3 – Irregularity letters and Notifications	[Gantt bar: Q3 2009]														
10	A7 – IMAPS Enhancements	[Gantt bar: Q3 2008]														
11	C5 – Pilot with an Office(including B4 and B6)	[Gantt bar: Q4 2009]														
12	A5 – Monitoring and Statistics	[Gantt bar: Q2 2009]														
13	C6 – Complete arch. + BPM + middle ware	[Gantt bar: Q3 2009]														
14	C7 – DBMS and technical Enhancements	[Gantt bar: Q3 2009]														
15	B1 – e-Payment, e-Billing	[Gantt bar: Q3 2009]														
16	B2 – e-Modification	[Gantt bar: Q3 2009]														
17	B3 – e-Status	[Gantt bar: Q3 2009]														
18	B5 – Electronic Communication: WIPO with Holders / Representatives	[Gantt bar: Q3 2008]														

Phases II and III

24. When approving the implementation of Phase I of the IT Modernization Program in September 2007, the Madrid and Hague Union Assemblies noted that the International Bureau would make concrete proposals concerning Phases II and III in due course⁷. Phase II was tentatively scheduled for implementation in the years 2010 and 2011. Implementation of Phase III would depend on further analysis on whether it would eventually prove to be necessary and, if so, when.

⁷ Document H/A/24/2, paragraph 34(iii).

25. The approach initially followed under the IT Modernization Program was to continue to use the ADABAS/Natural database and programming language, taking into account the high level of satisfaction that the MAPS and DMAPS system functionality enjoyed among users, in general. Instead of focusing on a completely new system, the IT Modernization Program aimed to further maximize return on the original system development investment by:

(i) migrating MAPS and DMAPS to a more cost effective operation platform; (ii) focusing on “web” enabling the MAPS and DMAPS application systems – i.e., opening the systems transactions that were hitherto available only internally and, therefore, increasing the benefits to Madrid Union Members, and holders and representatives alike; and (iii) addressing the obvious inherent shortcomings that a mainframe system has in the manipulation of text in support of letter production, as well as in classification and translation related activities.

26. As indicated at the outset of the IT Modernization Program (document H/A/24/2, paragraph 27), Phase II would involve partial migration of Natural interactive programs to Java – Sub-Project C8 – and further development of the electronic publication subsystem – Sub-Project C10. Phase III – which would result in the overall migration to a new technical environment resulting in the removal of ADABAS/Natural technologies (Sub-Projects C9 and C11) – was considered to be optional at that time.

27. However, as already mentioned above, the International Bureau has had great difficulties in identifying consultants with extensive ADABAS/Natural skills, and ADABAS and Natural technologies would appear to be experiencing a rapid decline in the market place. It is a fact that it is nearly impossible to locate staff sufficiently skilled in these technologies.

28. Such recruitment difficulties have led the International Bureau to reflect upon the wisdom of continuing to have the Madrid and Hague operations dependant upon technologies for which it is clear that the level of skilled staff availability in the market place is dangerously low and the situation is unlikely to improve. The conclusion of the International Bureau is that the risks associated with these systems remaining dependant upon ADABAS and Natural are too high and that mitigation measures need to be introduced.

29. Consequently, implementation of Phase III as early as possible has become the most realistic option in the view of the International Bureau.

30. On the basis of the information available to date, the International Bureau estimates that Phases II and III could be implemented according to the calendar reflected in the graph below.

ID	Task Name	2009	2010				2011				2012				
		Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	
1	C8- Remaining BPM, Portal and RIA	[Redacted]													
2	C10 - Publication	[Redacted]													
3	C9 - Remaining Interactive Web Services	[Redacted]													
4	C11 - Remaining Java / Oracle Conversion	[Redacted]													

V. IMPLEMENTATION MODALITIES FOR PHASES II AND III

31. One possible option for the implementation of Phases II and III would be to rely on in-house developments using consultants or third party contractors. However, the costs associated with this approach may require reconfirmation considering the estimates were included in the consultancy report prepared by Sogeti S.A. Switzerland in the summer of 2007 in the run-up to the initiation of the IT Modernization Program. In addition, there would also be an added element of risk due to the size and complexity of the redevelopment effort in a technology that internal staff are not familiar with.

32. When considering the modalities for executing Phases II and III, there are a number of options relating to the final technical architecture that also need to be considered. One option would be to establish an Oracle/Java environment identical (or similar) to the new PCT technical architecture⁸. Another option would be to establish a Microsoft .NET environment. The advantages of following the PCT lead in using Oracle/Java would mean that a single technical environment would from that time harbor all WIPO's major business application software, with all the economies of scale that a single architecture would imply. The disadvantage of following the PCT lead in using Oracle/Java would probably be cost, since Microsoft .NET system developments are generally less costly to initiate and to, subsequently, maintain.

33. An alternative implementation approach would be to engage an external company to convert the MAPS and DMAPS systems from ADABAS/Natural technology to an alternate technology to be determined by the company (Oracle/Java or Microsoft .NET, for example). It should be noted that a significant portion of the technical, business specific complexity of MAPS and DMAPS is the bespoke workflow system that is integrated into the technical solution. Since Phase I of the IT Modernization Program includes the introduction of standard workflow tools (Business Processing Modules or BPM), any MAPS and DMAPS conversion exercise would be exclusive of the conversion of its bespoke work flow functionality.

VI. RECOMMENDED APPROACH FOR PHASES II AND III

34. For the implementation of Phases II and III, the International Bureau recommends that an open international tender be conducted with a view to selecting a company that would:

- (i) undertake a technical assessment of the MAPS and DMAPS application systems and databases for the purposes of converting them into a new technical architecture;
- (ii) propose an appropriate target technical architecture; and

⁸ The International Bureau is currently in the process of decommissioning its legacy PCT application systems, which are also ADABAS/Natural dependant, and which have been replaced with a modern three tier Oracle/Java technical solution that has been the result of years of development effort.

(iii) prepare a fixed price offer for the conversion of MAPS and DMAPS application software and data to the proposed new technical architecture, including the execution of subsequent system testing and the establishment of systems performance benchmarks, together with an appropriate warranty period.

35. The longer term operational support of the converted solution would be modeled upon the successful approach currently in place for WIPO's ERP systems – i.e., contracts would be concluded with an external partner for the ongoing development of the solution. Such contracts would be administered by a core internal team of technical experts with strong business knowledge. The internal team would be responsible for the day to day operation of the system and minor enhancements.

36. The International Bureau is confident that the costs of following the approach recommended in paragraph 34, above would be well within the original cost estimates for Phases II and III (namely, 1.943 million Swiss francs and 8.292 million Swiss francs). The International Bureau is also confident that the proposal included in paragraph 35, above for ongoing support of the technical solution would be in line with industry practice as successfully demonstrated in the support model for WIPO's ERP systems.

VII. FINANCING OF PHASES I, II AND III

Remainder of Phase I

37. As recalled in paragraph 3, above, a budget of 5.028 million Swiss francs was approved for the implementation of Phase I of the IT Modernization Program in 2008-2009. However, as a result of the delays in the implementation of the program, as explained earlier in this document, only some 3.524 million Swiss francs will have been spent by the end of 2009. Most of the remainder 1.504 million Swiss francs (most precisely, an estimated amount of 1.495 million Swiss francs) would still be needed for the purpose of completing the implementation of Phase I in 2010.

38. Financing of the 3.524 million Swiss francs to be spent in 2008-2009 is expected to come from the following sources: 1.45 million Swiss francs from the Revised Program and Budget for 2008/09 (including 1 million Swiss francs from Program 6 and 0.45 million Swiss francs from Program 25); 2.074 million Swiss francs from the Madrid Union reserve set aside for this purpose.

39. Financing of the 1.495 million Swiss francs currently estimated to be needed for completing the implementation of Phase I in 2010 would, subject to the approval of the Madrid Union Assembly, be financed from the Madrid Union Reserve Fund, as proposed in paragraph 49 of document MM/A/42/2.

Phase II

40. As indicated in document H/A/24/2, the implementation of Phase II of the IT Modernization Program – to be undertaken in 2010/11 – would amount to an estimated cost of 1.943 million Swiss francs, to be shared between the Madrid Union (1,432,000 Swiss francs) and the Hague Union (511,000 Swiss francs).

41. The Madrid Union's share (1,432,000 Swiss francs) would, subject to the approval of the Madrid Union Assembly, be financed from the Madrid Union Reserve Fund, as proposed in paragraph 49 of document MM/A/42/2. The part to be paid by the Hague Union (511,000 Swiss francs) is proposed to be financed from the PCT Union Reserve Fund, as explained in paragraph 46, below.

Phase III

42. As indicated in document H/A/24/2, the estimated investment cost of Phase III, i.e. 8.292 million Swiss francs, would also be shared between the budgets of the Madrid Union (5,804,400 Swiss francs) and the Hague Union (2,487,600 Swiss francs).

43. The part to be paid by the Madrid Union (5,804,400 Swiss francs) would, subject to the approval of the Madrid Union Assembly, be financed from the Madrid Union Reserve Fund, as proposed in paragraph 49 of document MM/A/42/2. The part to be paid by the Hague Union (2,487,600 Swiss francs) is proposed to be financed from the PCT Union Reserve Fund, as explained in paragraph 46, below.

Financing of the Share of the Hague Union by a Loan from the PCT Union Reserve Fund

44. By December 31, 2007, the Hague Union Reserve and Working Capital Fund (RWCF) showed a negative figure of 340 thousand Swiss francs. This negative figure is unchanged under the methodology approved by Member States as at January 1, 2008⁹.

45. In the Revised Program and Budget for the 2008/09 biennium, approved by the Assemblies of WIPO Member States in December 2008, the Hague Union was expected to generate a surplus of 562 thousand Swiss francs. The level of the Hague Union RWCF was, consequently, established at 222 thousand Swiss francs (562 thousand – 340 thousand) as at the end of 2009. Meanwhile, the Hague Union RWCF target level for 2008/09 (15 per cent of the estimated biennial expenditure (PBE factor)) was established at 995 thousand Swiss francs, meaning a negative balance of 773 thousand Swiss francs. In addition, in the Proposed Program and Budget for the 2010/11 biennium, the Hague Union is expected to make a deficit of 1,203 thousand Swiss francs, leaving the RWCF at the end of 2011 at a negative figure of 981 thousand Swiss francs. As the RWCF target will increase up to 1,451 thousand Swiss francs, the balance will amount to -2,432 thousand Swiss francs.

⁹ The re-statement is the result of the application of the adjusted income and expenditure allocation methodology (see Annex IV of the Revised Program and Budget for 2008/09), as approved by Member States as part of the 2008/09 Program and Budget.

46. Consequently, it is proposed that the amounts needed by the Hague Union to pay its parts of the estimated investment costs of Phases II and III (511,000 Swiss francs and 2,487,600 Swiss francs, respectively) be borrowed from the PCT Union Reserve Fund. This proposal to authorize the International Bureau to borrow from the Reserve Fund of one Union to finance the activities of another is not novel. In particular, it is recalled that the International Bureau has, in the past, been authorized twice to borrow sums from the Madrid Union surplus to cover the deficit of the PCT Union¹⁰.

47. Thus, in document PCT/A/40/6 submitted to the Assembly of the PCT Union in view of its fortieth session to take place also during this forty-seventh series of meetings of the Member States of WIPO, the Director General is proposing that the Assembly of the PCT Union authorize the International Bureau to loan up to the amount of 3 million Swiss francs from the PCT Union Reserve Fund to cover the Hague Union's share in the financing of Phases II and III, on the understanding that that amount shall be reimbursed by the Hague Union to the PCT Union as soon as the level of reserves of the Hague Union so allows.

48. The decision of the Assembly of the PCT Union to authorize this loan will be reported on orally in course of the twenty-eighth session of the Hague Union Assembly so that the latter can proceed with its own decision on the proposed financing.

49. *The Assembly is invited to:*

(i) *take note of the status of implementation of Phase I of the IT modernization program, as described in paragraphs 5 to 22 of and Annex II of the current document;*

(ii) *approve the implementation of the remainder of Phase I and of Phases II and III of the IT modernization program within the 2010/11 biennium, as proposed in paragraphs 23, 30 and 34 to 43 of the current document;*

¹⁰ More precisely, when, in 1979, the budget of the PCT Union was fixed for the years 1980 and 1981, the Assembly of the PCT Union noted the deficit likely to accumulate by the end of 1980 and authorized the Director General to ask the Assembly of the Madrid Union to grant a loan to the PCT Union (document PCT/A/III/11, paragraph 16). Accordingly, it was proposed to, and agreed by the Assembly and the Committee of Directors of the Madrid Union that the International Bureau loaned up to a 1,600,000 Swiss francs from the Madrid Union Reserve Fund (document AB/X/2, paragraphs 65^{ter} and 303(v) and document AB/X/32, paragraph 40). Moreover, when, in 1980, the budget of the PCT Union for the year 1981 was revised, a deficit was also noted. The Governing Bodies of WIPO and the Unions administered by WIPO adopted a general report mentioning that the Assembly of the PCT Union authorized the International Bureau to borrow, in addition to the sum already authorized, a further amount from the Madrid Union (document AB/XI/9, paragraph 19(xi)).

(iii) approve the Hague Union's share in the financing of Phases II and III of the IT modernization program as proposed in paragraphs 46 to 48 of the current document.

[Annexes follow]

ANNEX I

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS

Table 1: Internal Operation

Seq.	Project	Description	Category
A1	Translation	Update translation tools to replace in-house translation tools with commercial ones.	Operational
A2	Classification	Update Nice classification tools by integrating database of accepted goods and services into classification procedure. Develop a web application to assist users in composing lists.	Operational
A3	Irregularity Letters and Notifications	Update the letter generation process to produce more understandable documents.	Operational
A4	Trademark Latest Status	Create tools to show the goods and services protected within a given designated Contracting Party, and show how these change over time.	Operational
A5	Monitoring and Statistics	Create tools to monitor and analyze operational processes. Create statistics for internal and external use.	Analytical
A6	Office Automation	Integrate internal administrative tasks into the MAPS/IMAPS system, e.g., importing Word documents, emails, etc. directly into MAPS/IMAPS.	Operational
A7	IMAPS Enhancements	IMAPS enhancements (e.g., search capabilities, new document formats, tighter integration with MAPS, ...).	Operational

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS

Table 2: External Communication

Seq.	Project	Description	Category
B1	e-Payment, e-Billing	Create e-Billing (for extracts from the International Register) and e-Payment (for other transactions) for holders.	e-Business
B2	e-Modification	Allow holders to submit transactions electronically and to further automate their processing within MAPS.	e-Business
B3	e-Status	Allow holders to monitor the status of their communications to WIPO.	e-Business
B4	Electronic Communication: Offices → WIPO	Enhance the transmission of information from national or regional offices to WIPO.	e-Business
B5	Electronic Communication: WIPO → Holders/Representatives	Enhance the transmission of information from WIPO to holders and representatives.	e-Business
B6	Electronic Communication: WIPO → Offices	Create tools that enhance collaboration between WIPO and national or regional offices with respect to the international procedure.	e-Business

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS

Table 3: Governance and Technical

Seq.	Project	Description	Category
C1	Project Organization and Change Management	Put procedures into place which will facilitate the implementation of these projects.	Governance
C2	Requests for Proposal and POC ¹¹	Requests for Proposal (tenders) and Proof of Concept of technical solution.	Governance
C3	SOA ¹² and Tools	Create the IT architecture (SOA) and provide the necessary tools for its use.	Architecture
C4	Downsizing to Unix	Migrate MAPS and DMAPS from the UNICC mainframe to a UNIX environment.	Downsizing
C5	Pilot with an Office	Pilot project with a single national office based on direct access to MAPS. (SOA+BPM ¹³ +e-Business +Portal ¹⁴ +RIA ¹⁵).	Conversion
C6	Complete Architecture + BPM + Middleware	Adapt the IT architecture and BPM processes based on experience with Pilot (C5) to allow expansion to other interested offices.	Conversion
C7	DBMS ¹⁶ and Technical Enhancements	Improve the database design of MAPS and resolve any technical issues.	Conversion
C8	Remaining BPM, Portal and RIA	Migrate business logic from Natural to Java, but retain Adabas.	Conversion

¹¹ Proof of Concept: verifying that the proposed technical architecture performs according to specifications.

¹² Service-Oriented Architecture: an architecture that uses loosely coupled services to support the requirements of business processes and users.

¹³ Business Process Management.

¹⁴ Portal: a Web interface which provides individualized access to users based on their security profile.

¹⁵ Rich Internet Application: a Web application that has the features and functionality of traditional desktop applications.

¹⁶ Database Management System.

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS

Seq.	Project	Description	Category
C9	Remaining Interactive Web Services	If needed, define processes and develop a new user interface with common technology for WIPO and national or regional offices.	Conversion
C10	Publication	Modernize the publication process including the replacement of the legacy Visual Basic programs.	Architecture
C11	Remaining Java / Oracle Conversion	Migrate the remaining Natural /Adabas programs to Java/Oracle if and when needed, but not before 2010.	Conversion

[Annex II follows]

ANNEX II

**INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS STATUS REPORT AS OF JUNE 30, 2009**

A1 Translation							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	124,500	56,566	131,094	--	67,934	(6,594)	(6,594)
Description	Update translation tools to replace in-house translation tools with commercial ones						
Benefits	More automation, reduced costs, improved quality						
Current status	Application for automating the translation of overrides using the translation of the basic list is under test (Beta Test) as of May 31, 2009						

A2 Classification							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	124,500	78,113	114,294	--	46,387	10,206	10,206
Description	Update Nice classification tools by integrating database of accepted goods and services into classification procedure. Develop a web application to assist users in composing lists.						
Benefits	Database of validated terms available on the Web, that helps users of the Madrid system pre-validating their list of goods and services						
Current status	Decreased time processing and automated translation for pre-validated lists Prototype of the E-Classification application is available on the Intranet and under test as of May 2009						

A3 Irregularity Letters and Notifications							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	480,000	23,035	235,060	280,000	456,965	244,940	(35,060)
Description	Update the letter generation process to produce more understandable documents						
Benefits	Producing more comprehensive letters						
Current status	A working group is working on the requirements						

A4 Trademark Last Status							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	240,000	11,517	117,530	135,000	228,483	122,470	(12,530)
Description	Create tools to show the goods and services protected within a given designated Contracting Party, and show how these change over time						
Benefits	Better and clearer status of trademark within a given designated Contracting Party						
Current status	A working group is working on the modifications, from the examination policy to the IT tools, required to determine the Goods and Services that have effect in given designated Contracting Party						

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS STATUS REPORT AS OF JUNE 30, 2009

A5 Monitoring and Statistics

	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	340,000	16,316	87,984	--	323,684	252,016	252,016
Description	Create tools to monitor and analyze operational processes. Create statistics for internal and external use						
Benefits	Access to statistics from Intranet and Internet						
Current status	Prototype of the Web application is available on the Intranet and under test as of May 2009						

A6 Office Automation

	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	48,000	31,803	51,506	--	16,197	(3,506)	(3,506)
Description	Integrate internal administrative tasks into the MAPS/IMAPS system						
Benefits	Less manual procedure, less paper based processing						
Current status	New printing procedure using OMR technology: completed Automation of the certified email system: completed Automation of the creation of certified copies of Hague applications: completed						

A7 IMAPS Enhancements

	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	48,000	16,221	51,424	--	31,779	(3,424)	(3,424)
Description	IMAPS enhancements (e.g., search capabilities, new document formats, tighter integration with MAPS, ...)						
Benefits	Additional functions for users						
Current status	Export in PDF format for Tiff document: completed New indexing and printing functions: completed Management of native PDF format inside IMAPS: on-going						

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS STATUS REPORT AS OF JUNE 30, 2009

B1 e-Payment, e-Billing							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>

Budget Description	240,000	11,517	117,530	125,000	228,483	122,470	(2,530)
	Create e-Billing (for extracts from the International Register) and e-Payment (for other transactions) for Holders						
Benefits	E-payment facility for users of the Madrid system Reduce processing time for Finance						
Current status	E-payment, by credit card or current account, is available on the Web site for paying fees upon reception of an irregularity letter E-billing for extracts and e-payment of standard fees is under study Additional E-Business functions from B1 will be implemented through a common project where holders and representatives will be able to manage and execute selected transactions on their Madrid portfolios electronically, via the Internet						

B2 e-Modification							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>

Budget Description	336,000	16,124	124,542	215,000	319,876	211,458	(3,542)
	Allow holders to submit transactions electronically and to further automate their processing within MAPS						
Benefits	Reducing processing time for users Reducing workload (Mail processing team)						
Current status	E-Business functions from B2 will be implemented through a common project where holders and representatives will be able to manage and execute selected transactions on their Madrid portfolios electronically, via the Internet						

B3 e-Status							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>

Budget Description	240,000	11,517	137,530	100,000	228,483	102,470	2,470
	Allow holders to monitor the status of their communications to WIPO						
Benefits	Better communication to holders Decreasing requests receive from holders						
Current status	E-Business functions from B3 will be implemented through a common project where holders and representatives will be able to manage and execute selected transactions on their Madrid portfolios electronically, via the Internet						

B4 Electronic Communication: Offices -> WIPO							
Budget, description and current status included under C5							

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS STATUS REPORT AS OF JUNE 30, 2009

B5 Electronic Communication : WIPO -> Holders/Representatives							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	120,000	103,509	126,515	--	16,491	(6,515)	(6,515)
Description	Enhance the transmission of information from WIPO to holders and representatives						
Benefits	Better communication to holders Costs savings from paper less transmission						
Current status	Gazette is now exclusively available via the Internet and has been enhanced with search functions Notification of certain communications are now available via the internet (ROMARIN) Notification of certain communications by certified email is now available						

B6 Electronic Communication: WIPO -> Offices							
Budget, description and current status included under C5							

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS STATUS REPORT AS OF JUNE 30, 2009

C1 Project Organization and Change Management							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	48,000	36,686	37,889	0	11,314	10,111	10,111
Description	Put procedures into place which will facilitate the implementation of these projects						
Benefits	Enabling the project to progress						
Current Status	Completed Project office and Project Team in place						

C2 Requests for Proposal & POC							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	48,000	17,803	87,506	--	30,197	(39,506)	(39,506)
Description	Requests for Proposal (tenders) and Proof of Concept of technical solution.						
Benefits	Providing hardware/software platform for the project and the hosting services for UNIX and SOA platform						
Current status	Offers from bidders have been evaluated and the successful bid is currently subject to Contract Review Committee validation						

C3 SOA & Tools							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	72,000	16,705	105,509	--	55,295	(33,509)	(33,509)
Description	Create the IT architecture (SOA) and provide the necessary tools for its use						
Benefits	Provides other projects with the tools required to be developed.						
Current status	Offers from bidders for SOA tools are under final evaluation Technical implementation will follow						

C4 Downsizing to Unix							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	1,529,875	109,133	1,625,843	--	1,420,742	(95,968)	(95,968)
Description	Migrate MAPS and DMAPS from the UNICC mainframe to a UNIX environment						
Benefits	Reduce running costs of MAPS/DMAPS						
Current status	Thorough analysis: completed Detailed analysis: completed Selection of consulting services from the migration through an RFP: completed New contract with ICC: completed Technical implementation: started as of June 2009						

INFORMATION TECHNOLOGY MODERNIZATION PROGRAM:
SUB-PROJECTS STATUS REPORT AS OF JUNE 30, 2009

C5 Pilot with an Office (includes B4 and B6)							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	599,200	28,755	323,766	300,000	570,445	275,434	(24,566)
Description	Pilot project with a single national office based on direct access to MAPS. (SOA+BPM +e-Business+Portal +RIA)						
Benefits	Implementing, using, validating and learning new technology (SOA+BPM +e-Business+Portal +RIA)						
Current status	Depending on the completion of C2 and C3. It will start as of September 1, 2009						

C6 Complete Architecture + BPM + Middleware							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	150,000	7,198	10,956	140,000	142,802	139,044	(956)
Description	Adapt the IT architecture and BPM processes based on experience with Pilot (C5) to allow expansion to other interested offices						
Benefits	allow various stakeholders to benefit from the new SOA tools						
Current status	Will start upon completion of C2, C3 and C5						

C7 DBMS & Technical Enhancements							
	<i>Initial Budget</i>	<i>Total Expenditure</i>	<i>Total Earmarked 2009</i>	<i>Total Futures 2010</i>	<i>Balance Based on Expenditures</i>	<i>Balance Based on Earmarked 2009</i>	<i>Balance Based on 2009 + 2010</i>
Budget	240,000	11,517	37,530	200,000	228,483	202,470	2,470
Description	Improve the database design of MAPS and resolve any technical issues						
Benefits	Adapt the database to new tools						
Current status	Will start upon completion of C2, C3 and C5						

[End of Annex II and of document]