

WIPO / OMPI

WORLD INTELLECTUAL PROPERTY ORGANIZATION

ELECTRONIC FILING BUDGET ANALYSIS

AUGUST 2001

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Geneva, 17 August 2001

Reference: GOR/BUR/WGA

REPORT ON ANALYSIS OF ELECTRONIC FILING BUDGET

Dear Mr Roach,

Following our proposal dated August 6, 2001, for an analysis of WIPO Electronic Filing Budget, we are pleased to present the results of our work. This report sets out the scope of work, our approach and our overall conclusions. It also contains a summarized, as well as a detailed discussion of the identified findings and the respective recommendations that would allow you to benefit from and implement the identified actions.

This report is intended for use by the WIPO management as well as for member states, which represent the stakeholders in the Electronic Filing project.

We would like to take this opportunity to thank the staff at the WIPO for their assistance during the course of our analysis.

If there are any matters raised in this report that you would like to discuss in further detail, please do not hesitate to contact us.

Yours sincerely,

PricewaterhouseCoopers SA

Richard Golding,
Partner

Paul Wang,
Manager

EXECUTIVE SUMMARY

(1) Business Case

The objectives of the electronic filing (e-filing) project are to adopt a standard for the electronic filing and processing of international applications, to develop a system for electronic filing based on the existing PCT-EASY software and to drastically reduce the amount of paper generated daily with the current PCT process.

The e-filing project was originally part of another project named IMPACT (Information Management for the Patent Cooperation Treaty), which aims to automate the processes and procedures of the PCT. Due to the growing importance of electronic filing and the necessity to build a secure electronic environment, the Director General of WIPO decided that the e-filing project should be established independently from the IMPACT project. Specific budget and dedicated staff has been allocated to the project.

At the thirty-second series of meetings of the Assemblies of the Member States of WIPO, a proposal (see document A/32/5) for the initiation of a project for the automation of the PCT was considered and approved (see document A/32/71, paragraphs 94 to 99). One of the objectives for what is now known as the IMPACT (Information Management for the Patent Cooperation Treaty) Project was to "create and make available to receiving Offices and PCT applicants electronic filing software" (see document A/32/5, paragraph 1). Furthermore, it was stated that:

"Existing standards for electronic filing, coding and transmission of data would be followed, and, where necessary, new standards would be developed on the basis of international and industry standards, in order to ensure full compatibility of the system used in the International Bureau with those used in the national and regional Offices" (see document A/32/5, paragraph 8).

These two objectives have formed the basis of the PCT Electronic Filing Project, both during its first 12 months as part of the IMPACT Project and now as a separate project within its own right.

In 1998, Deloitte Consulting made a budget estimation for the e-filing project. At the time, the project was estimated at approximately 2.8 million Swiss Francs (CHF). At the early stage of the project, the scope only included the internal development of the PCT application. The project has since been extended to include external developers, formal establishment of standards and e-trusted services. After these very substantial scope modifications, the project was re-estimated at 18.3 million CHF. The budget estimation takes into account the development costs for the epoline (e-filing software used by the EPO) and the EFS (e-filing software used by the USPTO) and adapted to WIPO e-filing requirements and specifications.

At the third session of the Program and Budget Committee, held in Geneva, April 25 to 27 2001, some concern was expressed as to whether the budget presented accurately reflects the estimated costs to meet the objectives of the e-filing project. In order to validate the project's current budget estimate of 18.3 million CHF, an independent budget assessment has been commissioned and is presented in this document.

(2) Scope of E-Filing Budget Analysis

Following the Program and Budget Committee concerns about the e-filing budget estimation, WIPO requested an independent assessment of the 18.3 million CHF budget. The assessment project took place between the 7th and the 17th of August 2001.

In order to accurately understand the project, we received documentation about the project scope, the existing PCT processes, and the legal framework (Part 7 of the PCT Administrative Instructions) and the technical specifications (Annex F). We conducted a series of interviews with external consultants, with the Director of the Office of the PCT, with the Coordinator of the Standing Committee on Information Technology and with the head of the PCT Legal Resources Section.

Regarding the budget, we received two different documents: the budget repartition included in the statement of work, and the budget estimation made by the Project Manager. To gain a more detailed view of the budget and a better understanding of the project framework, we conducted a series of interviews with the e-filing project key players, the Project Manager and the Director of the IT Project Division.

Based on this information and on our benchmarks for software development and trusted services, we performed a detailed budget analysis and comparison.

(3) Performed Work and Results Limitation

The work that was conducted in this high-level budget analysis mandate, given the time frame (11 man/days), does not necessarily reflect all the aspects that a normal project management review would have shown. For a normal project management review, we would have conducted several sub-reviews of items, which only a few are listed below:

- Business needs and requirements analysis
- Functional specifications review
- Scope analysis
- Organisation review
- Budget and cost review

(4) Technical Design

As mentioned in the Business Case above, the aim of the e-filing project is to adopt standards for e-filing, develop software based on the existing PCT-EASY product and to reduce the amount of paper. Software will be produced for use both by applicants and by patent offices receiving applications.

To achieve these objectives on a technical aspect, the project consists of the development of an application derivative from the existing PCT-EASY, which will be capable of filing and receipt of patent applications electronically.

Included in the scope of work, standards for the electronic patents will have to be defined using programming languages.

An electronic patent applications system implies the use of trusted electronic services. Patent data should be encrypted and remain confidential, the sender should be properly identified and the act of sending non-repudiable.

Finally, the project includes two more steps, which are the testing to verify the functionalities and the identification of the bugs and errors of the application; and the implementation of a Help-Desk to help the potential users in the use of the application or problem encountered. The number of users is expected to steadily grow once the system is available. It is to be noted that currently 34% (over 30,000 are expected for 2001) of all PCT applications are received using the PCT-EASY software.

(5) Project Management

Due to the structure and the reporting line of WIPO, a logical sequencing method (Rapid Development Method) was applied until now. A high-level project plan was submitted to the Assembly of PCT member states in September 2000, but a detailed project plan does not yet exist, since the legal framework (Part 7) and the technical specifications (Annex F) are not yet approved by the member states. As soon as they are finalized, a project plan containing the following points should be elaborated:

- a. **Detailed milestone plan** showing the milestones with their mutual dependencies
- b. **Activity plan**, which describes how to achieve the milestones. It will clarify the relation between milestones and the time and resource consumption of each task.
- c. **Responsibility chart or work breakdown structure**, which assigns a role to each person implied in the project and their deliverable responsibilities.

In addition, a detailed analysis and evaluation of the existing products (epoline from the EPO and EFS from USPTO) should be done as soon as possible.

WIPO would highly benefit from such detailed descriptions including GANTT and PERT charts in order to make a better estimation of the duration of each task, its related costs and effort and the dependency of tasks.

(6) Conclusion

For the reasons mentioned above, a detailed project plan is not available yet, which makes precise budget estimation difficult.

The technical specifications in Annex F and the legal framework in Part 7 need to be finalized, a detailed project plan needs to be prepared and detailed analyses of the existing products that could be (partly) used for the e-filing project need to be undertaken.

Based on the information provided to us through interviews and from different documents that were made available to us (by WIPO or from the Internet), we estimate that the budget that was articulated by WIPO does cover partly what would be expected from a high-level budget analysis. However, we would add certain important items in the overall budget, such as the detailed activity per person. More precisely, we estimate that the following items be re-evaluated:

- Project team

The number of people working on the e-filing project is not sufficient, given the amount of specifications and the numerous functions that this project should cover. For this reason, we would recommend increasing the number of internal WIPO consultants as well as increase the number of third party consultants, referred to as Technical Support Services Consultants (Senior or Junior) for the duration of the project. The overall budget for the WIPO consultants would be raised from 918 K CHF to 1.2 million CHF and the overall budget of TSS Senior Consultants would be raised from 4.1 million CHF to 5.7 million CHF.

- Public Key Infrastructure

Given the information available, the amount of 1.6 million CHF does not reflect all the technical infrastructure that a PKI would be necessary to have for an internal development. A more detailed analysis of all components that are required for this PKI would be necessary in order to make a proper assessment of the feasibility. However, based on our experience, we can affirm that by outsourcing the PKI, at least half of the cost of in-house development could be saved.

- Help Desk Infrastructure

The help desk infrastructure budget quoted does not comprise all the levels of response that a normal help desk would consist of, such as customer support. Therefore, we would recommend increasing the help desk infrastructure to a range between 1.5 million CHF to 2 million CHF. Moreover, we strongly recommend taking into account the customer support and customer relations as well as the training aspects.

The comparison with similar projects as the EFS of the USPTO and epoline of the EPO gives some rough ideas about the amount of work and money. A formal precise comparison table between the e-filing and the epoline / EFS would have been feasible if all data from both products were analysed. Then, it would have been necessary to perform a gap analysis and identify the differences between the e-filing functional requirements and the functionalities provided by these products. Unfortunately, at this stage, the e-filing functional requirements

have not been finalized yet. This needs analysis, or commonly referred to as a "Gap Analysis", is a powerful systematic examination of what functionalities the evaluated products offer and where the "gaps" are. This technique should not be confused with a quality related assessment (audit) since it is more comprehensive in that it is an open, but structured forum, non-confrontive and involves input from senior level management and other key personnel.

(7) References of previous WIPO related Work

PricewaterhouseCoopers has performed previous assignments for WIPO which include the following:

- Actuarial expertise of the closed pension fund of WIPO on 31.12.1997, 31.12.1995 and 31.12.1991. The WIPO contacts were Mr Philippe Favatier and Mrs Thérèse Dayer. The objectives of this expertise consisted of determining the amount of the engagements of the fund mentioned above and to compare them to the fortune available. This comparison will make sure that the fortune will be able to cover the engagements in the future.

APPENDICES

(1) Introduction

On the 26th of July 2001, WIPO requested an independent review of the e-filing project to determine whether the budget for the project presented in April 2001 accurately reflects the estimated costs of achieving the objectives of the project. The budget assessment will be presented at the First Session of the Standing Committee on Information Technologies, Information Technology Projects Working Group, to be held in Geneva on September 3rd 2001. Our work took place between the 7th of August and the 17th of August 2001 and consisted of interviews of key players of the project (Project Management, Legal Department, IT Consultants, ...).

We have concentrated our work on the budget plan analysis prepared by WIPO, on the Patent Cooperation Treaty (PCT) processes and on a demonstration of the existing PCT-EASY, epoline and EFS. As part of our engagement, we have performed a detailed analysis of:

- ♣ The project budget documents (Budget Estimation, Current Costs, EPO and USPTO e-filing estimation costs);
- ♣ Annex F Documentation (PCT Standards, PKI Documentation, etc.);
- ♣ Milestones of the PCT E-Filing Pilot;
- ♣ Presentation of the project;
- ♣ Other documents available on the Internet.

We have also conducted interview sessions with Mr. Allan Roach (Director, IT Projects Division), Mr. Karl Kalejs (E-Filing Project Manager), Mr. John Godman (External Consultant of SPS), Mr. Gary Smith (Director, Office of the Patent Cooperation Treaty), Ms. Helen Frary (Coordinator, Standing Committee on Information Technology - SCIT) and Mr. Matthew Bryan (Head, PCT Legal Resources Section). For availability reasons, a representative of the Office of Controller has not been included in the interview sessions as originally planned.

(2) Context

The PCT electronic filing project, which was commissioned as a separate project in December 1999, originated as part of another internal IT project, the IMPACT project. In December 2000, the initial estimate for the e-filing Project was found to be insufficient to meet the agreed scope and the Director General decided that a project should be established independently of IMPACT. A dedicated project manager and team have been allocated to the project and the total budget has been estimated at this date at approximately 18.3 million CHF.

PCT e-filing is an important project, which has as objectives the adoption of a standard for the electronic filing and receipt processing of international patent applications and the reduction of the large amount of paper used in the PCT.

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In August 2001, several milestones have been achieved. According to WIPO’s estimation, the project is delayed by approximately four months in relation to the project plan. However, the costs announced fit to the estimated budget.

(3) Detailed Analysis

We received information on the Budget Plan prepared by the WIPO for the e-filing project in the ‘Statement of Work’. This plan defines 11 Cost Centres, which are defined below:

- ♣ Establishment of the standard for the electronic filing and receipt processing of international patent applications;
- ♣ The creation of principal DTDs (Document Type Definitions) for PCT documents;
- ♣ The design, prototyping, beta testing and development of all sub-systems including extended PCT-EASY, receiving Office server software, a Public Key Infrastructure (PKI) and a secure database for RO/IB for Pilot purposes. Where possible, existing software will be leveraged, the project will therefore include the installation of United States Patent and Trademark Office (USPTO) Electronic Filing Software (EFS) and European Patent Office (EPO) ‘epoline’ software for prototyping, evaluation and, if appropriate, possible customization.
- ♣ Pilot work in co-operation with interested PCT receiving Offices, in particular those based in developing countries;
- ♣ The implementation of a Help desk infrastructure at the International Bureau including hardware, software, licenses and installation, as well as the integration of customized services for the PCT electronic filing system into the IB’s Help desk services;
- ♣ Acquisition of hardware and software necessary for the new system;
- ♣ Detailed testing of the new system, with the active participation of the users;
- ♣ Management of the development and implementation of the new system;
- ♣ WIPO staff costs linked to the project, including office rent;
- ♣ The hiring of consultants to assist the PCT staff in the development of the project;
- ♣ Staff missions and third party travel related to the project.

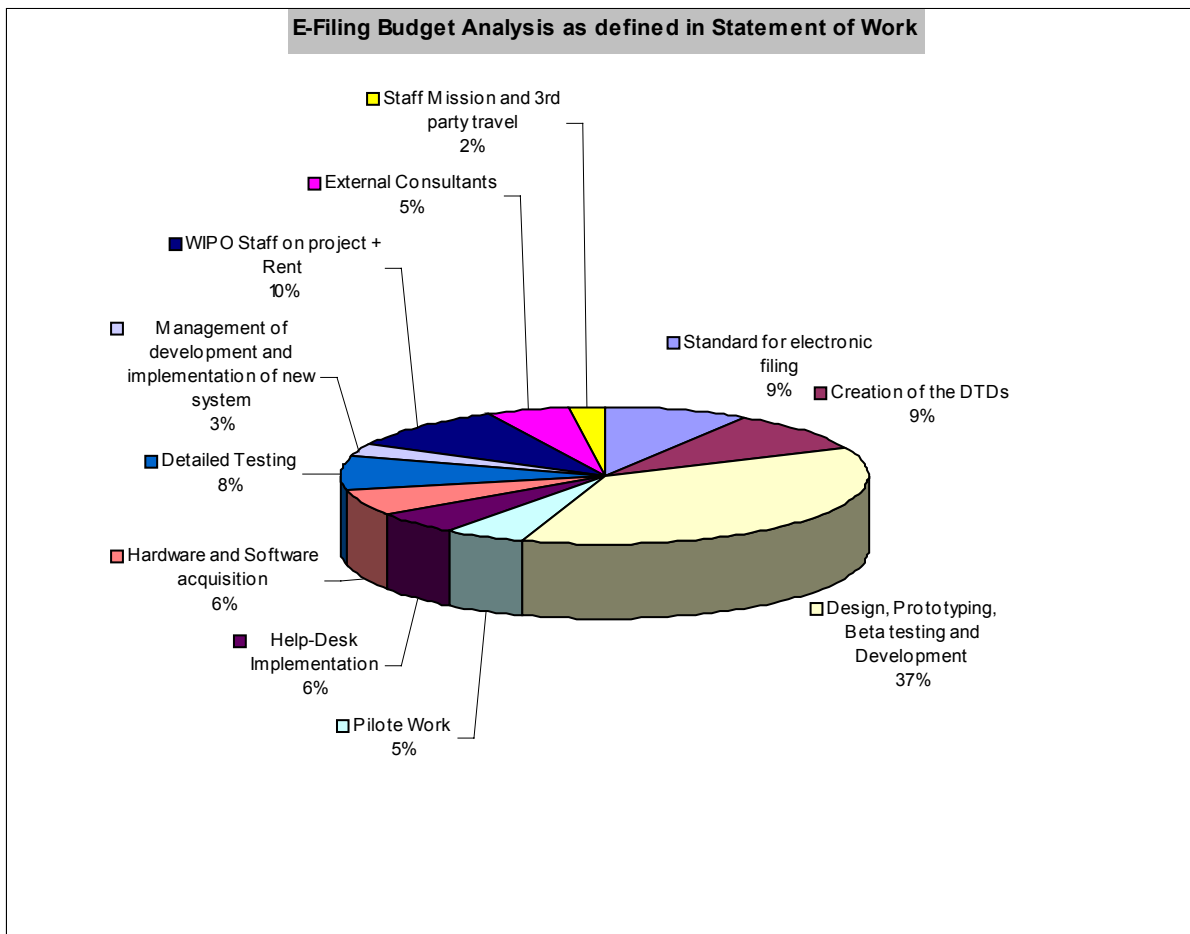
<i>Subject in SOW</i>	<i>Statement of work</i>	<i>Units¹</i>	<i>Percent²</i>	<i>Item in budget</i>	<i>WIPO e-filing budget</i>	<i>budget per subject</i>	<i>%</i>
1	Standard for electronic filing	1 / 2.5		4	1'641'600.00	1'641'600.00	8.97%
2	Creation of the DTDs	0.5 / 2.5		4	820'800.00	1'732'800.00	9.47%
		1 / 3.5		5	912'000.00		
3	Design, Prototyping, Beta testing and Development	2 / 2		11	1'600'000.00	6'709'600.00	36.66%
		1 / 2.5		4	1'641'600.00		
		1.5 / 3.5		5	1'368'000.00		

¹ Unit is referred as a single resource unit out of the total number of resources allocated for each item of the WIPO’s overall budget plan.

² Percent is referred as a percentage of the overall budget allocated for a specific item in the WIPO budget plan.

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			60 %	7	2'100'000.00		
4	Pilot Work		25 %	7	875'000.00	875'000.00	4.78%
5	Help-Desk Implementation	1 / 1		12	1'010'000.00	1'010'000.00	5.52%
6	Hardware and Software acquisition	2 / 2		9	636'000.00	1'126'000.00	6.15%
		2 / 2		10	490'000.00		
7	Detailed Testing	1 / 3.5		5	912'000.00	1'437'000.00	7.85%
			15 %	7	525'000.00		
8	Management of development and implementation of new system	1.5 / 4		1	543'000.00	543'000.00	2.97%
9	WIPO Staff on project + Rent	2.5 / 4		1	905'000.00	1'887'000.00	10.31%
		14 / 14		3	784'000.00		
		1/1		6	198'000.00		
10	External Consultants	3 / 3		2	918'000.00	918'000.00	5.02%
11	Staff Mission and 3rd party travel	2 / 2		8	420'000.00	420'000.00	2.30%
TOTAL FOR THE E-FILING PROJECT					18'300'000.00	18'300'000.00	100.00%

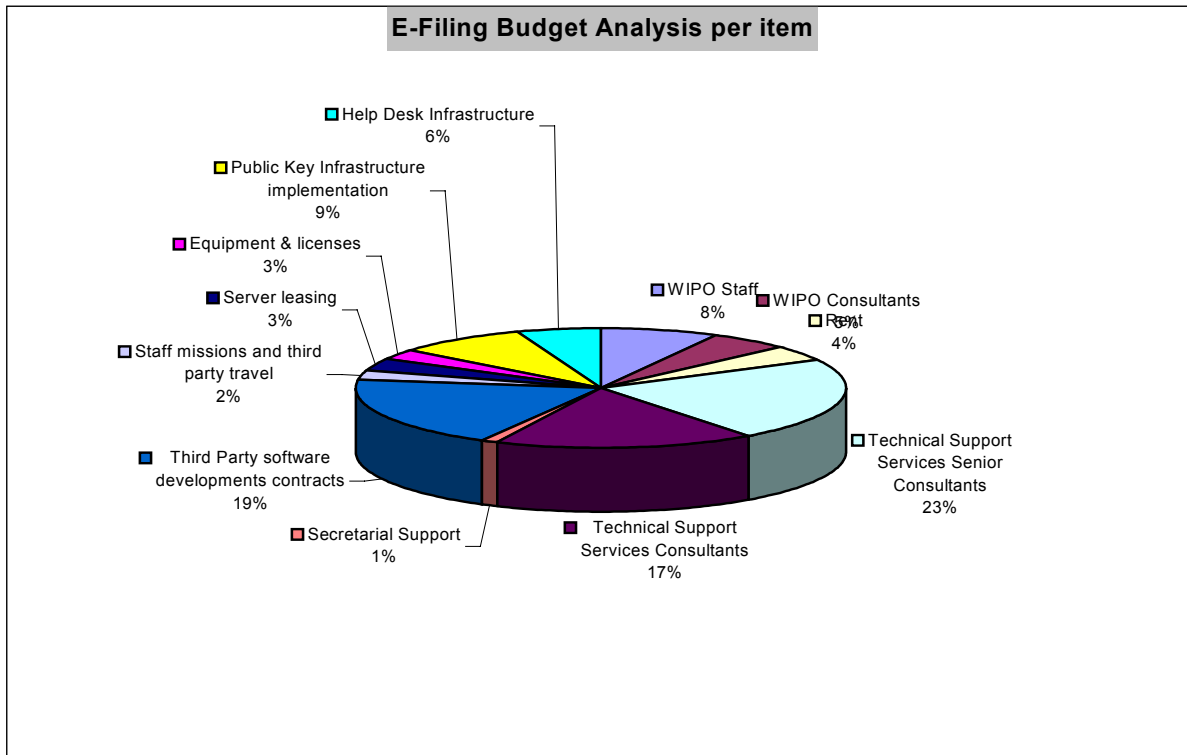


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The budget estimation established for the e-filing project consists of 12 different items, which are mainly ‘WIPO Staff’, ‘External Consultant’, ‘Server Leasing’, ‘Public Key Infrastructure Implementation’, etc. The budget estimation we received was not detailed enough. Therefore, in order to achieve this analysis, we conducted interviews with the Project Manager, Mr. Karl Kalejs, who gave us additional information and a more detailed analysis.

	<i>Item</i>	<i>Cost</i>	<i>Details</i>	<i>Units</i>	<i>Estimated Cost</i>
1	WIPO Staff	362'000	N/A	4.0	1'448'000
2	WIPO Consultants	306'000	8500 * 36	3.0	918'000
3	Rent	56'000	N/A	14.0	784'000
4	Technical Support Services Senior Consultants	1'641'600	2400 * 228 * 3	2.5	4'104'000
5	Technical Support Services Consultants	912'000	2000 * 228 * 2	3.5	3'192'000
6	Secretarial support	198'000	5500 * 12 * 3	1.0	198'000
7	Third party software development contracts	500'000	N/A	7.0	3'500'000
8	Staff missions and third party travel	420'000	22 * 10'000 + 24 * 8000 + 8000	1.0	420'000
9	Server leasing	318'000	N/A	2.0	636'000
10	Equipment & licenses	245'000	N/A	2.0	490'000
11	Public Key Infrastructure implementation	800'000	N/A	2.0	1'600'000
12	Help desk infrastructure	1'010'000	540'000 + 190'000 + 280'000	1.0	1'010'000
TOTAL					18'300'000

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It was expected that the breakdown of the various activities should show the details of each activity or each task assigned for each project member (external or internal). In a standard scope-boxing project, we would have expected the following for each of the items above:

1. WIPO Staff

- ♣ A description of each WIPO staff member;
- ♣ The role assigned to him/her;
- ♣ An additional feature describing the various deliverable responsibilities;
- ♣ The time that was given to him/her for each task;

WIPO would highly benefit from such detailed descriptions in order to make a better estimation of the duration of each phase and its related cost and effort;

We would highly recommend providing as soon as possible such a detailed project plan as the e-filing project is still at its project initiation phase;

WIPO estimation of 4 WIPO staff belonging to the core team and the related overall estimated cost of **1'448'000 CHF** for the duration of the project (36 months) seems adequate (representing 7.91% of the overall budget).

2. WIPO Consultants

The same recommendation as for WIPO staff applies for the WIPO consultants.

The WIPO estimation of 3 WIPO Consultants seem slightly underestimated, given the various roles and responsibilities that they would be assigned to. Even though backup to certain roles has been considered, we still think that additional people need to be hired and

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we estimate that 4 WIPO Consultants seems more appropriate. Thus, the recommended unit would be 4 and the related cost **1'224'000 CHF** (instead of 918'000 CHF, representing 5.02% of the overall budget) for the duration of the project (36 months).

3. Rent

Rent estimated for 14 office space needs to be increased by a minimum of 3 office space for the 3 additional project members that is being suggested. The overall budget would be increased from 784'000 CHF (representing 4.28% of the overall budget) to **952'000 CHF**.

4. Technical Support Services Senior Consultants

The 2.5 TSS Senior Consultants are currently assigned roles of providing assistance in the DTD finalisation, the evaluation of existing e-filing software such as the USPTO EFS and the epoline, as well as the creation of a prototype of the e-filing software.

Given the delay in getting the DTD finalised and getting Annex F agreed among the Contracting States in order to finalize the functional specifications, both the EFS and epoline would not be adequately evaluated as the functional specifications would not have been entirely established. We recommend that a number of 3.5 to 4 TSS Senior Consultants be assigned the following tasks throughout the entire project:

1. Finalisation of the DTD and the Annex F, followed by prototype development
2. Evaluation of the EFS and gap analysis between requirements and functionalities offered
3. Evaluation of the epoline and gap analysis between requirements and functionalities offered
4. Business and technical development followed by product integration and testing

Thus, the overall budget would be re-estimated between **4'924'800 CHF** and **5'745'600 CHF** (instead of 4'104'000 CHF, representing 22.43 % of the overall budget) for the duration of the project (228 days x 3 years).

5. Technical Support Services Consultants

2.5 TSS Consultants are planned to be hired for 2 years. The evaluated budget of **3'192'000 CHF** seems adequate (for 24 months, representing 17.44% of the overall budget).

6. Secretarial Support

1 secretary plus another secretary to be hired (as defined in the document "E-filing Team Organisation and Structure" serving as support or backup for administrative work seems adequate. We estimate that administrative work would include among the main tasks, report writing, document updating, following-up on cost, monitoring the project against budget and time, keeping control of external contracts and performing interoffice communication. The budget quoted of 198'000 CHF (currently representing 1.08% of the overall budget) for the duration of the project (36 months) could therefore be doubled and a figure between **198'000 CHF** and **396'000 CHF** could be quoted.

7. Third Party Software Development Contracts

This item comprises development contracts for a three phase-iteration for the pilot version of the e-filing product and another three phase-iteration for the released version of the e-filing product, plus an additional buffer iteration to cover any exceeding phase. Each of the iterations have been allocated a budget of 500'000 CHF for all the components of the product. The five components composing the e-filing product are the following:

- Authoring tool
- E-filing client
- Receiving server
- PKI services
- Back-end system print/store

Each component has been estimated by WIPO at an average cost of 100'000 CHF. Thus, the overall budget of **3'500'000 CHF** seems adequate and represents the following:
{ [3 phases (pilot) + 3 phases (released)] x [5 components x 100'000 CHF per component] } + 500'000 CHF budget buffer.

8. Staff Missions and third party travel

Staff missions and third party travel, representing currently 2.30% of the overall budget seems adequate. The budget estimated at 420'000 CHF seems adequate.

9. Server leasing

According to the WIPO e-filing project manager, the server leasing budget, representing 3.48% of the overall budget was taken from the IMPACT current server leasing amount. Moreover, the duration of the leasing has been quoted as 3 years. In addition to that, Hewlett Packard has offered WIPO a considerable rebate that would allow WIPO to make an adequate evaluation of the server leasing budget. Therefore, the budget of **636'000 CHF** seems adequate.

10. Equipment & licenses

According to the WIPO e-filing project manager, the equipment and licenses listed in this budget correspond to all test materials for the establishment of the e-filing prototype and subsequent activities, such as the development tools, the software tools and the creation of the lab. The estimated budget of **490'000 CHF**, representing 2.68% of the overall budget) seems adequate.

11. Public Key Infrastructure implementation

The Public Key Infrastructure implementation estimated by WIPO consists of a beta PKI to deliver certificates for testing purposes and a released final PKI to deliver final certificates after the rollout of the e-filing project. However, since the functional specifications haven't been finalised, the e-filing technical infrastructure is still uncertain. A complete feasibility study of the functional specifications hasn't been made yet. The budget listed for this item is therefore a rough estimation of an internal PKI solution. Based on our considerable

experience in PKI consulting as well as PKI implementation, we can affirm that building an internal infrastructure is highly resource consuming. An important and complex IT infrastructure will be necessary (CA, RA, CRLs, LDAP, redundant infrastructure, IDS, Firewalls, etc). In addition to this, strong internal specific technical skills will be required. Moreover, a high-level feasibility study about internal construction will be required. We, therefore, recommend that consideration be given to outsourcing the PKI implementation both for financial purposes and for feasibility purposes, consistent with the need for the PKI to operate with wide acceptance in the multi-jurisdictional environment of the PCT system. A general in-house development within a company, depending on the company's current IT infrastructure and the company's current level of security, would cost between **1'500'000 CHF** and **3'000'000 CHF**. Normal outsourcing of PKI can save at least half of the cost of in-house development, since all services like CA hosting, CRL management, 24/7 secure monitoring, both for beta and released versions would be outsourced. The price could be lower or higher depending on the level of service required for the PKI. This price comprises the infrastructure but does not include the consulting fees to deploy the PKI service nor all the procedures related to handling certificates for example. To be able to make a formal assessment of the PKI necessary for WIPO E-Filing project, a complete feasibility study of all the necessary components would be necessary and this could be performed at a later stage, once all the functional specifications have been finalised.

12. Help Desk infrastructure

The help-desk infrastructure that has currently been estimated by WIPO comprises the Oracle licenses, the IBM server, the license and support for the MAGIC tool, but does not cover staff cost. We would still emphasize that once the e-filing tool is rolled out and operational, the help-desk staff would be facing, at the beginning, an immediate high volume of questions from various aspects, such as legal, IT, formatting, DTD, certificates, procedures, etc. Thus, the help-desk should also serve as a customer support and should be layered with 1st, 2nd and 3rd level of response depending on the severity and technical complexity of the questions and be able to dispatch the questions according to the escalation procedures. Even by not counting the operational costs, we would recommend increasing the helpdesk infrastructure by an additional 1 unit and having a budget of between **1'515'000 CHF** and **2'020'000 CHF** (instead of 1'010'000 CHF).

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The recommended estimation of the new budget would look as follows:

	<i>Item</i>	<i>WIPO Cost</i>	<i>WIPO Units</i>	<i>WIPO Estimated cost</i>	<i>Recommended Units</i>	<i>Min. Recommended Cost</i>	<i>Max. Recommended Cost</i>
1	WIPO Staff	362'000	4.0	1'448'000		1'448'000	1'448'000
2	WIPO Consultants	306'000	3.0	918'000	4	918'000	1'224'000
3	Rent	56'000	14.0	784'000	17	784'000	952'000
4	Technical Support Services Senior Consultants	1'641'600	2.5	4'104'000	3.5	4'924'800	5'745'600
5	Technical Support Services Consultants	912'000	3.5	3'192'000		3'192'000	3'192'000
6	Secretarial support	198'000	1.0	198'000	2	198'000	396'000
7	Third party software development contracts	500'000	7.0	3'500'000		3'500'000	3'500'000
8	Staff missions and third party travel	420'000	1.0	420'000		420'000	420'000
9	Server leasing	318'000	2.0	636'000	2	636'000	636'000
10	Equipment & licenses	245'000	2.0	490'000		490'000	490'000
11	Public Key Infrastructure implementation	800'000	2.0	1'600'000		1'500'000	3'000'000
12	Help desk infrastructure	1'010'000	1.0	1'010'000	2	1'515'000	2'020'000
TOTAL				18'300'000		19'525'800	23'023'600