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WORLD INTELLECTUAL PROPERTY ORGANIZATION

GENEVA

BUDGET COMMITTEE

Nineteenth Session Geneva, June 4 and 5, 1998

PREMISES COMMITTEE

Ninth Session Geneva, June 4 and 5, 1998

QUESTIONS ON PREMISES RAISED BY CERTAIN MEMBER STATES AND ANSWERS PREPARED BY THE SECRETARIAT

Memorandum of the Director General

- 1. On the occasion of the March 23 and 25, 1998, joint session of the Budget and Premises Committees, several delegations stated that they needed further information in order to be able to make decisions concerning premises. Those delegations said that they would like to work with the Secretariat to resolve their questions.
- 2. In a letter dated April 14, 1998, the Ambassador and Permanent Representative of the United States of America sent the Director General a letter with a number of questions attached; that letter and those questions are contained in Attachment 1 of this document, and the Director General's reply, dated April 24, 1998, is contained in Attachment 2.

WO/BC/19/2 – WO/PC/9/2 page 2

- 3. The Permanent Mission of Canada requested the Secretariat to provide further information regarding the long term needs of the Organization, in particular, background to and basis for the forecasts of the growth in numbers of WIPO staff members, to the year 2008.
- 4. The Permanent Mission of Japan requested further information on the impact of information technology on the forecasts of growth in numbers of WIPO staff needs to the year 2008.
- 5. The Secretariat sent to the Permanent Missions of Canada, Japan and the United States of America copies of the documents concerning premises previously issued by WIPO, over the last two years, a list of which is contained in Attachment 3. The Secretariat also sent those Permanent Missions copies, in electronic form, of the Deloitte & Touche study entitled WIPO Evaluation Study into the Information and Document Management Needs of the PCT Sector. Copies of any of the above-mentioned documents or the electronic form of the said Deloitte & Touche study will be provided on request.
- 6. The Secretariat has prepared answers to the questions from the Permanent Mission of the United States of America, Canada and Japan, and following informal consultations with staff of those Permanent Missions, sent to each of those Permanent Missions on April 27, 1998, the paper entitled *Responses to Questions on Premises from the Permanent Mission of the United States of America*, which is contained in Attachment 4 to this document, and the paper entitled *Background to Forecasts of Numbers of WIPO Staff, Contained in Paragraphs 16 to 21 of Document WO/GA/22/1*, which is contained in Attachment 5 to this document. The latter paper is the first of eight annexes of the former paper; the other seven annexes, which provide background information not prepared specifically in response to the questions of the above-mentioned Permanent Missions, are listed at the end of Attachment 4 to this document; copies of any of those annexes will be provided on request.

[The Attachments follow]

Attachment 1

Letter of the Permanent Representative of the United States of America to the Director General dated April 14, 1998.

Attachment 2

Letter of the Director General to the Permanent Representative of the United States of America dated April 24, 1998.

April 24, 1998

Sir,

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I have the honor to acknowledge receipt of your letter of April 14, 1998.

I thank you for the questions that accompanied your letter relating to work force projections made by WIPO, automation, space allocation, site selection for new premises, and oversight by Member States that were attached to your letter. We have completed answers to those questions, which are enclosed with this letter, along with the supporting documentation. In preparing the answers to these questions, we received very prompt and constructive assistance from your staff, for which I am most grateful.

My colleagues and I are at your disposal for any further information that you may wish to have.

Accept, Sir, the assurances of my highest consideration.

Kamil Idris
Director General

His Excellency
Mr. George E. Moose
Ambassador
Permanent Representative
Permanent Mission of the United States of America
to the United Nations Office at Geneva
Route de Pregny 11
1292 Chambésy

[Attachment 3 follows]

Attachment 3: List of Documents Concerning Premises Issued by WIPO Since March 1996

	Document Reference	Title	Date
1.	WO/GA/22/2	Report	March 27, 1998
2.	WO/BC/18/6 - WO/PC/8/3	Report	March 25, 1998
3.	WO/BC/18/3 - WO/PC/8/2 with WO/GA/22/1 and Annex	Premises Premises (Annex of Plans)	February 19, 1998
4.	WO/GA/XXI/13	Report	October 1, 1997
5.	WO/GA/XXI/11	Premises	August 8, 1997
6.	WO/BC/XVI/4 - WO/PC/VII/4	Report	April 16, 1997
7.	WO/BC/XVI/3 - WO/PC/VII/3	International Architectural Competition for Constructing a Building on the "Steiner Lot"	February 28, 1997
8.	WO/BC/XVI/2 - WO/PC/VII/2	Evaluation of the Possibilities of the Geneva Property Market for Meeting Future Premises Requirements (1997-2006) of WIPO: Report of Independent Consultant	February 28, 1997
9.	WO/GA/XIX/4	Report	October 2, 1996
10.	WO/GA/XIX/3	Matters Concerning Premises (Addendum)	September 20, 1996
11.	WO/GA/XIX/1	Matters Concerning Premises	July 31, 1996
12.	WO/BC/XV/4 - WO/PC/VI/4	Report	September 11, 1996
13.	WO/BC/XV/3 - WO/PC/VI/3	Building on the "Steiner Lot"	July 31, 1996
14.	WO/BC/XV/2 - WO/PC/VI/2	Needs of WIPO for Additional Premises: Opinion and Report of Independent Expert	July 23, 1996
15.	WO/BC/XIV/3 - WO/PC/V/3	Report	May 15, 1996
16.	WO/BC/XIV/2 - WO/PC/V/2	Needs of WIPO for Additional Premises; Building on the "Steiner Lot"	March 29, 1996

[Attachment 4 follows]

Attachment 4

Responses to Questions on Premises From the Permanent Mission of the United States of America

The following questions were contained as an attachment to a letter sent by Ambassador George E. Moose, Permanent Representative of the United States of America to the United Nations and Other International Organizations in Geneva to Dr. Kamil Idris, Director General of the World Intellectual Property Organization. The questions in the attachment to that letter were not numbered but are numbered here and shown in italics for ease of reference.

Questions Relating to Workforce:

Question No. 1: What is WIPO's projected workforce for the next ten years?

<u>Answer to Question No. 1</u>: WIPO's projected workforce for the next ten years is as follows:¹

<u>Year</u>	Total Staff Members
1997R	654.5
1998	729.5
1999	744.5
2000	763 - 822
2001	778 - 867
2002	793 - 910
2003	815 - 942
2004	841 - 982
2005	864 - 1,022
2006	897 - 1,077
2007	928 - 1,131
2008	963 - 1,191

An elaboration of the bases upon which these forecasts were made is found in Annex I which contains a document entitled "Background to Forecasts of Number of WIPO Staff Members, Contained in Paragraphs 16 to 21 of Document WO/GA/22/1."

These figures do not include the numbers of consultants, short-termers, translators working under special service agreements, staff financed by trust funds, contractors working in WIPO's buildings (including firms involved in computerization developments, staff of the cafeteria caterer, staff of the in-house travel agency, cleaning staff, etc.), external auditors, trainees, and staff of the Office of the International Union for the Protection of New Varieties of Plants (UPOV). As explained in WIPO document WO/GA/22/1, paragraph 15, to take into consideration the need for workplaces for the foregoing persons, a factor of 20% is added to the forecast of total staff members. In addition, a factor of 5% is added to the number of staff members to provide for a reserve of working places at any given time. It is

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¹ Taken from Table 3 of WIPO document WO/GA/22/1. r:\publish\meeting\att4us.doc

on this basis that the projected number of working places needed shown in Table 3 of WIPO document WO/GA/22/1 was arrived at.

These forecasts are arguably low in light of the percentage increase of 16.1% per annum of international applications under the PCT system over the last three biennia. Indeed, the growth of use of the PCT system in the first three months of 1998 is even greater than had been expected, with 16,437 international applications in those three months. This is 36.5% more than the number of 12,042 international applications in the corresponding three months in 1997. The projected number of international applications for 1998 is therefore expected to be well above the figure of 59,000 budgeted.

The forecasts do take into consideration savings expected through the application of information technologies. As explained below in answer to question No. 5, the savings expected, in particular those in respect of the PCT system, compare favorably with the actual savings or projected savings in the Japanese Patent Office and the U.S. Patent and Trademark Office. Moreover, the forecasts also take into consideration savings that are expected if WIPO's currently dispersed facilities can be consolidated into one. The expected savings in this regard are consistent with the conclusion of a study commissioned by the U.S. Patent and Trademark Office that its "needs would best be met in a cost-effective manner by consolidating its disparate pieces into a single complex."

Question No. 2: Do these estimates take into account projected efficiencies resulting from improved automation and document handling?

Answer to Question No. 2: Yes. The manner in which this was done is as indicated paragraphs 3-8 of the document contained in Annex I. Moreover, further information regarding efficiencies resulting from improved automation and document handling is covered in the answers to the questions No. 4, 5, 6, and 7 below relating to automation.

Question No. 3: What are the maximum and minimum bounds of these workforce projections? To what degree would the uncertainties underlying max/min variability be reduced by reexamining options in subsequent years (two years out, four years out, etc)?

<u>Answer to Question No. 3</u>: For each of the years 2000 to 2008, maximum and minimum bounds of the work force projections are shown in the table found in the response to question No. 1. For example, from that table, the minimum and maximum bounds for work force projections in the year 2000 are 763 and 822, respectively, and for the year 2008 are 963 and 1,191, respectively.

Growth projections are just that - projections - and are necessarily uncertain. Waiting and reexamining a given projection at a future date means only that uncertainties can be reduced for the then short-term future. The underlying uncertainties in the longer term would remain, however. Moreover, if projected growth occurs, waiting may result in necessary premises not being available to accommodate the growth at a reasonable price and under reasonable conditions. Thus, uncertainties in projections must be weighed against the possibility that, if not acted upon, the needs they foretell may not be met.

<u>Further Explanation to the Answer Given to Question No. 3</u>: The uncertainties underlying the growth forecasts given above, which result in the lower and higher forecasts made for each

year, derive from a number of factors including, in particular, (as noted in paragraph 14 of document WO/GA/22/1) the future growth of the use of the PCT, Madrid and Hague systems (which in turn will depend upon the future economic situation worldwide, accessions of new member States, and new features of those systems) and the future growth of other WIPO activities, notably Cooperation for Development and the WIPO Worldwide Academy. Moreover, the impact of information technologies, especially such technologies that have not reached a commercial stage of their development, is inherently uncertain.

Questions Relating to Automation:

Question No. 4: How has WIPO taken into account in workforce projections the experience of the Canadian Patent Office, the Japan Patent Office, and the United States Patent and Trademark Office in automating their procedures?

<u>Answer to Question No. 4</u>: WIPO has taken into account the experience of the Canadian Intellectual Property Office, the Japanese Patent Office, and the United States Patent and Trademark Office through bilateral and multilateral contacts with those offices and through studies that have been prepared for WIPO on internal automation that took into account information about automation experiences in those offices.

<u>Further Explanation to the Answer Given to Question No. 4</u>: Over the course of several years the question of the automation of intellectual property offices, including the automation of WIPO, has been considered internationally. WIPO has actively participated in those discussions as an organization keenly interested in taking advantage of new information technologies. In addition, WIPO has had numerous contacts in bilateral and multilateral fora with national intellectual property offices, including the three enumerated in Question No. 4, where the automation of offices and workforce projections were taken into consideration.

More concretely, a PCT Technical Meeting was convened in the Hague in July, 1997 to allow the participating offices to share information on their experiences in the field of automation. The offices enumerated above participated in that meeting. A copy of the report of that meeting is attached as Annex II. Following that meeting a study was undertaken by the Deloitte and Touche Consulting Group ("Deloitte and Touche") entitled "WIPO Evaluation Study into the Information & Document Management Needs of the PCT Sector" (the "study"). A copy of the Deloitte and Touche study was previously provided, in an electronic form, to the Permanent Mission of the United States of America. Three representatives of Deloitte and Touche were present at the above-referenced PCT Technical Meeting in order to gain first-hand experience from the other participants as to the present thinking and capabilities in the field of the automation of intellectual property offices.

On December 12, 1997, WIPO convened a meeting at which the results of the study by Deloitte and Touche were presented. The three offices identified in Question No. 4 participated in that meeting and all provided oral and written comments on the study. Copies of the written comments by the United States of America, Japan, and Canada are attached as Annex III. Deloitte and Touche took these comments into consideration in making modifications to the study, including to the section on staffing projections. In this respect a document entitled "Qualitative and Quantitative Benefits" was prepared by Deloitte and Touche (Reference S.P0565.40.13) and is attached as Annex IV. This document, in an electronic form, was previously provided to the Permanent Mission of the United States of

America. This document, as the synopsis indicates, "investigates and analyses the qualitative and quantitative benefits anticipated from the implementation of various aspects of information management and automation. The quantitative analysis is based on estimated staff and non-staff costs and savings, with detailed projections." It is on the basis of these detailed projections and quantitative analysis that the workforce projections contained in paragraph 20(i) of WIPO document WO/GA/22/1 were made.

A specific comparison of the relative experiences of WIPO, the United States Patent and Trademark Office, the Japanese Patent Office and the Canadian Intellectual Property Office is found in response to question No. 5.

Question No. 5: What are WIPO's conclusions regarding the change in workload volume during and after automation?

<u>Answer to Question No. 5</u>: This question, in particular the term "workload volume," appears to have two aspects. First, "workload volume" could mean the volume of work undertaken per person within WIPO. This aspect of the question relates to the efficiency of WIPO personnel. Second, "workload volume" could mean the volume of work for WIPO as a whole, measured, for example in terms of applications received under the PCT, Madrid, and Hague systems or requests for training and technical assistance by developing countries.

As to the first aspect of the question, it is anticipated that automation will increase the efficiency of WIPO personnel - in particular that of certain categories of workers responsible for global protection systems, such as the PCT. As to the second aspect of the question, it is anticipated that during the time that automation is being effected, workload volume will increase in the area of information technologies. This is primarily due to additional personnel being required to effect planned automation, to maintain the systems for automation once effected, and to conduct training in the use of new equipment and systems. Moreover, automation of global protection systems (PCT, Madrid, and Hague) will make those systems easier to use, less expensive and, consequently, more attractive. Accordingly, it can be anticipated, but not easily quantified, that the number of applications in those systems, hence workload volume, will increase.

<u>Further Explanation to the Answer Given to Question No. 5</u>: The work of effecting a further automation of WIPO is expected to add to the workload in the short term. In particular, during the course of automation, and to a certain extent beyond, short-term staff and consultants to effect and maintain the automation projects will be required. Indeed, p. 24 of Annex IV (the Deloitte and Touche Study) projects additional information technology staff during and after automation of the PCT system. This comports with the experience of the Canadian Intellectual Property Office.

After automation is completed it is anticipated that the staffing requirements for certain categories of workers (primarily clerical) will be reduced in certain sectors of WIPO (for example in the sector responsible for global protection systems). In respect of the PCT system, for example, as can be seen from the figures given in paragraph 20(i) of document WO/GA/22/1 (based on the Deloitte and Touche Study contained in Annex IV), significant productivity improvements are expected to accrue. Having 227.5 staff members for 54,422 IAs in 1997R implies an overall productivity of 239 IAs handled per staff member, becoming 251 IAs handled per staff member in 1999, with 254.5 staff members for 64,000 IAs. For the

conservative growth scenario, *less* staff members (249) would handle 79,000 IAs in 2002, implying an overall productivity of 317 IAs handled per staff member, reaching 367 IAs handled per staff member in 2008 when 297 staff would handle 109,000 IAs (which implies an expected productivity increase of over 50% for 2008 as compared to 1997R). Comparable productivity gains accrue for the higher growth scenario.

These projected savings to WIPO, in particular in respect of the PCT operations, compare favorably with that experienced in the Japanese Patent Office. In 1984 the Japanese Patent Office started its so-called "paperless project." In 1985 the patent documents retrieval system was operational and in 1990 and 1993 the first and second versions, respectively, of the paperless system for online patent applications were implemented. According to the 1996 Annual Report of the Japanese Patent Office (Annex V, p. 97), in 1985 the total number of staff of the JPO was 2,329, including 865 patent/utility model examiners and 1,000 clerical staff. In that year the JPO received 302,995 patent and 204,815 utility model applications, for a total of 507,810 applications. By 1996, the total number of staff and patent/utility examiners had increased to 2,521 and 1,073, respectively, with the number of clerical staff decreasing to 914. In 1996 the JPO received 376,615 patent applications and a total of 14,082 utility model applications under both the old and new laws for a total of 390,697 applications - a reduction of approximately 23% from 1985 to 1996.

Over that 11 year period, clerical staff in the JPO had decreased by approximately 9%, but overall staff had increased by about 8%. The projected staff numbers with savings due to automation in the Office of the PCT compares very favorably with the experience of the Japanese Patent Office. For example, as indicated in the spreadsheet attached to Annex I entitled "PCT 'Conservative Forecast'", by the year 2002 it is projected that without savings a staff level of 380 would be required, versus 305 net staff with savings due to automation. This is a savings of 75 staff positions, or 20%. Most of these savings will be in the clerical area. There will be savings in the PCT examining corps, however, when electronic filing becomes widely used because there will be less bad data contained in international applications, thus requiring less examiner time to correct.

The projected savings of staff positions in the Office of the PCT also compares favorably with the projections of efficiencies to be gained through reengineering in the United States Patent and Trademark Office. In March, 1998, the Office of Inspector General, United States Department of Commerce, issued a report that concluded that the United States Patent and Trademark Office's justifications for a space consolidation lease are valid. (United States Department of Commerce, Office of Inspector General, Inspection Report No. IPE-9724, herein "IG Report"). Page 15 of the IG Report refers to a draft performance analysis by an information technology contractor on the savings that may be achieved through reengineering efforts in the patent area, including automation. The IG Report at page 15 states the following regarding this draft performance analysis:

[The United States Patent and Trademark Office] does agree that its reengineering initiatives will achieve significant savings in terms of cost, full-time employees, and space. However, [the United States Patent and Trademark Office] has not quantified its projected savings and has not factored any such savings into its plans for the new facility because the bureau [sic, Office] does not believe that benefits will be realized until after 2001.

Despite a lack of agreement from the United States Patent and Trademark Office on a procedure or algorithm to be applied to determine the effect of automation on staff projections, the IG Report cited favorably to a projection from the draft performance analysis "that approximately 5.4 percent of PTO's patent staff may be saved by fiscal year 2001, as a result of implementing the patent reengineering process." The projected staff numbers with savings due to automation in the Office of the PCT compares favorably with this projection. In particular, as indicated in the spreadsheet attached to Annex I entitled "PCT 'Conservative Forecast'", by the year 2001 it is projected that without savings a staff level of 356 would be required, versus 312 net staff with savings due to automation. This is a savings of approximately 44 staff positions, or 12%.

Question No. 6: What are WIPO's conclusions regarding changes to required storage space, administrative space, and infrastructure in implementing automation taking into account the experiences of the above patent offices?

Answer to Question No. 6: As concerns storage space, it is expected that the automation of the PCT system will result within a few years in having only electronic files. Thus, consistent with the experiences on projections of the offices identified in question No. 4, the relatively small amount of storage space within the WIPO and BIRPI Buildings for files for PCT applications being processed would essentially disappear. This is reflected in paragraph 14 of document WO/GA/22/1, where it is estimated that about 20 additional working places would thereby be made available. PCT application files are kept in separate storage premises in Meyrin (Canton of Geneva). The replacement of paper files by electronic files will mean that it will not be necessary to rent additional storage space; because of the requirement to store PCT application files for 30 years, the off-site storage in Meyrin will continue for a number of years but eventually be phased out.

Automation of the PCT system, with an increasing percentage of applications arriving in electronic form and using the EASY system, is expected to reduce numbers of staff, and their associated administrative space in the long run. This was the conclusion of the Deloitte and Touche Study found in Annex IV; see, in particular, page 24 thereof. This staff savings is principally due to reduced numbers of data entry staff (due to progressively eliminating the data entry role), reduced numbers of examiners (due to the progressive elimination of much bad data as a result of EASY), reduced publications staff (due to the progressive elimination of publications roles), reduced reproduction staff (due to moving to having only a few paper copies of PCT pamphlets printed), and reduction of other staff (due to additional process enhancements). At the same time, a modest amount of additional space will be required for information technology equipment associated with the new systems to be implemented, and for the additional information technology staff required for programming and maintaining those systems.

Question No. 7: In what ways are the experience of the above offices applicable or non-applicable to WIPO's planned automation upgrades?

<u>Answer to Question No. 7</u>: The experiences of the above-identified offices are applicable to WIPO's planned automation program in two respects. First, all of those offices and WIPO are basically putting in place electronic document handling systems, including receipt, tracking, manipulation, storage, and dissemination of documents. Second, the experiences of those offices in the management of an automation effort are relevant to the automation effort

underway at WIPO. Thus, the successes and failures of the above-identified offices in their automation efforts are instructive to WIPO. It was this recognition of a commonality of interests that led to the bilateral and multilateral cooperation in the field of automation described above in response to Question No. 4.

The experience of some of the above-identified offices may not be applicable to the planned automation of WIPO to the extent they use older, mainframe-based technology than that available today. It is WIPO's intention to put in place an open, standards-based system for the filing of applications under the PCT. Moreover, the experiences of the above-identified offices may not be applicable to the planned automation of WIPO to the extent those experiences are based on the substantive examination of patent applications. WIPO has no responsibility for the substantive examination of International Applications under the PCT.

NOTE: The answers to Questions No. 4, 5, 6, and 7 refer, in particular, to the automation of the PCT system. As concerns the processing of trademarks under the Madrid system, the operations within the Secretariat are essentially paperless, reflecting the high degree of automation of that system. Further improvements will undoubtedly be implemented in the future, making effective use of new developments in information technology and the experience of trademark offices around the world, both in States members of the Madrid Union and in other countries.

Questions Relating to Space Allocation.

Question No. 8: What are your guidelines for space allocation and measurement of interior space? How were your standards chosen?

Answer to Question No. 8: The guidelines or standards applied by WIPO for space allocation per employee are as identified page 9 in the study prepared by STG-Coopers & Lybrand entitled "Evaluation of the Possibilities of the Geneva Property market for Meeting Future Premises Requirements" ("STG-Coopers & Lybrand Study", contained as an Annex to WIPO document WO/BC/XVI/2-WO/PC/VII/2). These standards are as follows: General Service Staff (9 to 10.5 m2), Professionals (12 to 14 m2), Managers (18 to 21 m2), and Directors (27 to 28 m2). For convenience, these standards are applied internally by reference to the number of windows in a given office. Thus, Professional staff of grade P 1 to P 4 have a two-window office, P 5 a three-window office and Directors a four-window office. Depending on their functions, General Service staff may have a two-window office, although most share, with two General Service staff in a three-window office, three staff in a four-window office and four staff in a five-window office.

These standards were chosen and have been maintained so as to be comparable to the standards used in other organizations of the United Nations as well as with other intergovernmental organizations elsewhere including the European Patent Office and the World Bank. The STG-Coopers & Lybrand Study, in a table found at page 9, compared WIPO's standards with those of other international organizations, including in Geneva, and concluded that "WIPO's standards for office floor space per employee are reasonable. It is clearly shown that they indeed correspond to the floor space that is accepted by usage and in the literature, as well as to the standards applied on other sectors of the United Nations"

Question No. 9: How would the remodeling and, if chosen, major renovation of the WMO Building affect the demand for work spaces in the immediate future?

Answer to Question No. 9: The renovation, modernization and extension of the WMO Building will enable a significant part of the demand for work places to be satisfied in the near future. When that construction work is completed, however, the extended WMO Building will not enable the projected demand to be satisfied in the year 2001 and thereafter (reference Table 8 in document WO/GA/22/1).

Question No. 10: WIPO data suggests that with a major renovation of the WMO Building, the demand for additional work space in 2001 will be less than 50 spaces. What are the benefits and costs of deferring a decision on procurement of additional space and/or building until 1999 or 2000?

Answer to Question No. 10: There are two benefits in deferring a decision on the procurement of additional space and/or building until 1999 or 2000. First, the Special Reserve Fund for Additional Premises and Computerization would be left on deposit with the *Banque Nationale Suisse* of the Swiss Confederation, earning interest (at present 3.25% per annum). Second, short-term uncertainties associated with growth of WIPO, in particular in the PCT, Madrid, and Hague systems, as well as uncertainties in respect of emerging, but not currently commercialized, information technologies could be resolved. Thus, other options could be considered if WIPO's space needs over the next year to two were found to grow at a slower or faster rate than has currently been forecast.

The most significant disadvantage of deferring a decision is that options currently available may not remain so until 1999 or 2000, and it is hard to envisage that WIPO would be able to find other premises as close to its present city block. In this respect, it is worth noting that national intellectual property offices, including all of those identified above in Question No. 4 recognize the many economic and efficiency benefits to be gained from consolidation of operations. Further, deferring a permanent solution to the space needs of WIPO means more costly alternatives, namely rental of office space, must be pursued. Still further, since it has been planned that office space not immediately required would be rented out to third parties until needed, a revenue stream (which would be greater than the above-mentioned interest from the funds on deposit with the *Banque Nationale Suisse*) would be foregone.

Question No. 11: Can some elements of the WIPO workforce be more easily separated from the main workplace than others, e.g., Patent Cooperation Treaty workers? The workspace requirements of how many workers could be accommodated through the provision of premises separate from the WMO Building, but in the vicinity of Geneva?

Answer to Question No. 11: Some elements of the WIPO workforce can be more easily separated from the main workplace than others. This is evidenced by the fact that certain units of the Secretariat, rather than others, have been located in the rental premises which are remote from the WIPO/BIRPI I/BIRPI II Buildings, namely, the CAM and OIM Buildings, the P&G Annex, the IBM Building and the UC/UNHCR Building. The choice of which units are to be moved into rented premises away from the WIPO/BIRPI I/BIRPI II complex has been and continues to be a source of considerable difficulty.

While such dispersion is possible, it comes with economic and other costs. It is telling that of the offices identified in question No. 4, only the United States Patent and Trademark Office is not located in a consolidated, or single, facility. That Office plans, however, to change that situation.

The March 1998 report of the Office of Inspector General, United States Department of Commerce, referred to above in response to question No. 5, concluded that the United States Patent and Trademark Office's justifications for a space consolidation lease are valid. That IG Report concluded that the United States Patent and Trademark Office should continue with its space consolidation effort. In this respect, pages 2 and 3 of the report cite that that Office's primary justification for a new facility to be a 1991 study that concluded that the United States Patent and Trademark Office's "needs would best be met in a cost-effective manner by consolidating its disparate pieces into a single complex". WIPO agrees with this conclusion. In particular, WIPO too could reap benefits through space consolidation, as compared to a dispersion of groups and facilities among remote sites. The costs of such dispersion are identified below in response to questions No. 12 and 13.

Question No. 12: Can one or more functions be placed apart from the main complex without undue cost or difficulty in management?

<u>Answer to Question No. 12</u>: As noted in response to Question No. 11, one or more functions may be placed at sites remote from the main complex of WIPO. This cannot be done, however, without undue cost or difficulty.

<u>Further Explanation to the Answer Given to Question No. 12</u>: Locating units apart from the main complex causes excessive costs, which could be avoided if the staff were co-located, and associated management problems. These costs include additional management and security costs, as well as the lost time as a consequence of travel between remote locations. The basic issue becomes that of cost-effectiveness and efficiency of operations of the Secretariat, since it can be argued that almost any function or unit could be placed apart from the main complex. The experience of WIPO (and, as noted above in response to Question No. 11, the experience of national intellectual property offices) is that there are considerable disadvantages to having staff located in different premises, and considerable advantages that would result by co-locating the staff.

Question No. 13: Would the 33 million Swiss franc surcharge apply to all types of workers placed in outlying buildings?

Answer to Question No. 13: Yes. The "surcharge" of some 33 million Swiss francs is the capitalized equivalent of the additional costs calculated by STG-Coopers & Lybrand, amounting to 1,337,000 francs per year, of locating some 600 staff in a "satellite" site located near the Geneva airport.² These additional costs are identified by the additional study prepared by STG-Coopers & Lybrand, referred to in paragraphs 74 to 77 of WIPO document

As noted in paragraph 77 of document WO/GA/22/1, a discount rate of 4% per annum was used as the assumed rate of return on WIPO's funds. The estimated annual additional costs of the "satellite" site of 1,337,000 francs was divided by 0.04 to arrive at the capitalized equivalent of 33,425,000 Swiss francs. For comparison, taking a discount rate of 3.25% per annum, the rate of interest currently earned by the funds on deposit with the *Banque Nationale Suisse*, yields a capitalized equivalent of 41,138,461 Swiss francs.

WO/GA/22/1 and attached hereto as Annex VI. This study is an updated version of one previously done and reported in WIPO document WO/BC/XVI/2-WO/PC/VII/2 (see, in particular, Annexes 9 & 10).

The additional costs identified by STG-Coopers & Lybrand consisted essentially of two elements. The first element is the cost of extra staff (messengers, shuttle-bus driver, receptionist, maintenance staff, building technician, security personnel) to provide basic services to a remote location. Such extra staff is necessary irrespective of the nature of the work being performed in the remote location. The second element consisted of the loss of time for staff going back and forth between buildings and the cost of the shuttle bus; STG-Coopers & Lybrand had estimated that for 600 staff, there would be an average of some 66 cases each day of a staff member going from one site to the other, this involving the once a week Professional Information Meeting of all Professional staff, trips between buildings by information technology staff, trips between buildings concerning personnel matters, and various other professional contacts.

The costs of extra staff and equipment and the frequency and duration of trips (and consequent loss of time) projected in the foregoing study conforms to WIPO's actual experience in operating satellite offices in the Geneva area, including, in particular, the CAM and OIM buildings near the World Health Organization.

Questions Relating to Choice of Site:

Question No. 14: Given the above considerations, what are the comparative cost/benefits of all reasonable options in the Geneva region? In our view, these options include (i) further expansion and addition to the WMO facility or (ii) other owned property, (iii) the purchase of the P&G Building, (iv) purchase and building on the Steiner lot, (v) further expansion of buildings on owned property, and (vi) purchase of buildings or property for development in the vicinity of Geneva, (vii) including (if feasible) the placement of a building across the border from Geneva in France.³

Answer to Question No. 14:

Further expansion and addition to the WMO facility or other owned property, and further expansion of buildings on owned property (elements (i), (ii), and (v)): This element raises the question as to whether "further" expansion and addition to the WMO facility or other owned property can be undertaken. This is dealt with in answer to Questions No. 16-18, below.

Purchase of the P&G Building, purchase and building on the Steiner lot, and purchase of buildings or property for development in the vicinity of Geneva (elements (iii), (iv), and (vi)): These elements call for a request for a comparative cost/benefit study of the purchase of the P&G building, purchase and building on the Steiner lot, and purchase of buildings or property for development in the vicinity of Geneva. Such a comparative study has already been prepared by STG-Coopers & Lybrand identified above and contained as an annex to WIPO document WO/BC/XVI/2-W0/PC/VII/2. This study was noted with appreciation by the WIPO Budget and Premises Committees at their April 14 and 15, 1997 sessions. See

³ The reference numerals (i) through (vii) were added to the original question for ease of reference.

WIPO document WO/BC/XVI/4 Rev.-WO/PC/VII/4 Rev. (paragraph 8). No further work was requested by those Committees at that time. Clarification is required, therefore, as to manner in which the study by STG-Coopers & Lybrand fails to meet the request for the comparative cost/benefit study.

If feasible, the placement of a building across the border from Geneva in France (element (vii)): This element suggests that a building can be placed across the border from Geneva in France, "if feasible." The placement of a building across the border from Geneva in France cannot be foreseen for the following reasons. The time required for WIPO personnel to travel from the main WIPO complex of buildings to a remote building in France would be great. This is particularly so since it would involve crossing the border between France and Switzerland. For the reasons given above in response to Question No. 13, this travel time and the additional administration that any new building entails would increase costs and reduce efficiency. These costs and problems are compounded when, in the course of meetings or conferences, delegates are required to cross the border to travel between WIPO facilities.

Question No. 15: What is the Swiss Government's position regarding federal or cantonal support for the purchase of buildings or land in the Geneva canton? If support is available, does assistance vary according to the type and placement of the space under consideration?

Answer to Question No. 15: The Delegation of Switzerland, as reported at paragraph 113 of the Report of the Budget and Premises Committees in joint session March 23 and 25, 1998 (WIPO document WO/BC/18/6-WO/PC/8/3) stated the following:

"With reference to the situation of Switzerland as the host country, the Delegation recalled that a few years ago Switzerland made a specific offer concerning a particular project, that is, the Steiner lot and the offer was turned down by the Governing Bodies of WIPO. The Delegation said that the present conditions were no longer the same as at that time, having changed both for the organization and for the host country. Nonetheless, Switzerland was naturally keen to have the active presence of WIPO and was prepared to discuss with the Secretariat all the questions raised by delegations. But in order for the Director General to make contact with the host country, the Director General must be given a mandate . . ."

The State of Geneva (Republic and Canton of Geneva) has, in the past, offered to make a site available to WIPO in the form of a free of charge leasehold arrangement (droit de superficie), whether the Steiner lot (that it would acquire from the Steiner firm) or another lot already owned by the State of Geneva or to be acquired (provided that the acquisition price could be justified). The Secretariat understands that this has been the usual, though not invariable, practice of the State of Geneva for international organizations. Indeed, WIPO benefits from a free of charge droit de superficie for the land on which the WIPO, BIRPI I and BIRPI II Buildings are situated, and will soon benefit from such an arrangement in respect of the WMO Building. The position that the State of Geneva may now have in relation to any land on which WIPO may wish to build, cannot be known until a decision has been taken by the Member States of WIPO on the choice of options.

The foregoing positions of the Swiss Federal Authorities and the State of Geneva were confirmed with the Permanent Mission of Switzerland Before the International Organizations at Geneva on April 24, 1998.

Question No. 16: What are the physical and legal constraints on further expansion of the WIPO Building or other buildings on WIPO land?

Answer to Question No. 16:

There are both physical and legal constraints on further expansion of the WIPO Building or other buildings on WIPO land. The physical constraints, as discussed below in response to question No. 17, can be overcome to a certain degree if a decision is taken to spend the necessary funds. For example, the foundations and frame of the main WIPO building and the BIRPI I and BIRPI II buildings were built to accommodate a certain weight. If it were desired to increase the height of those buildings beyond a certain limit, it may be necessary to reinforce the foundations and superstructure accordingly. This would significantly increase the cost of construction.

There are also legal constraints. There exists a plan (plan localisé de quartier, hereinafter "PLQ") for every zone in Geneva, including that in which WIPO is situated. The PLQ is descriptive of the roads, buildings (existing and planned), green space, parking, and public equipment in existence. There is some general guidance given in the PLQ of the extent of new construction that has been authorized under the PLQ. If new construction is desired in the zone, the plans for the proposed construction must be submitted to and discussed with Geneva authorities. This discussion involves representatives of the person proposing the construction (WIPO and its architect, for example) and the Geneva authorities. The result of these discussions may follow two paths. The first, and least time consuming and onerous, is to obtain permission to proceed with construction from the Département de l'aménagement, de l'équipement et du logement (informally translated as the "Department of Planning, Equipment, and Housing") of the Republic and State (Canton) of Geneva. This permission is contingent upon the proposed construction being consistent with the PLQ. If a more ambitious plan of construction is desired, the second path is to apply for and obtain a new PLO. The process of applying for and obtaining a new PLO can take one year or more, including a period for public comment and opposition, a process that adds considerable cost and uncertainty to the outcome.

The decision of the Department of Planning, Equipment, and Housing is in large part based upon the degree to which the proposed construction deviates from the PLQ. This discussion centers on the existing buildings or improvements in the PLQ, as well as any new construction it contemplates, and is aimed at ensuring that any changes are in keeping with the PLQ. That is, the goal is to ensure that a planned construction does not upset the *status quo*. In this process, the *status quo* can be referred to as a *de facto* standard. Thus, existing or planned buildings in the vicinity of WIPO contained in the PLQ may be referred to by all parties to the discussion as a standard not to exceed. For the zone in which WIPO is located, the *de facto* standard for the height of new construction is 21 meters above ground level. Thus, depending upon the slope of the land upon which a building is built, there may be five or six stories above ground level. The occupation rate (ratio between the above-ground surface area of a building and the surface area of the plot of land upon which the building is located) is typically between 1.2 and 1.5, though not specifically indicated on the PLQ.

Further, there is a *de facto* standard for determining the distance between buildings which is a function of their height. It should be noted that recent construction in the vicinity of WIPO, including the building under construction for the ITU, is consistent with the foregoing standards.

It is also likely that there may be restrictions placed on modifications of the main WIPO building so as to maintain its architectural integrity. In this respect it should be noted that a planned demolition of the garage (gas station) in front of the new premises of the UNHCR was halted because it was designed by a member of the Braillard family, the family of Mr. Pierre Braillard, the architect of the main WIPO building.

Question No. 17: Are there construction or zoning regulations and/or limitations that would pertain to significant extension or modification of the WMO Building?

Answer to Question No. 17:

It is possible, technically, to add floors to the WMO building in addition to the one floor already planned but it would be very expensive and not very cost effective. This is because, according to Mr. Stefani, a consulting architect hired by WIPO, the construction of two or more additional floors would require significant and costly modification and strengthening of the existing building.

The zoning regulations and/or limitations are in general described above in response to question No. 16. Annex VII contains a memorandum dated December 23, 1997, prepared by the Department of Planning, Equipment, and Housing the (*Département de l'aménagement*, *de l'équipement et du logement*) of the Republic and State of Geneva which contains a report of a meeting that took place on December 17, 1997 between that Department and WIPO. The memorandum indicates that the Department offered their informal opinion that the proposed modifications to the WMO building to add an additional floor, an additional building, and additional parking would be consistent with the PLQ and, therefore, acceptable.

It should be noted, however, that the addition of one floor on the WMO building, given the close proximity of the BIRPI II building, is possible only as an exception to the PLQ. Thus, by letter dated February 10, 1998 (attached as Annex VIII), the Department observed that by adding an additional floor on the WMO building, the standards in respect of the distance between that building and the BIRPI II building would be violated. Specifically, they stated that the BIRPI II building was already too close, by 5.5 meters, to the WMO building, and that given the height of the completed WMO building (with an additional floor) the BIRPI II building would be too close by 8.5 meters to the WMO building. Nonetheless, that Department offered its provisional opinion that this situation may be allowed as an exception.

In addition, that Department indicated that an aerial passageway between the BIRPI II and WMO buildings has a reasonable chance of being accepted. They also indicated that an underground passageway between the WIPO building and the WMO building is possible, provided the existing large trees can be preserved.

Question No. 18: If so, has the Secretariat discussed any modification or waiver of these requirements with the Geneva/Swiss authorities?

Answer to Question No. 18:

Yes. As indicated above, the Department of Planning, Equipment, and Housing offered their provisional opinion that an additional floor on the WMO building may be allowed as an exception to existing standards under the PLQ.

Further, on March 17, 1998 representatives of WIPO and the Department of Planning, Equipment, and Housing of the Republic and State of Geneva met to discuss further derogation of the *de facto* norms to accommodate further modification of the WMO building or further construction on the WIPO property. In particular, a proposal was made to add more than one floor on the WMO building or an additional building (beyond the new tower adjacent to the WMO building), such as south of the BIRPI I building. The response of the Department was negative, observing that some variation in terms of the height of the WMO building had already been provisionally indicated. The Department suggested that such proposals for additional construction would be blocked by the State of Geneva, whether in the context of seeking construction permission under the existing PLQ or if seeking a new PLQ.

Questions Relating to Oversight:

Question No. 19: If an acceptable site is selected, what will be the mechanism through which members of the Premises Committee exercise oversight regarding purchase negotiations, design competition, and subsequent letting of contracts for design and construction?

Answer to Question No. 19: The Member States will, naturally, exercise oversight. The scope of that oversight and the way in which it is to be exercised is for the Member States of WIPO to decide. It is a matter that could be taken up at the joint session of the Budget and Premises Committee on June 4 and 5, 1998 as it appears to be within the scope of the decision which the WIPO General Assembly called upon those Committees to take. (See, WIPO document WO/GA/22/2, paragraph 9).

Question No. 20: Will all members of the Premises Committee be able to participate in such oversight?

<u>Answer to Question No. 20</u>: There is no legal bar against any or all members of the Premises Committee participating in the oversight described in Question No. 19.

Question No. 21: Will decisions require final approval by the Governing Bodies?

<u>Answer to Question No. 21</u>: The decisions that are to be taken, the process for taking decisions, as well as the entities to take them, is for the Member States of WIPO to decide, consistent with the WIPO Convention.

Annexes to Responses to Questions on Premises from the Permanent Mission of the United States of America

Annex I - Background to Forecasts of Numbers of WIPO Staff Members, contained in paragraphs 16 to 21 of Document WO/GA/22/1.

Annex II - Report on the PCT Technical Meeting, The Hague, July 9 to 11, 1997.

Annex III - Comments from the United States of America, Japan and Canada on the study into the Information and Document Management Needs of the PCT sector prepared by Deloitte and Touche.

Annex IV - Document entitled "Qualitative and Quantitative Benefits", prepared by Deloitte and Touche. This document relates to aspects of information management and automation in the Office of the PCT.

Annex V - Annual Report 1996, Japanese Patent Office, page 97.

Annex VI - Evaluation of the Possibilities of the Geneva Property Market for Meeting Future Premises Requirements (1997-2006) (complementary study) prepared by Coopers & Lybrand.

Annex VII - Memorandum prepared by the Department of Planning, Equipment and Housing of the Republic and Canton of Geneva dated December 23, 1997.

Annex VIII - Letter from the Department of Planning, Equipment and Housing concerning the extension of WIPO facilities, including the WMO building, dated February 10, 1998.

[Attachment 5 follows]

Attachment 5

<u>Background to Forecasts of Numbers of WIPO Staff Members,</u> <u>Contained in Paragraphs 16 to 21 of Document WO/GA/22/1</u>

- 1. The forecasts of numbers of WIPO staff members contained in paragraphs 16 to 21 of document WO/GA/22/1 were developed by the Secretariat based upon its experience and its best judgment as to the development of staff numbers over the next decade. The forecasts were, furthermore, based on the following:
- (a) actual levels of activity under the PCT, Madrid and Hague systems over the past three biennia and budgeted for the 1998-99 biennium;
- (b) considerations contained in the study of automation of the PCT system undertaken by the Deloitte & Touche Consulting Group (entitled WIPO Evaluation Study into the Information and Document Management Needs of the PCT Sector) concerning the reductions of staff expected to result from such automation;
- (c) productivity gains (whose impact over a 10 year period can generally only be estimated) expected to result from increased use of information technology throughout the Secretariat, with the associated increase in the effectiveness and efficiency of the work carried out;
- (d) considerations contained in the report of the independent expert, Mr. Alec Sugden, which provided staff projections to 2006 (contained in the Annex to document WO/BC/XV/2-WO/PC/VI/2 dated July 23, 1996), updated and extended to the year 2008*.
- 2. For each of the paragraphs 16 to 21 (and their sub-paragraphs) of document WO/GA/22/1, the following paragraphs provide information regarding the basis for the forecasts of numbers of WIPO staff members, and indicate the impact of information technology that was specifically considered in making those forecasts (in addition to the general benefits of increased use of information technology throughout the Secretariat).
- 3. ad paragraph 16 of document WO/GA/22/1. Forecasts for Part I: Policy, Direction and Management.

Staff increase forecast: 1999 73.5 staff

2008 91 to 104 staff

The conservative increase of 2% to 4% p.a., which is less than the overall increase forecast for the Secretariat, is based on the Secretariat's best judgment.

Impact of information technology: As concerns the WIPO Mediation and Arbitration Center, growth in the numbers of staff could be very large if WIPO plays an important role in dispute-resolution between private parties, including with regard to Internet domain names.

^{*} Due to the changed structure of the Secretariat in the 1998-99 biennium, however, many of the projections in the Sugden report are not directly applicable.

As concerns the Information Products Section, improvements in the information system for publication sales, notably the introduction of an "electronic bookshop", combined with the gradual shift from paper to electronic publications, and taking advantage of the electronic infrastructure that will be in place (including the WIPO Global Information Network) should result in a reduction in the number of staff needed for a given volume of publication sales and distribution (although the demand for information products and services is expected to grow).

4. ad paragraph 17 of document WO/GA/22/1. Forecasts for Part II: Cooperation for Development and WIPO Worldwide Academy.

Staff increase forecast: 1999 88 staff

2008 137 to 177 staff

- (a) Considerable requests for assistance are expected in the future, especially after January 1, 2000, when most countries have to have systems in place to satisfy their TRIPS obligations; increased assistance will be needed, in particular, concerning the development and operation of their intellectual property systems and enforcement mechanisms, including the most effective use of information technology. Increased assistance will also be needed in the development and promotion of the use of intellectual property. Demands for human resources development are also expected to continue to rise; the effective use of information technology-based training, teaching and advisory services should enable such demands to be met with a lower rate of increase of staff.
- (b) The following numbers of posts for staff members in the Development Cooperation and External Relations Units have been budgeted for the past three biennia and for Cooperation for Development and WIPO Worldwide Academy in the 1998-99 biennium:

<u>Year</u>	Staff Members	% Increase		
1992	42.5			
1993	42.5	0%)	
1994	49	15.3%)	
1995	52	6.1%)	12.5%
1996	61	17.3%)	Average
1997R	75.5	23.8%)	1992-1997
1998	88			
1999	88			

(c) It was assumed that while the requests for assistance will continue to grow, the future growth of staff will be at less than the 12.5% average growth over the past few biennia, through the effective use of information technology. Noting that the growth of staff for 1999 over 1997R is 8% p.a. for two years, a rate of growth of 5% to 8% p.a. was forecast for the years after 1999.

Impact of information technology: Information technology will have a significant impact on the efficiency and effectiveness of the work carried out, increasing the possibilities of distance learning, capacity building and, more importantly, decentralization of the activities into the institutions of the member States through the WIPO Global Information Network.

Any possibility for a reduction in staff will be more than offset by the increased demand for information, training and assistance, resulting in the forecasted growth in staff.

5. ad paragraph 18 of document WO/GA/22/1. Forecasts for Part III: Progressive Development of Intellectual Property Law and Standing Committees.

Staff increase forecast: 1999 32 staff

2008 41 to 46 staff

The growing importance of this core activity is indicated by the increase from 25 staff for 1997R to 32 staff for 1998 and 1999. The nominal increase of staff, at 2% to 4% p.a. thereafter, which is less than the overall increase forecast for the Secretariat, is based on the Secretariat's best judgment as to future staff needs.

Impact of information technology: The information technology global revolution is an identifiable factor in the underlying growth forecasts in this area. The rapid pace of technological change and the global impact of the Internet and its effect on intellectual property rights will continue to present new challenges and new issues to be resolved, requiring additional staff to cope with the extra demand. The pressing need to address the intellectual property issues related to electronic commerce is one example of the new challenges that are directly related to information technology.

6. ad paragraph 19 of document WO/GA/22/1. Forecasts for Part IV: Global Information Network and Intellectual Property Information Services.

Staff increase forecast: 1999 44 staff

2008 69 to 89 staff

- (a) The establishment and operation of the Global Information Network is a new type of activity for WIPO, which is expected to lead to some future staff increases, even with a maximum level of outsourcing.
- (b) The provision of intellectual property information services, notably the development of Intellectual Property Digital Libraries (IPDLs) to make intellectual property information available worldwide, is also expected to lead to future staff increases.
- (c) Information systems are already used in virtually every aspect of the activities of the Secretariat, and these will be developed and improved, along with the internal network services, in order to make effective use of new technologies and software, and thereby increase the productivity of operations within the Secretariat. This will require growing numbers of information technology staff.
- (d) In light of these requirements, the Secretariat's best judgment was that there would be a rate of growth of staff of 5% to 8% p.a. after 1999.

Impact of information technology: New activities are involved which are entirely dependent on information technology, and this whole area is specifically concerned with the important matter of the effective application of information technology. It will therefore involve staff growth, but will lead to significant productivity gains in other areas. As the

capacity of countries to absorb information technology increases, a continuing growth of demand is anticipated.

7. ad paragraph 20 of document WO/GA/22/1. Forecasts for Part V: Global Protection Systems and Services

(i) PCT System.

Staff increase forecast: 1999 254.5 staff 2008 297 to 384 staff

(a) The following numbers of international applications (IAs) were received for the past three biennia, and are budgeted for the 1998-99 biennium.

	International			
Year	Applications	% Increase		
1992	25,917			
1993	28,577	10.3%)	
1994	34,104	19.3%)	
1995	38,906	14.1%)	16.1% p.a.
1996	47,291	21.6%)	Average
1997	54,422	15.1%)	1992-1997
1998	59,000			
1999	64,000			

- (b) For the "conservative forecast" given in paragraph 20(i) of document WO/GA/22/1, the increase of some 5,000 IAs p.a. budgeted for the 1998-99 biennium has been assumed to continue to 2008, resulting in 109,000 IAs for 2008 (i.e., an increase of 70% over the 1999 budget level).
- (c) For the "higher forecast" given in paragraph 20(i) of document WO/GA/22/1, the 15% increase of 1997 over 1996 is assumed to continue for 1998, implying an increase of 8,163 IAs, then the slightly lower figure of 8,000 IAs p.a. is forecast for the years 1999 to 2003, then 7,000 IAs p.a. is forecast for the years 2004 to 2008 (noting that the increases for 1996 and 1997 were 8,385 and 7,131 IAs, respectively), resulting in 138,000 IAs for 2008 (i.e., an increase of 116% over the 1999 budget level).
- (d) Both of these forecasts of numbers of IAs are arguably low in light of the percentage increase of 16.1% p.a. over the past three biennia. Indeed, the growth of use of the PCT system in the first three months of 1998 is even greater than had been expected, with 16,437 IAs in those three months, which is 36.5% more than the number of 12,042 IAs in the corresponding three months in 1997. The projected number of IAs for 1998 is therefore expected to be well above the figure of 59,000 budgeted.
- (e) For each year, for both the "conservative" and "higher" forecasts of IAs, the numbers of PCT staff (including short-termers) that would be needed based on the existing system for handling IAs were first calculated, and are shown as "staff PCT without IT" on the attached spreadsheets developed from the spreadsheet in the Deloitte & Touche study

(Deliverable No 13 entitled "Qualitative and Quantitative Benefits" reference S.P0565.40.13 (Issue 1.4)), pages 23 and 24). These numbers of PCT staff provided a baseline from which projected savings in staff numbers due to automation could be deducted.

- Those savings in staff that would result from the automation of the PCT system (including the major new electronic document management system, the gradual use of the EASY system and electronic filing of IAs, and productivity gains through other improvements in the processing of IAs) were then calculated, based on the considerations in the Deloitte & Touche study (Deliverable No 13 entitled "Qualitative and Quantitative Benefits" reference S.P0565.40.13 (Issue 1.4)). The staff savings involve, in particular, reduced numbers of data entry staff (due to progressively eliminating the data entry role), reduced numbers of examiners (due to the progressive elimination of much bad data as a result of EASY), reduced publications staff (due to the progressive elimination of publications roles), reduced reproduction staff (due to moving to having only a few paper copies of PCT pamphlets printed; this saving is reflected below in paragraph 8(iv) for the Conference and Operational Services Division), and reduction of other staff (due to additional process enhancements). Offsetting those reductions would be additional staff needed for data capture during the transitional phase (as paper and facsimile input are gradually replaced by electronic input) plus additional information technology support staff. The resulting numbers of PCT staff (including short-termers) are shown (as "net staff PCT with IT") on the attached spreadsheets. The final line of those spreadsheets shows the corresponding forecast numbers of PCT staff members (excluding short-termers) based on the 1999 situation (taking into account nine fixed posts (Deputy Director General and his immediate staff, Developing Countries (PCT) Division, and two other posts) as well as three fixed posts for supporting the development and deployment of the PCT automation project (see document A/32/5, paragraph 15)); those forecast numbers of PCT staff members are given in Table 3 and paragraph 20(i) of document WO/GA/22/1.
- (g) The figures in Table 3 and paragraph 20(i) of document WO/GA/22/1 imply considerable productivity increases resulting from the effective use of information technology. To illustrate, having 227.5 staff members for 54,422 IAs in 1997R implies an overall productivity of 239 IAs handled per staff member, becoming 251 IAs handled per staff member in 1999, with 254.5 staff members for 64,000 IAs. For the conservative growth scenario, *less* staff members (249) would handle 79,000 IAs in 2002, implying an overall productivity of 317 IAs handled per staff member, reaching 367 IAs handled per staff member in 2008 when 297 staff would handle 109,000 IAs (which implies an expected productivity increase of over 50% for 2008 as compared to 1997R). Comparable productivity gains accrue for the higher growth scenario.

Impact of information technology: See sub-paragraphs (f) and (g), above.

(ii) Madrid System.

Staff increase forecast: 1999 60.5 staff

2008 107.5 to 134 staff

(a) The following numbers of international registrations were published (up to 1995) or recorded (as from 1996) during the past three biennia, and are budgeted for the 1998-99 biennium.

	International			
<u>Year</u>	Registrations	% Increase		
1992	15,702			
1993	16,498	5.1%)	
1994	17,486	6.0%)	
1995	18,852	7.8%)	4.0% p.a.
1996	18,485	-1.9%)	Average
1997	19,070	3.2%)	1992-1997
1998	20,200	5.9%		
1999	21,400	5.9%		

- (b) The average for the past three biennia is 4.0% p.a., and the average budgeted for the 1998-99 biennium is 5.9% p.a. (reflecting the higher numbers expected with more States members of the Agreement and Protocol), leading to the assumption of an underlying growth of 5% p.a. in numbers of applications for international registrations.
- (c) The "two scenarios" given in paragraph 20(ii) of document WO/GA/22/1 relate to the impact of accessions to the Madrid Protocol, and concern both the timing and the resulting further growth in applications for international registration that would result from further accessions, in particular, the accessions of the United States of America, Japan and the European Community. The "lower growth scenario" adds 10% p.a. for the three years 2002 to 2004 whereas the "higher growth scenario" adds 20% p.a. for the years 2000 to 2002. Such accessions and their impact must be considered for planning purposes but cannot be assured.
- (d) For the year 2008, the "lower growth scenario" would result in some 43,600 applications for international registration (i.e., an increase of 104% over the 1999 budget level), whereas the "higher growth scenario" would result in some 56,000 applications for international registration (i.e., an increase of 162% over the 1999 budget level).
- (e) For the purpose of calculating the corresponding staff growth, an adjustment was made involving 15 fixed posts (management, legal staff, information technology staff and secretaries), which were excluded from the calculation of the growth of the Madrid staff.
- (f) The results of those scenarios are the following numbers of staff forecast for the Madrid system. (Also shown are the numbers of staff for the Hague system, as explained in the following section, which give the total Madrid/Hague numbers of staff shown in Table 3 of document WO/GA/22/1.)

	Staff Members							
Year	Madrid System	Hague System	<u>Total</u>					
1997R	54.5	11	65.5					
1998	58.5	12	70.5					
1999	60.5	12.5	73					
2000	63 - 72.5	13 - 13.5	76 - 86					
2001	65.5 - 86	13.5 - 14	79 - 100					
2002	72.5 - 104	13.5 - 15	86 - 119					
2003	82 - 108.5	14 - 15.5	96 - 124					
2004	91.5 - 113.5	14.5 - 16.5	106 - 130					
2005	95 - 118.5	15 - 17.5	110 - 136					
2006	99.5 - 123.5	15.5 - 18.5	115 - 142					
2007	103 - 128	16 - 20	119 - 148					
2008	107.5 - 134	16.5 - 21	124 - 155					

Impact of information technology: Since the operations under the Madrid system are now essentially paperless, due to the extensive use of modern information systems, no further savings in staff are expected to accrue from further information technology developments, assuming that the Offices joining the Madrid system would participate fully in the electronic exchange of data.

(iii) Hague System.

Staff increase forecast:	1999	12.5 staff
	2008	16.5 to 21 staff

(a) The following numbers of deposits and renewals or prolongations were recorded during the past three biennia, and are budgeted for the 1998-99 biennium.

	Deposits and			
<u>Year</u>	Renewals	% Increase		
1992	4,783			
1993	5,198	8.7%)	
1994	5,446	4.5%)	
1995	5,611	3.0%)	5.4% p.a.
1996	5,832	3.9%)	Average
1997	6,223	6.7%)	1992-1997
1998	6,500	4.5%		
1999	6,800	4.6%		

- (b) The average for the past three biennia is 5.4% p.a., and the average budgeted for the 1998-99 biennium is 4.5% p.a., leading to the assumption of a 4% p.a. to 5% p.a. growth of applications for international deposit and renewals or prolongations.
- (c) The application of information technology should lead to staff savings, whereas a higher rate of growth of applications could follow after the entry into force of a new Act of the Hague Agreement. Reflecting those factors, the Secretariat's best judgment was to use a

slightly wider range of 3% p.a. to 6% p.a. for growth in numbers of staff, giving the results shown above for the Hague system.

Impact of information technology: The further use of electronic publication techniques combined with computerized operations should reduce the impact on staff growth resulting from a possible growth in applications after the entry into force of the new Act.

8. ad paragraph 21 of document WO/GA/22/1: Forecasts for Part VI: General Support Services.

The following five units comprise the "General Support Services"; the total of the numbers of staff members for those units as indicated in the table on the following page, give the numbers shown in Table 3 of document WO/GA/22/1.

(i) Human Resources Management.

Staff increase forecast: 1999 30 staff

2008 39 to 48 staff

The level of human resources management activities of recruitment, staff development and administration of staff entitlements are very much dependent upon the size of the Secretariat. A considerable use is already made of information systems and these will continue to be improved. At the same time, staff development activities will be increased, in order to enable staff throughout the Secretariat to develop their skills and make optimal use of their capabilities. The Secretariat's best estimate is for a growth of one or two staff members per year for the years after 1999, giving the results shown in the table on page 9; the overall increase of 30% to 60% for 2008 over 1999 is virtually the same as the increase forecast for the Secretariat as a whole.

(ii) Finance Division.

Staff increase forecast: 1999 38 staff

2008 48 to 53 staff

The workload of the Finance Division depends on the size of the Secretariat (for the payroll and general expenses), on the level of the activities serving the market sector (notably the PCT, Madrid and Hague systems and the WIPO Arbitration and Mediation Center), and on the level of other WIPO activities (notably for cooperation for development). The staff of the Secretariat was forecast to grow by 29% to 60% for 2008 as compared to 1999; the growth of the number of PCT IAs was forecast to increase by +70% to +116% over the same period, and the growth of Madrid applications for international registration was forecast to increase by +104% to +162% over the same period. With productivity gains expected to result from the modernization of the finance information systems, notably with the new FINAUT 2000 system, the growth of the staff of the Finance Division was forecast at a lower level than the above-mentioned increases, and was taken to involve two new staff per biennium for the lower forecast, and three new staff per biennium for the higher forecast, resulting in the numbers of staff (for the Finance Division plus the Office of the ADG) shown in the table on page 9.

Table: Forecasts of Numbers of Staff Members for General Support Services

Year	Human Resources Management	Finance Division	Languages Division	Conference and Operational Services Division	Buildings Division	Total
1997R	28	37	30.5	57.5	20	173
1998	30	38	34	57.5	20	179.5
1999	30	38	34	57.5	20	179.5
2000	31 - 32	40 - 41	36 - 38	57 - 58	22 - 24	186 - 193
2001	32 - 34	40 - 41	36 - 38	56 - 58	22 - 24	186 - 195
2002	33 - 36	42 - 44	38 - 42	56 - 58	22 - 24	191 - 204
2003	34 - 38	42 - 44	38 - 42	54 - 55	22 - 24	190 - 203
2004	35 - 40	44 - 47	40 - 46	51 - 54	23 - 25	193 - 212
2005	36 - 42	44 - 47	40 - 46	49 - 52	23 - 25	192 - 212
2006	37 - 44	46 - 50	42 - 50	46 - 53	24 - 26	197 - 223
2007	38 - 46	46 - 50	42 - 50	48 - 54	24 - 26	198 - 226
2008	39 - 48	48 - 53	44 - 54	48 - 54	25 - 27	204 - 236

(iii) Languages Division.

Staff increase forecast: 1999 34 staff

2008 44 to 54 staff

(a) The best estimate of the Secretariat was that the number of staff would grow at a rate of two to four staff per biennium, which gives the results shown in the table on page 9; the increase of 29% to 59% for 2008 over 1999 is virtually the same as the increase forecast for the Secretariat as a whole.

(b) These forecasts are arguably low in the light of the need for the Secretariat to respond to the demands that were expressed at the recent meetings of the Budget and Premises Committees and at the recent Assemblies of the Member States of WIPO for a considerably increased use of languages.

(iv) Conference and Operational Services Division.

Staff reduction forecast: 1999 57.5 staff

2008 48 to 54 staff

- (a) With much reduced printing of PCT pamphlets following large-scale automation of the PCT system, the Deloitte & Touche study (Deliverable No 13 entitled "Qualitative and Quantitative Benefits" reference S.P0565.40.13 (Issue 1.4)) indicates that a major reduction of staff would be expected in the PCT printshop.
- (b) Higher levels of activity for the Division are expected as the Secretariat and the activities of the Organization grow. However, extensive use of information technology is planned, involving, in particular, equipping the WIPO printing plant with state-of-the art technology in an integrated printing network, developing an integrated records management system for managing electronic and paper-based communications and documents, using the Global Information Network for the worldwide distribution of information and documents, and using the Intranet to reduce internal paper flows. Those improvements, and bringing together the presently dispersed staff of the Secretariat, will result in major productivity gains, enabling those higher levels of activity to be handled with only slight increases in staff.
- (c) In the light of those factors, the Secretariat's best estimate was that the overall number of staff will be held essentially at and below the present number of 57.5 budgeted for 1999, as shown in the table on page 9.

(v) Buildings Division.

Staff increase forecast: 1999 20 staff

2008 25 to 27 staff

An initial increase of two to four staff was assumed for 2000, to deal with the various construction projects, involving the modernization, renovation, extension and connection of the WMO Building and possibly construction of a building on the Steiner lot. Once those projects would be completed, and the presently dispersed staff of the Secretariat would be brought together, there would be savings (in technical and security staff) due to the co-location

of premises. With the growing Secretariat, the best judgment of the Secretariat was that a slight growth in staff should be assumed involving one staff member per biennium. These estimates give the results shown in the table on page 9; the increase of 20% to 35% for 2008 over 1999 is lower than the increase forecast for the Secretariat as a whole.

Impact of information technology in "General Support Services": Within the five units comprising the "General Support Services", there is already good use made of information technology, and improvements in information systems are expected to result in substantial productivity gains and staff savings. With the emergence of new technologies in the field of translation (including terminology data bases, computer-assisted translation and voice recognition), electronic publication and records management systems, it is expected that staff growth in the future will be further contained. In the longer term, the WIPO Global Information Network will play a significant role in the Secretariat's information dissemination policies, and this will undoubtedly affect services such as those of the Conference and Operational Services Division and Human Resources Management, as they take full advantage of the new possibilities offered by information technology.

PCT "Conservative Forecast"												
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Teal	1997	9%	8%	8%	7%	7%	6%	6%	6%	6%	6%	
IA's	54,422	59,000	64,000	69,000	74,000	79,000	84,000	89,000	94,000	99,000	104,000	
perc. not fully electron	JT, TZZ	100%	90%	80%	70%	60%	50%	40%	30%	20%	15%	
perc. not EASY		95%	90%	70%	60%	50%	40%	30%	20%	15%	15%	
perc. paper print		95%	70%	50%	5%	5%	5%	5%	5%	5%	5%	
perc. saving examiner		1%	2%	6%	8%	10%	12%	14%	16%	17%	17%	
perc. saving publis.		0%	7%	15%	35%	60%	70%	80%	80%	80%	80%	
perc. saving reprod.		15%	30%	80%	95%	95%	95%	95%	95%	95%	95%	
IT staff perc. total		6%	6%	7%	8%	8%	8%	8%	8%	8%	8%	
				. , ,								
staff PCT without IT	239.5	250	271.5	292.7	313.9	335.1	356.3	377.5	398.7	420.0	441.2	462.4
staff non PCT without IT	32	33	36.3	39.1	41.9	44.8	47.6	50.4	53.3	56.1	58.9	
Total staff without IT	271.5	284	308	332	356	380	404	428	452	477	501	525
reduc. data entry	*17	1	2	6	9	11	15	18	22	24	25	28
reduc. examiner	*86	1	2	6	9	12	15	18	22	25	26	29
reduc. publish	*60	0	5	11	26	48	60	72	76	81	85	89
reduc. reprod.	*16	2	5	15	19	20	22	23	24	26	27	
reduc. addit.proc.enh	0	0	0	7	7	8	8	9	9	10	10	10
addit. staff Capture		0	16	12	9	7	5	3	2	1	1	_
incr. IT staff	*14	1	3	6	9	8	8	8	9	10	12	13
net staff PCT with IT	239.5	250	286	286	289	280	283	284	293	306	322	334
net non PCT staff with IT	32	31	30	22	18	16	16	15	16	17	18	
net staff with IT	271.5	281	314	306	305	297	299	300	310	323	340	
diff staff		3	-6	27	52	84	105	128	142	153	160	
net staff growth rate		6%	11%	-3%	0%	-3%	1%	0%	3%	4%	5%	4%
PCT Staff Members	227.5	242	255	255	257	249	251	253	261	272	286	297

PCT "Higher Forecast"												
Year	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
i eai	1991	15%	12%	11%	10%	9%	8%	7%	6%	6%	6%	
IA's	54,422	63,000	71,000	79,000	87,000	95,000	103,000	110,000			131,000	
perc. not fully electron	01,122	100%	90%	80%	70%	60%	50%	40%	30%	20%	15%	
perc. not EASY		95%	90%	70%	60%	50%	40%	30%	20%	15%	15%	
perc. paper print		95%	70%	50%	5%	5%	5%	5%	5%	5%	5%	
perc. saving examiner		1%	2%	6%	8%	10%	12%	14%	16%	17%	17%	
perc. saving publis.		0%	7%	15%	35%	60%	70%	80%	80%	80%	80%	
perc. saving reprod.		15%	30%	80%	95%	95%	95%	95%	95%	95%	95%	95%
IT staff perc. total		6%	6%	7%	8%	8%	8%	8%	8%	8%	8%	8%
·												
staff PCT without IT	239.5	265	298.3	331.9	365.5	399.1	432.7	462.1	491.5	520.9	550.3	579.7
staff non PCT without IT	32	35	39.9	44.3	48.8	53.3	57.8	61.7	65.7	69.6	73.5	77.5
Total staff without IT	271.5	300	338	376	414	452	490	524	557	590	624	657
reduc. data entry	*17	1	2	6	9	13	17	21	25	28	30	
reduc. examiner	*86	1	2	6	10	13	17	21	26	29	30	
reduc. publish	*60	0	5	11	29	54	69	84	89	94	100	
reduc. reprod.	*16	2	5	16	21	23	25	27	28	30	32	
reduc. addit.proc.enh	0	0	0	8	8	9	10	10	11	12	12	13
addit. staff Capture		0	17	13	11	9	6	4	2		1	_
incr. IT staff	*14	3	5	8	12	13	14	14	16	17	19	20
net staff PCT with IT	239.5	265	313	327	341	340	352	358	373	391	414	
net non PCT staff with IT	32	33	34	26	23	21	22	21	23	24	25	
net staff with IT	271.5	298	346	350	361	362	373	379	395	415	439	
diff staff		2	-8	26	54	91	117	144	162	175	185	
net staff growth rate		13%	16%	1%	3%	0%	3%	2%	4%	5%	6%	4%
PCT Staff Members			278	291	303	302	313	318	331	347	367	384