## **ANNEX B**

## **NEW CONSTRUCTION PROJECT**

- 352. At the 37<sup>th</sup> series of meetings held in Geneva on September 23 to October 1, 2002, the Assemblies of the Member States of WIPO approved the following (see paragraph 262 of document A/37/14):
  - (a) the construction of an administrative building with a budget of Sfr157,500,000 as proposed in document A/37/2, modified to maximize the number of working places, as well as to optimize the technical design in accordance with recommendations to achieve cost savings and efficiency gains;
  - (b) the construction of a conference hall with a budget of Sfr33,000,000 as proposed in document A/37/2, taking into account the need to coordinate with UNOG in order to maximize the utilization of conference facilities;
  - (c) the appointment, in accordance with WIPO procurement procedures, of an external consultancy firm to participate in project management;
  - (d) the further study by the International Bureau with a view to providing for additional parking spaces and necessary consultations with Geneva authorities;
  - (e) the entrusting of the Program and Budget Committee with overseeing the construction project, in particular with regard to the finalization of the technical design, receiving regular reports from the International Bureau, and the establishment of a consultation process, within the framework of the Program and Budget Committee, between interested delegations and the Secretariat in order to validate financial projections and underlying assumptions;
  - (f) the revision of sub-program 18.4 (New Construction) of the program and budget for the 2002-2003 biennium as proposed in document A/37/2, including a decrease in the budget allocation from Sfr52,338,000 by Sfr2,514,000 to Sfr49,824,000.
- 353. Following the approval of the revised budget, the new construction project was further adjusted and enhanced to reflect specific decisions and recommendations adopted by the Member States of WIPO and suggestions proposed in the project evaluation report prepared by the Federal Audit Office of Switzerland (see document A/37/2). The project plans were finalized by February 2003 and provided to

potential general contractors in February-March 2003. The bids are expected to be received towards the middle of 2003, at which time they will be evaluated in a transparent manner. A more detailed discussion of the project specifications and its development as well as the description of technical improvements included in project plans is found in the subsequent sections of the current Annex.

354. Table 28 describes the project's basic specifications by comparing the approved (September 2002) and the current revised estimates. The new construction project consists of an administrative building providing 560 workplaces, 280 underground parking spaces and a cafeteria with 300 seats and the conference hall with 650 seats. Of the total project budget of Sfr190,500,000, Sfr157,500,000 or 82.7 per cent is for the administrative building and Sfr33,000,000 or 17.3 per cent is for the conference hall. As approved by the Member States, the Secretariat has also continued the development of project plans covering the additional storage designed to be converted into additional parking when needed.

Table 28
Summary of Project Specifications

Specifications - Unit of Measure	Approved Estimates (A/37/2)	Revised Estimates (WO/PBC/6/2)
A. Budget (In millions of Swiss francs)		
Administrative building	157.5	157.5
Conference hall	33.0	33.0
Total, A	190.5	190.5
B. Building Capacity		
Office building – working places	560	560
Conference hall – seats	650	650
Underground parking – spaces	280	280
Additional storage/parking – spaces	-	-
Cafeteria – seats	300	300
C. Average Cost (In Swiss francs)		
Cost per volume (m <sup>3</sup> )	961	890
Cost per area (m <sup>2</sup> )	4,493	3,143
Cost per workplace of administrative building	281,250	281,250
D. Dimension		
Building volume (m <sup>3</sup> )	198,300	214,024
Building gross floor size (m <sup>2</sup> )	42,400	60,604
Volume per workplace (m <sup>3</sup> ) of administrative building	317.5	321.6
Gross floor size per workplace (m <sup>2</sup> ) of administrative building	67.9	88.4

355. Although the project planning is based on 560 working places, the architectural concept of the administrative building provides the flexibility to provide office space for up to 612 staff members through the modification of the floor layout by partitioning and regrouping working spaces (as discussed in document A/37/2). However, it should be noted that the need to accommodate the higher number of staff

members would involve putting three to four staff members per office. Therefore, the present project planning is based on the approved building capacity of 560 workplaces.

356. As discussed in document A/37/2, the administrative building includes a number of essential facilities, including an underground parking for trucks, underground space for loading, multipurpose hall, library and reading room, information center and medical unit. The cafeteria will be located on the ground floor of the building adjacent to *Chemin de Mon-Soleil*. As part of the architectural design, the interior volume at ground floor and the internal gardens on the various office levels will serve as vital green spaces regulating the ambience and relative humidity levels in the building as well as offering spaces for the occupants for informal meetings. The theme of interior gardens is a direct result of the desire to recreate the original site after the building's completion, and thus the ground floor can be considered as a form of WIPO public space, which adapts to the natural contours of the site and thereby creates a symbiotic relationship with the surrounding context.

357. The conference hall provides 650 seats for delegates and will be divisible into two rooms of 450 and 200 seats each, as approved by the Member States. The increase by 50 places from the original plan has been achieved through an improved space planning in the architectural design, including a reduction in the area per each seat as recommended by the auditors. It is expected that the increase in capacity would be achieved within the approved cost estimates. As discussed in A/37/2, the conference hall will be equipped with modern interpreters' booths and the latest audiovisual and multimedia equipment. Following suggestions in the evaluation report, the sound equipment will take into account the specifics of the room's acoustics. High-resolution video projectors, supported by many types of video equipment, including, among others, DVDs, PCs, video-conferencing and electronic voting equipment, will be available.

## **Improvements of Project's Technical Solutions**

358. The revised project plan incorporates suggestions and recommendations of the Member States of WIPO and the auditors aimed at enhancing the project's technical solutions and achieving cost savings. Basic concepts underlying the project's technical plans include the use of modern technology in an environmentally responsible manner while respecting the current stringent regulations regarding energy saving, building physics and thermal planning; the effective integration of the new project with the existing WIPO infrastructure to create synergies and compatibility and achieve cost savings; the use of the advantages offered by the surrounding environment; the respect of the project's architectural design and the provision of adequate office standards. The major technical solutions adopted by the project plans are summarized below. More detailed descriptions of the project's technical characteristics are contained in project plans which have been provided to general contractors along with all relevant drawings, sketches and plans as part of tender materials. Although the technical installations are rationalized and upgraded within the approved project budget, precise levels of savings and benefits can be

reliably ascertained only when the cost details become available during the tendering process.

- 359. Conference hall (general) The improvements cover the hall's design, structure, acoustics, ventilation and cooling systems. For instance, the conference hall will be refurbished with a false ceiling to improve its acoustics and to enhance ventilation systems. The false ceiling will be made of noise-absorbing material. In addition, in accordance with auditor's recommendations a textile covering is introduced on the floor in order to absorb any excessive noise. The level of noise produced by technical equipment, i.e. ventilators, is reduced through the installation of noise absorbers at each airflow exit. Further to the advice of auditors, the volume of the hall per person is reduced from 9-11 cubic meters previously planned to 7.8 cubic meters (paragraph 222 of Annex of document WO/PBC/5/3). Moreover, the orientation and inclination of delegates' seats were increased from 10 to 12 per cent to achieve a better visibility (paragraph 224 of the same Annex). The visibility is further enhanced through an improved positioning of the speaker's stand. This is done to facilitate both delegates and interpreters who need to have a good The main conference hall will be supported by at least view of the hall. The two divisible halls will have seven cabins each 10 interpreter's cabins. conveniently located to provide quality service.
- 360. Heating, Ventilation and Air Conditioning (CVC) Heating, ventilation and air conditioning installations are optimized in a number of ways to achieve cost savings and improve performance efficiency. The concept of active floor is used for the ground and first floors of the administrative building to provide the required level of heating in winter and cooling in summer. The concept of cold ceiling in summer is retained for office floors, based on the auditor's recommendations. WIPO uses a heating concept according to which the cold air coming from windows during winter is heated by radiators located in proximity to windows. Heating units are based on a single heating element for each module to enable possible changes in office configurations.
- 361. The heating and cooling system in the conference hall has been adapted to be cost-effective and flexible in accordance with the users' needs. The system is designed to provide the necessary comfort levels for each divisible part of the conference hall independently of each other. This will ensure a rational use of heating and cooling resources and help achieve important savings. Another modification of the system involves its repositioning from the ceiling and walls to the ground level. The system will generate a smaller amount of cooled air, as compared to the previous concept, which will be used only for the lower part of the building where the delegates are seated. The heavier cold air stays down and will provide necessary comfort levels for the delegates. The upper part of the hall will not be cooled. The system is based on the hydraulic concept of heating, in line with auditors' recommendations (paragraph 288 of the Annex to document WO/PBC/5/3). Currently, a study is underway to achieve a possible synergy between the existing and new buildings through the sharing of the production of the heating energy via the use of mutually compatible installations (paragraph 288 of the same Annex).

- 362. Ventilation In accordance with auditors' recommendations, the concept of a four-pipe ventilator-convector will not be used. Instead, the ventilation concept is based on the design and structure of the building, in particular the three atrium spaces serve as natural ventilation shafts by allowing natural light to penetrate into the building without the undesirable effect of excessive heating. The atriums assure a free flow of air out of offices. This helps to reduce the reliance on air extraction installations and creates important savings. In regard to the conference hall, the concept of ventilating the entire area at the same time has been abandoned, as recommended by the auditors. Instead, ventilation is provided for the each part of the hall in an independent manner. It is also noted that the ventilation system is directly linked to the cooling system, thus providing significant synergies. This concept is similar to the practices used by FIPOI in the Salle W. Rappard of WTO and the WMO building.
- 363. Environment The Minergy concept discussed by auditors was carefully studied. However, the concept was not considered the ideal solution given the specific requirements of the project and the fact that it results in sub-standard comfort levels due to the use of very basic cooling systems, which, among others, provide a room temperature equal or close to outside temperature conditions. As to heating exchange systems, additional studies are currently underway.
- 364. Sanitary engineers A certain degree of rainwater recovery to meet certain needs has been envisioned. As for the proposals of the auditors regarding the production of hot water and heat recovery, additional studies are also underway. Concerning the networks for the sprinkler system and fire hydrants, they will be maintained separately to assure better security and the proper degree of maintenance.
- 365. Electrical engineers The auditors' recommendations concerning electrical engineering are being studied. The majority of technical installations, including alarms, access controls, fire detectors and others, are configured based on the standards and technologies compatible to the ones in the existing buildings to ensure proper management and to achieve an optimum cost structure. As to the interpretation system in the conference hall, it is similar to the one used in the existing conference facilities so as to provide an interconnectivity of audiovisual equipment to enable their shared use among different facilities.
- 366. Acoustics and structure of the administrative building The structure of the facades of the administrative building was simplified from two layers to a single layer to satisfy the local norms concerning the noise protection. The acceptable noise level at the side of Route de Ferney will amount to 43 dB. The reduction in the facades' layers is expected to result in certain cost savings.

## **Update of Building Dimensions**

367. The revised project plans provide more realistic estimates of the building dimensions, which are now estimated at 214,024 cubic meters in volume and 60,604 square meters in gross floor size. These estimates indicate some increases from project plans dated November 2001 which served as the basis of the audit review. It is now clear that the earlier plans have either underestimated or ignored a number of important dimensions for atriums and other parts of the administrative building. Since November 2001, a number of project elements have been re-evaluated resulting in additional provisions for some elements, including an increase by 1,000 square meters in the size of the gallery of the administrative building and an additional provision of 1,600 square meters for the roof of the atriums.

368. As shown in Table 28, the average costs of the project are thus estimated at Sfr890 per cubic meter and Sfr3,143 per square meter. These figures show significant improvements from the November 2001 plans essentially due to an underestimation of project dimensions at early stages.

## **Project Financial Plan**

369. The project cost amounts to the approved budget of Sfr190,500,000, of which Sfr157,500,000 is for the administrative building and Sfr33,000,000 is for the conference hall. As the project plans have undergone further improvement, it has become possible to elaborate with greater precision the detailed cost information by building components, objects of expenditure and implementation period. A number of cost items have been adjusted upwards and the contingency reserves were reduced accordingly to reflect the current level of project development. These re-allocations have been made within the approved budgetary ceiling. The current cost information by details would be further confirmed when the detailed cost estimates are received from general contractors.

370. Table 29 provides a comparison of the revised and approved financial plans by building components, object of expenditure and biennial allocations. By building components, the budgetary allocation for the administrative building has been adjusted upwards by Sfr8,713,000 or six per cent, including an increase by Sfr6,982,000 or 6.4 per cent for the office area and Sfr1,731,000 or five per cent for the underground area. The allocation for the conference hall was increased by Sfr1,702,000 or 5.6 per cent. As a result, the initial contingency of Sfr16,000,000 has been reduced by Sfr10,415,000 or 65.1 per cent to Sfr5,585,000. With regard to objects of expenditure, the construction is now valued at Sfr142,271,000, up by Sfr7,662,000 or 5.7 per cent; honorariums amount to Sfr22,900,000, an increase by Sfr2,709,000 or 13.4 per cent, and the cost of audit review is increased by an additional amount of Sfr44,000 to Sfr444,000 to reflect the actual expenditures. As seen in Table 29, the budget allocation for 2002-2003 is maintained at the revised budget level approved in September 2002. The allocation for 2004-2005 is increased by Sfr822,000 or 1.0 per cent to Sfr80,950,000; whereas, the allocation for 2006-2007 is reduced by Sfr822,000 or 1.5 per cent to Sfr55,078,000.

Table 29
Revised and Approved Project Plans by Building Components,
Object of Expenditure and Biennia

Parameters	Approved Estimates (A/37/2)	Change	Revised Estimates (WO/PBC/6/2)
A. By Building Components and Contingency 1. Building components			
Administrative building			
Underground area	34,688	1,731	36,419
Office area	109,612	6,982	116,594
Total, Admin. bldg.	144,300	8,713	153,013
Conference hall	30,200	1,702	31,902
Total, A.1	174,500	10,415	184,915
2. Contingency	16,000	(10,415)	5,585
TOTAL	190,500		190,500
B. By Object of Expenditure			
1. Construction			
Pre-structural works	10,829	239	11,068
Structural works	116,544	7,270	123,814
Special equipment/services and external works	7,236	153	7,389
Total, B.1	134,609	7,662	142,271
2. Contractual services			
Honorariums of architects and engineers	20,191	2,709	22,900
Project management	2,800		2,800
Audit review	400	44	444
Total, B.2	23,391	2,753	26,144
3. Operating expenses	8,000		8,000
4. Furniture	8,500		8,500
Total, B.1-B.4	174,500	10,415	184,915
5. Contingency	16,000	(10,415)	5,585
TOTAL	190,500		190,500
C. By Biennium Budget Allocation			
1. 2000-2001	4,648		4,648
2. 2002-2003	49,824		49,824
3. 2004-2005	80,128	822	80,950
4. 2006-2007	55,900	-822	55,078
TOTAL	190,500	<u> </u>	190,500

Table 30
Detailed Project Plan by Building Components and Object of Expenditure
(in thousands of Swiss francs)

	Administrative Building				Conference	TOTAL	
Building Component	Underground Area			Offices	Total	Hall	
Object of Expenditure	Parking	Storage	Total				
	$\boldsymbol{A}$	В	C=A+B	D	E=C+D	F	G=E+F
1. Construction							
Pre-structural works	2,555	1,278	3,833	5,909	9,742	1,326	11,068
Main structural works	16,637	8,484	25,120	77,051	102,171	21,643	123,814
Special equipment/services and external	9	5	14	5,423	5,437	1,952	7,389
works				-,:	-,,	-,,	.,
Total, 1	19,201	9,767	28,967	88,383	117,350	24,921	142,271
2. Contractual services							
Honorariums of architects and engineers	3,091	1,572	4,663	14,226	18,889	4,011	22,900
Project management	378	192	570	1,739	2,310	490	2,800
Audit review	60	30	90	276	366	78	444
Total, 2	3,528	1,795	5,323	16,241	21,564	4,580	26,144
3. Operating expenses	1,080	549	1,629	4,970	6,599	1,401	8,000
4. Furniture	-	500	500	7,000	7,500	1,000	8,500
Total, 1-4	23,809	12,611	36,419	116,594	153,013	31,902	184,915
5. Contingency	734	373	1,107	3,379	4,487	1,098	5,585
TOTAL	24,543	12,984	37,527	119,973	157,500	33,000	190,500

Figures may not add up due to rounding

371. Table 30 provides the detailed financial plan by object of expenditure and building components. The new construction project consists of an administrative building, with offices and an underground area, and a conference hall. Offices include workplaces and common areas, and the underground area is composed of parking and storage spaces. Out of the total budget of Sfr190,500,000, the administrative building currently amounts to Sfr157,500,000 or 82.7 per cent of the total project budget, with Sfr119,973,000 or 63.0 per cent of the total project budget allocated to the office building and Sfr37,527,000 or 19.7 per cent to the underground area. Parking and storage areas amount to Sfr24,543,000 and Sfr12,984,000, or 12.9 per cent and 6.8 per cent respectively of the total project budget. The conference hall amounts to Sfr33,000,000 or 17.3 per cent of the total project budget.

372. In line with the budget presentation of the approved project budget provided in document A/37/2, the main objects of expenditure are distinguished between construction, contractual services, operating expenses, furniture and contingency and are described in detail below.

#### Construction

373. Construction costs amount to Sfr142,271,000 or 74.7 per cent of the total project budget. They include pre-structural works, main structural works and works on special equipment/services and external works. The pre-structural works are valued at Sfr11,068,000 or 5.8 per cent of the project budget. They comprise site and

soil investigations; site clearance and preparation; installation of general facilities on the site required for the construction work; adaptations to existing installations, services and access facilities; and the construction of special foundations and supports for the works on waterproofing and excavating the basement.

374. The main structural works amount to Sfr123,814,000 or 65.0 per cent of the total budget. These works involve the excavation of the basement; all building works, including all concrete work, masonry, steel work, metal work, stone work, construction of windows, external insulation and external surface treatment; all major installations, such as electrical, heating, ventilation, air conditioning and refrigeration, sanitation, elevators, and all internal finishing works, such as flooring, wall and ceiling finishing, internal surface treatment and painting.

375. Special equipment/services and external works are currently valued at Sfr7,389,000 or 3.9 per cent of the project budget. This phase includes electrical installations associated with various communication equipment, data transfer systems, security and alarm systems and other low power systems; cabling and telecommunications equipment for the conference hall; all sanitary fittings for the kitchens; the set up of automatic barriers for the parking; external landscaping; all structural and finishing activities related to external works; necessary electrical and sanitary works for external installations; road works; and gardens.

376. In regards to building components, the administrative building accounts for 82.5 per cent of the total construction work or Sfr117,350,000, including Sfr88,383,000 for offices and Sfr28,967,000 for the underground area (Sfr19,201,000 for parking and Sfr9,767,000 for storage). The construction work for the conference hall is valued at present at Sfr24,921,000. On average, the construction work amounts to Sfr157,827 per workplace in the office building, Sfr68,575 per parking place in the underground parking area and Sfr38,340 per seat in the conference hall.

### **Contractual Services**

377. Contractual services are estimated at Sfr26,144,000 or 13.7 per cent of the project budget, including Sfr22,900,000 for the honorariums of architects and engineers, Sfr2,800,000 for the project management and Sfr444,000 for the audit review. Honorariums of architects and engineers include Sfr11,745,000 for the architect's honorarium, Sfr8,336,000 for engineers and Sfr2,817,000 for various sub-contractors in such fields as geology, geometry, fire safety, facades, building esthetics, planning of green space, natural and artificial lights. Honorariums of individual engineering firms are expected to vary from as low as Sfr584,000 to as high as Sfr4,196,000, depending on the field and terms of reference. Project management is estimated at Sfr2,800,000 to cover the cost of external management and salaries for the internal project team. As to building components, total contractual services for the administrative building amount to Sfr21,564,000, including Sfr16,241,000 for offices and Sfr5,323,000 for underground area (Sfr3,528,000 parking and Sfr1,795,000 for storage). The budget for the conference hall amounts to Sfr4,580,000. On average, contractual services amount to Sfr29,001 per workplace, Sfr12,600 per parking space and Sfr7,046 per seat in the conference hall.

## **Operating Expenses**

378. Operating expenses amount to Sfr8,000,000 or 4.2 per cent of the total project budget, including secondary fees for the provision of security services on the construction site; insurance coverage for the building work; the cost of permits; connection charges for basic services, such as electricity, gas, water and the cost of reproduction of project designs and plans. Total operating expenses for the administrative building amount to Sfr6,599,000, made up of Sfr4,970,000 for offices and Sfr1,629,000 for the underground area (Sfr1,080,000 for parking and Sfr549,000 for storage). The operating expenses for the conference hall are estimated at Sfr1,401,000. On average, the operating expenses amount to Sfr8,875 per workplace, Sfr3,857 per parking space and Sfr2,155 per seat in the conference hall.

#### **Furniture**

379. Furniture amounts to Sfr8,500,000 or 4.5 per cent of total project budget, including desks, chairs, closets, bookshelves and computer equipment. This provision for the administrative building amounts to Sfr7,500,000, made up of Sfr7,000,000 for offices and Sfr500,000 for the underground area. The budget for the conference hall amounts to Sfr1,000,000. Furniture costs amount to Sfr12,500 per workplace and Sfr1,538 per seat in the conference hall.

## Contingency

380. The contingency provision currently stands at Sfr5,585,000 or 2.9 per cent of the project budget, following transfers-out in line with the project progress. This provision consists of Sfr4,487,000 for the administrative building, including Sfr3,379,000 for offices and Sfr1,107 for the underground area, and Sfr1,098,000 for the conference hall.

## **Project Implementation Schedule**

- 381. The new construction project is being implemented over a period of seven years, starting with the conclusion of the architectural competition in 2000 and finishing in June-September 2007. The construction work is estimated to commence around September 2003 and will take 43 months to complete.
- 382. Table 31 indicates the total project cost of Sfr190,500,000 on an annual basis for building components and contingency (part A) as well as by object of expenditure (part B). The revised project schedule for the new construction project and its comparison with the project plans of September 2002 is illustrated in Table 32. The estimated duration of selected work elements for the revised project is shown in Table 33.

Table 31 **Project Summary by Building Components, Object of Expenditure and Year**(in thousands of Swiss francs)

	2000	2001	2002	2003	2004	2005	2006	2007	Total
A. By building components and contingency									
1. Building components									
Administrative building									
Underground area	67	879	1,846	9,828	7,949	8,513	6,026	1,311	36,419
Office area	206	2,682	5,632	24,398	24,246	26,103	22,362	10,965	116,594
Total, Admin. bldg.	273	3,561	7,478	34,226	32,195	34,616	28,388	12,276	153,013
Conference hall	58	756	1,588	6,532	6,805	7,334	6,594	2,235	31,902
Total, A.1	331	4,317	9,066	40,758	39,000	41,950	34,982	14,511	184,915
2. Contingency								5,585	5,585
TOTAL	331	4,317	9,066	40,758	39,000	41,950	34,982	20,096	190,500
B. By object of expenditure									
1. Construction									
Pre-structural works	-	-	-	10,829	239	-	-	-	11,068
Structural works	-	-	-	22,713	36,011	39,200	25,890	-	123,814
Special equipment/services and external works	-	-	-	-	-	-	5,342	2,047	7,389
Total, B.1	-	-	-	33,542	36,250	39,200	31,232	2,047	142,271
2. Contractual services									
Honorariums of architects and engineers	51	4,254	7,370	6,210	800	800	1,500	1,915	22,900
Project management	280	63	336	322	500	500	500	299	2,800
Audit review	-	-	442	2	-	-	-	-	444
Total, B.2	331	4,317	8,148	6,534	1,300	1,300	2,000	2,214	26,144
3. Operating expenses	-	-	918	682	1,450	1,450	1,750	1,750	8,000
4. Furniture	-	-	-	-	-	-	-	8,500	8,500
Total, B.1-B.4	331	4,317	9,066	40,758	39,000	41,950	34,982	14,511	184,915
5. Contingency								5,585	5,585
TOTAL	331	4,317	9,066	40,758	39,000	41,950	34,982	20,096	190,500

Figures may not add up due to rounding

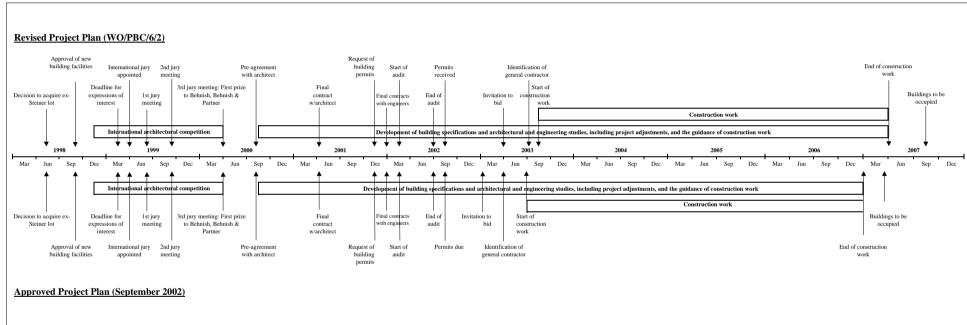


Table 32. Revised and Approved Project Plans by Implementation Period

Table 33
Revised Schedule for Selected Work Elements

	Approved Estimates (A/37/2)	Revised Estimates (WO/PBC/6/2)
International architectural competition	Nov 1998, 5 months	Nov 1998, 5 months
Development of detailed building specifications	Sep 2000, 24 months	Sep 2000, 24 months
Modification of project plans based on audit review recommendations	Sep 2002, 4 months	Sep 2002, 5 months
Start of the selection of general contractor	Jan 2003	Feb 2003
Finalization of the evaluation of received proposals	Apr 2003	Jun 2003
Selection of general contractor	May 2003	Jul 2003
Construction work Excavation, foundations, primary drainage and preparation of the building site	Jun 2003, 43 months 6 months	Sep 2003, 43 months 12 months
Main load-bearing superstructure up to the roof level Technical installations including heating, ventilation, mechanical and electrical installations	12 months 15 months	19 months 32 months
Development and execution of the roof and facades	15 months	17 months
Interior primary installations, such as floors, walls, ceiling and doors	12 months	13 months
Finishing and fixed furniture installations	8 months	8 months
External works, surface treatment and creation of green spaces	6 months	9 months
Internal fit-outs for office workstations, including office furniture, cabling and specific lighting	5 months	5 months
End of construction work	Jan 2007	Mar 2007
Building refurbishment and occupancy	Jan 2007, 3 months	Mar 2007, 3-5 months
Occupancy	Mar 2007	Jun-Sep 2007

383. In 2000-2001, project expenditure amounted to Sfr4,648,000 or 2.5 per cent of the total project budget. In 2002, the expenditures amounted to Sfr9,066,000 or 4.8 per cent of the project cost, lower by Sfr1,115,000 compared to approved project plans. However, it is expected that the expenditures will increase considerably in 2003 to Sfr40,758,000. Included in this amount is the advance payment to the general contractor at the start of construction works, in line with local norms. It is noted that the construction works are projected to start with a delay of three months compared to the approved plans (Tables 32-33). In 2004-2005 biennium, the project expenditures will peak at Sfr80,950,000. Construction work is expected to be completed by March 2007. This will be followed by the refurbishment of the building complex with necessary furniture and equipment, which will take three to five months. The building is expected to be occupied by June-September 2007 (Tables 32-33).

# Main Contractual Arrangements as of February 2003

384. A list of contractual arrangements set up with parties involved in the project is provided in Table 34.

Table 34 Description of Main Contractual Arrangements as of February 2003
(in thousands of Swiss francs)

Entity	Nature of Entity	Contract Start	Terms of Reference	Value
Behnish, Behnish & Partner, Stuttgart,     Germany - architectural contract	Advisor architect	August 2000	Detailed architectural studies; analysis of tasks and issues; research of essential elements of the overall project; preparation of draft project proposals; detailed development of project plans before an application for building permits is filed with the Geneva authorities; request of building permits; detailed studies on the execution of plan; preparation of relevant documents and RFPs for the tendering process; evaluation and analysis of received bids; development of final project plans based upon the consultation with the general contractor, general architectural guidance; finalization of technical documentation.	11,745
Behnish, Behinish & Partner - contract amendment covering miscellanous engineering services	Miscellanous engineers	July 2001	Engineering studies in the fields of geology, geometry, fire safety, facades, building esthetics, planning of green space, natural and artificial lights	2,817
3. Consortium of Schlaich, Bergermann und Partner GbR-Tremblet SA and Erricos Lygdopoulos	Civil engineers	June 2001	Development of detailed studies in the area of civil engineering	4,196
4. Consortium of Transsolar-Sorane SA and RG Riedweg & Gendre SA	HV (heating and ventilation) engineers	June 2001	Development of detailed studies in the area of heating and ventilation engineering	1,706
5. Consortium of Technic's Energy SA and Amstein+Walthert Geneva SA	Electric engineers		Development of detailed studies in the area of electric engineering	1,850
6. Technic's Energy SA	Sanitary engineers	June 2001	Development of detailed studies in the area of sanitary engineering	584
7. Federal Audit Office of the Swiss Confederation	Auditing agency	February 2002	Audit review of the new construction project	444
8. Département de l'Aménagement, de l'Equipement et du Logement (DAEL), Geneva	Cantonal agency	August 2002	Issuance of required building permits	869
TOTAL				24,211

385. The architects, Behnisch, Behnisch & Partner (BB&P), commenced their work in August 2000 with a pre-project phase which consisted of the analysis and evaluation of the needs and requirements of the client, a study of legal and other related aspects of the project, calculation of gross initial estimates, preparation of provisional technical documentation and summary cost estimates based on the norms of the Swiss Building Cost Classification. The project planning and development phase started in September 2001 and comprised such stages as the elaboration and adaptation of project plans in accordance with local rules, regulations and constraints, detailed estimation of the costs and timeframe of the project, development of detailed requirements concerning the construction work and the materials to be used, update of construction plans and preparation of documents for the building permits and the submission of permit requests to the Geneva authorities on November 29, 2001. Subsequently, detailed building cost estimates (general estimate or *Devis Général*) were prepared in March 2002.

386. After the preparation of the general cost estimates, the architects proceeded with pre-implementation phase of the project, namely finalization of construction plans and drawings, revision and preparation of the inventory of materials to be used, validation of building techniques and principles to be employed, preparation of project plans in required scales and update of project plans based on the recommendations of auditors. This stage included the preparation of tender materials. Specifically, the architects prepared terms of reference, a description of activities to be carried out by building components and types of work and indication of project duration by type of activity. During this phase, the architect has also worked on the modification of project plans based on the auditors' recommendations and preparing tender materials. This phase culminated in the issuance of the tender materials in February-March 2003. As of end 2002, the architects have completed about 75 per cent of the total services valued at around Sfr11,745,000.

387. In July 2001, to facilitate the project planning and development and to reduce management costs for WIPO, a contract arrangement was set up with BB&P on July 27, 2001, as an amendment to their base contract, whereby the architect would collaborate directly with various engineering firms responsible for studies in the fields of geology, geometry, fire security, traffic planning, facades, building esthetics, planning of green areas and natural and artificial lighting.

388. Various engineering firms started their work on the project as of June 2001. These firms have worked closely with the architect in developing various project areas, including detailed cost estimates and project and construction plans, in such areas as civil engineering, heating and ventilation, electric engineering and sanitary engineering. By end of 2002, the engineers have provided approximately 30-40 per cent of total required services as their involvement will be mainly during the construction itself. Their total contract is valued approximately at Sfr8,336,000.

389. Building permits (no. DD 97690) were received from the Geneva authorities on September 20, 2002 at a cost of Sfr869,000. The permits were for the new construction project with the additional storage. Additional permits would be needed if the storage were to be converted into parking.

390. In November 2002, invitations for the submission of the Expression of Interest in the project were advertised in a number of major international newspapers (*Le Monde, El Pais, The Economist, The Herald Tribune*), as well as the *Tribune de Geneve* and the *Neuer Zurcher Zeitung* and published on the Internet. Copies were also sent out to Permanent Missions of WIPO Member States in Geneva. Sixteen construction companies from eight countries have shown an interest. The Secretariat is currently in the process of making a short-list of companies based on such criteria as the degree of experience in the Swiss and/or international construction markets; the availability of references in the area of the construction of buildings, in particular office buildings and conference facilities; the level of generated activities; and creditworthiness and financial situation. The evaluation of proposals received from short-listed candidates and the identification of the winning general contractor will be finalized by the middle of 2003.

## **Update of Project Plans on Additional Parking Spaces**

- 391. The Secretariat has continued to study further the project plans on the additional storage facility and its possible conversion to parking spaces when needed. The additional storage space would be situated on the northern side of GB I building adjacent to the current WIPO underground parking. It would consist of five underground floors and would be 5,191 square meters in area and 14,535 cubic meters in volume. The total capacity of the facility when fully converted into parking spaces would be at least 250 vehicles.
- 392. The Geneva authorities have given its authorization under the PLQ (local district plan) to construct the additional storage facility as part of the new construction project. Additional authorization would be needed for the storage to be converted for use as car park. Consultations are currently underway to obtain the necessary permission for possible conversion of the storage space into parking places.
- 393. The conversion of the additional storage into parking will not involve any large-scale civil engineering work. According to preliminary plans, the cost of the additional storage and its conversion is expected to be accommodated within the overall budget ceiling of Sfr190,500,000. Further details will be available towards the middle of 2003, when a study on the additional parking is finished.
- 394. It is apparent the additional parking would be an economic investment providing necessary parking facilities for the increasing number of government officials, delegates, IP system users, researchers, university students and others who would be using WIPO's facilities, including its conference rooms which would reach a combined capacity of nearly 1,000 seats by 2007. The availability of parking spaces will continue to be limited in the future. The Premises plan of WIPO in Annex A describes the requirements and availability of working and parking spaces for WIPO in 2003-2009. It should be noted that the figures on parking requirements were elaborated based on a lower ratio between required parking spaces and working places (66:100) following the recommendations of the Federal Audit Office (see document A/37/2). According to the Premises plan, WIPO will continue to rent a

substantial number of additional parking spaces for its employees even with the 280 parking spaces made available in the new administrative building. In the *Parking des Nations* alone, WIPO is projected to maintain 268 parking spaces between 2003-2009. WIPO's visitors on the other hand would have no parking available for them except for a few on-street parking spots. The issue of parking will be especially serious during major conferences and meetings held at WIPO's conference facilities.

## **Project Management and Oversight**

395. To enhance the transparency and accountability of the project, the Secretariat has taken steps to keep regional coordinators and interested Member States informed on a regular basis of the project progress and its future plans. For this purpose, the Secretariat held on December 11, 2002, a briefing of Group Coordinators of Member State where they were updated about the project development, revised schedules and upcoming activities. A number of regular briefings and consultations are planned during the project progress in order to establish appropriate oversight mechanisms with the direct involvement of the Member States, as it has been requested by the Assemblies.

396. To ensure a proper management of the project, the Secretariat has also set up an internal oversight mechanism, the Construction Committee, which will monitor and evaluate the project development. The Committee works closely with the internal project management team.

397. As requested by the Member States, an external consultancy firm will be appointed to participate in project management. The involvement of an external management expertise will reinforce the project management and assure the project completion within the planned time frame and approved budgets. The external specialists will participate in the supervision and control of the project implementation process.

398. The selection process has followed standard WIPO procurement procedures which included an invitation to submit offers sent out to eleven firms. Seven firms have provided WIPO with their offers before the deadline set for December 1, 2002.

399. The external specialists will be required to have expertise in the following areas of construction industry: architecture, engineering (civil, heating, ventilation, air conditioning, sanitary, electrical, geological, geotechnical, automation in buildings, etc.), security during construction work, physical security, project costs, insurance and others. Their responsibilities during the project include the following assignments:

- Assist WIPO in the assessment of received bids from general contractors;
- assist WIPO in the establishment of a contract with the general contractor;
- provide WIPO with necessary expertise and information regarding the financial and technical aspects of the project management;

- assist WIPO when necessary in meetings with contractors on planning, development and assessment of project plans;
- provide on a periodic basis project progress reports to WIPO and its Construction Committee informing of the conformity of the project implementation with approved plans and of any potentials risks in project implementation which could result in higher project costs and/or delays in the project timetable;
- advise WIPO on the quality of work accomplished by the general contractor and other contractors;
- advise WIPO on the technical evaluation, needs' assessment and costing of the project.

[Annex C follows]