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PROPOSED PROGRAMME BUDGET FOR THE BIENNIUM 1984-1985

Revised estimates under section 28I, General Services, Geneva, 29B, Conference Services Division, Geneva and 32, Construction, alteration, improvement and major maintenance of premises

Technological innovations in the production of the publications and documentation of the United Nations

Report of the Secretary-General

1. The overall plan for the introduction of word-processing equipment in the documentation chain envisaged an initial introduction at Headquarters in 1978, followed then by Geneva in 1979. 1/ For reasons that have been reported, the introduction at Headquarters was delayed. 2/ The conversion of the Spanish Typing Unit to word processing was completed in 1981 and the English and French Units in 1982.

2. The cost-benefit advantages of word processing were anticipated under the following headings:

(a) Increased productivity in the typing operation;

(b) Savings on paper supplies in the reproduction process; and

(c) Further applications based on electronically stored data.

Although the full benefits of conversion at Headquarters have yet to be achieved, it can be stated that the conversion is demonstrably cost-effective, as well as being a technical success. The current situation is summarized below:

(a) Productivity savings: As indicated in paragraph 29.28 and table 29.26 in the Proposed Programme Budget for the Biennium 1984-1985, 3/ the staffing table of the English, French and Spanish units has been reduced through attrition by twelve posts and the number of additional temporary staff required during the General Assembly has also been reduced by twelve. The resultant savings in salaries, common staff costs and temporary assistance have been sufficient to cover full cost for rental, purchase and maintenance of word-processing equipment.

(b) Paper savings: There has been no measurable impact on the use of reproduction paper. Both technical and psychological problems have delayed the use of photo-reduction in the production of documentation in general distribution. While progress has been made in the in-house use of photocomposition, its use has thus far been restricted to documents which had heretofore been typeset.

(c) Further applications: The entire area of microfiche and archival sub-systems remains to be explored, but real progress has been made in the elimination of repetitive keyboarding. For example, the proposed budgets for both the biennia 1982-1983 and 1984-1985 were photocomposed internally in English and Spanish from word-processing diskettes. Moreover, external typesetting of the 1984-1985 proposed budget in French from diskette, instead of typescript, has resulted in savings on proofreading, as well as typesetting. A further example is the annual Round-up of Resolutions, which this year was released in January. The early release of this document and substantial labour savings in the Department of Public Information were possible because the text of the resolutions of the thirty-seventh session of the General Assembly, amounting to over 500 pages, was transmitted in electronic form from the Department of Conference Services to the Department of Public Information.

3. Word processing has demonstrated its potential in the documentation process. Results provide a more legible product, and will continue to produce substantial economies. It is recommended, therefore, that the introduction of these techniques at Geneva now proceed. It will be recalled that paragraph 29.63 in the proposed programme budget for the biennium 1984-1985 indicates: "At the time of preparation of these estimates, the question of the introduction of word processing in the Conference Services Division, Geneva, was under study. Consequently, a separate report would be submitted to the General Assembly at its thirty-eighth session in the context of the comprehensive reporting on this subject covering all relevant aspects of the matter." 4/

4. The introduction of compatible text processing equipment in the stenographic units in Geneva would make it possible to exchange with Headquarters, via computer and telecommunications, documents for translation and reproduction. Since the periods of peak activity in New York do not coincide with those in Geneva, the communication link would make the assignment of work at the two locations more flexible and efficient. The pouching of a certain amount of in-session documentation in both directions would also be reduced.

5. The installation at Geneva should eventually make it possible to reduce substantially the expenditures in the typing units on temporary assistance, which comprise a sizeable proportion of the staff costs involved there. The net 1981 expenditures for temporary assistance for the English, French and Spanish typing units at Geneva totalled $664,888; in 1982, $787,500.

6. It is envisaged that the introduction of word-processing equipment in the English, French and Spanish units at Geneva would proceed in three phases: (a) recruitment of a co-ordinator; (b) site preparation; (c) progressive installation of equipment simultaneously in the three units.

7. Should the General Assembly approve this proposal, it would be the intention to proceed immediately with the recruitment of a co-ordinator who would work closely with, and under the technical guidance of, the co-ordinator for the programme of technological innovations in the Department of Conference Services in New York. An additional temporary post at the P-4 level would be required as of 1 January 1984 for that purpose. In the forthcoming biennium, the functions of the co-ordinator would be to manage the many disparate activities associated with the physical establishment of the English, French and Spanish word-processing installations. At the same time, the co-ordinator would be responsible for organizing and monitoring the training programme for the staff, and for the development of the procedures that are essential for successful conversion to electronic equipment. A provision of $132,100 would be required under section 29B for that purpose.

8. It is expected that the office space required to accommodate the three stenographic units in the central part of the "E" building of the Palais will become available in early spring of 1984 and that installation could begin at that time. The installation of the equipment would require certain adaptations of the site on which the machines will be located, as well as installations of electrical and electronic connections. A provision of $649,500 would be needed for this purpose. This provision would finance the building and construction work, such as masonry, false-ceilings, carpentry, roof insulation, estimated at $308,000, and the technical work, such as air conditioning, electrical wiring, interconnecting cabling, fire detection, and security equipment, estimated at $341,500.

9. The configuration of the projected installation of the word-processing equipment is summarized in the table below:

Shared devices

5 Wang OIS/140-2 systems with 53.6 megabytes storage; 8" floppy diskette drive; extended memory for WISE

2 control consoles (PC model)

2 6560 ten megabyte disk drives for additional storage

1 Telecommunication facility

2 Intersystem exchange facilities (WISE)

Connected to the five central processing units (CPUs):

Unit	Location	Workstations	Draft printers	Wide-carriage printers	Laser printers
English	6	34	6	1	1
French	5	42	8	1	1
Spanish	4	23	4	1	1
Terminology	5	1	-	-	-
Docs. Control	5	2	1	-	-
Secretariat	5	1	-	-	-
Machine room	GR	-	1	-	-
Total		103	20	3	3

10. The configuration was arrived at after considering the number of permanent posts in each pool, and adjusting downward to account for the average night shift and a conservative rate of absence (for all reasons). In the case of the Spanish Unit, the number of workstations was readjusted upward to account for the large proportion of the work in that unit that is performed by temporary assistance personnel. Printers were configured at a ratio of one draft for every five workstations and one wide-carriage and one laser per unit. Five systems are necessary to support the number of peripheral devices and to supply adequate back-up to each language unit in the event of system failure.

11. This configuration reflects an attempt to ensure full compatibility with the systems installed at Headquarters. To derive the greatest benefits from the various types of equipment offered, it is proposed that:

(a) The CPU's be interconnected, making it possible to share peripheral devices, such as telecommunications and storage facilities;

(b) For draft work, high-speed matrix printers should be installed, rather than daisy wheel printers, which experience has shown to require more maintenance;

(c) The latest model workstation be obtained, i.e. the PC workstation, which contains a 5-inch floppy diskette drive, is ergonomic in design and costs less that the other workstations available;

(d) World Languages software and keyboard layouts be obtained, rather than the currently installed United Nations trilingual. Headquarters plans to convert all systems and workstations to World Languages after the current session of the General Assembly. There is no per terminal charge for the World Languages; United Nations keyboards and PROMs cost $235 per unit. A facility to switch electronically to an AZERTY keyboard for the French Unit is provided for.

12. The total estimated cost of acquiring the equipment and furniture and of the related maintenance in 1984-1985 is detailed below.

A. Acquisition of equipment and furniture

(a) Equipment

Word-processing equipment

		$
5	OIS/140-2 systems, extended memory and 2 shared control consoles	197 800
1	Telecommunications facility (OIS-FP1, OIS-TC, CN-RS232)	1 800
2	WISE (system interchange facility)	11 800
2	6560 10 megabyte disk drives	21 200
103	World Languages PC workstations PC-003B-I, PC-PM041 and PC-AC002	474 600
20	5577 two-speed matrix printers	140 500
3	6581W wide-carriage daisy wheel printers	24 700
3	LPS-12 laser printers	84 600
	Total	957 000

Software and other technical items

20	Acoustic-silencer covers for 5577 printers	12 000
20	Forms tractors for 5577 printers	6 000
2	Modems for communications	5 000
-	Cables, connectors, PROMs (for AZERTY/QWERTY switch on French workstations	17 000
-	Software (World Languages, batch telecommunications)	12 000
	Total	52 000

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13. In addition to the above purchase price of the equipment, the company charges for the delivery and installation of the equipment at a flat rate representing 3 per cent of the purchase price before application of the special rebate granted to the United Nations. On this basis, an additional amount of $37,000 would be required .

(b) Furniture

14. To make the best use of word processors, it is necessary to acquire specific furniture (workstation tables, ergonomic chairs, incandescent desk lights, printer tables, copy holders and reading tables), which for the present project are estimated at $90,000.

B. Maintenance of word-processing equipment, communications and computer costs

15. Under this item, a cost of $234,000 is estimated for the biennium, composed of $210,000 for maintenance of the word-processing equipment, and $24,000 ($12,000 per year) for the telecommunication facility which would be set up between Geneva and Headquarters through the UNOG computer and for the increase in the insurance cost required to cover this equipment. A breakdown of the monthly maintenance costs of the word-processing equipment is provided below:

Item	Number	Unit Price SF per month	Total Cost SF per month
OIS/140	5	735	3 675
6560 disk drives	2	220	440
Extended memory	5	55	275
WISE	2	135	270
5577 printers	20	145	2 900
LPS-12 printers	3	520	1 560
6581WC printers	3	170	510
PC workstations	105	120	12 600
Telecommunications	1	35	35
			22 265 SF at 2.13 = $10 453 per month.

C. Supplies and materials

16. The supplies required to operate the word-processing equipment, including floppy diskettes, disk storage folders, fabric ribbons, laser printer fluids, and print wheels, are estimated at $104,000 ($52,000 per year).

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SUMMARY

17. In summary, the estimated costs for the biennium can be broken down as follows:

		$	$	Budget section
1.	Non-recurrent costs			
(a)	Purchase of word-processing equipment;	957 000		29B
	Purchase of other technical items, such as modems, cable, connectors, PROMs, keycaps, and silencer hoods for printers;	52 000		29B
	Supplier's installation charge	37 000	1 046 000	29B
(b)	Furniture	90 000	90 000	28I
(c)	Site preparation	649 500	649 500	32
	Total non-recurrent costs		1 785 500	
2.	Recurring costs (per biennium)			
(d)	Maintenance of word-processing equipment (20 months)	210 000		29B
	Telecommunications line costs, computer usage costs, insurance	24 000	234 000	29B
(e)	Supplies and materials	-	104 000	28I
(f)	Project co-ordinator	132 100	132 100	29B
	Total recurring costs		470 100	
	Grand Total		2 255 600	

18. It is not possible at this stage to estimate with precision the savings that would be achieved in 1984-1985 as a result of the introduction of word processing at Geneva, but it is expected that increases in productivity comparable to those recorded at Headquarters would materialize. While it cannot be expected that the full cost of purchasing ($1,046,000) and maintaining ($234,000) the new equipment can be recovered in the first two years of operation, it can be expected that, over the expected five-year life of the equipment, savings on temporary assistance and overtime alone will offset that cost. Nevertheless, every effort will be made to meet the full cost of acquisition from within existing resources under section 29B of the programme budget for the biennium 1984-1985 and, therefore, an appropriation for that purpose is not being requested.

19. On that basis, additional appropriations would be required under sections 28I, General Services, Geneva; 29B, Conference Services Division, Geneva; and 32, Construction, alteration, improvement and major maintenance of premises, as follows:

	Section 28I $	Section 29B $	Section 32 $	Total $
Salary and common service costs (1 P-4)	-	132 100	-	132 100
Office furniture	90 000	-	-	90 000
Supplies and materials	104 000	-	-	104 000
Site preparation	-	-	649 500	649 500
	194 000	132 100	649 500	975 600

20. In addition, an amount of $26,800 would be required under section 31, Staff assessment, offset by a similar amount under income section 1.

Notes

1/ A/C.5/32/11.

2/ A/C.5/33/35.

3/ Official Records of the General Assembly, Thirty-eighth Session, Supplement No. 6 (A/38/6).

4/ Ibid., vol. III, p. 490.
