PROBLEMS OF STORAGE AND ITS COSTS
IN ORGANIZATIONS OF THE
UNITED NATIONS SYSTEM

(Addendum)

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I. INTRODUCTION

1. In response to the interest expressed at the fortieth session of the General Assembly in the Joint Inspection Unit carrying out a study on storage of documents, publications and other items, together with related costs, the Unit prepared and submitted to the forty-first session of the General Assembly a report entitled "Problems of storage and its costs in organizations of the United Nations system" (JIU/REP/86/9). However, because of the shortage of time the General Assembly was not in a position to discuss this matter and therefore postponed the debate until its current session. Nevertheless, in the light of the recommendations formulated in the afore-mentioned report a number of actions have been initiated in the United Nations system. An interesting development with respect to utilization of optical-disc technology for storage and retrieval of information has begun in the UN agencies, making the adoption of the optical-disc pilot project by the General Assembly, to serve as a general guide for the UN system, even more necessary and urgent.

2. Accordingly, the Inspectors decided to write an addendum to the basic report for the use of the forty-second session of the General Assembly. Its objective is three-fold: (a) to bring up-to-date the basic report; (b) to inform the delegates of the progress achieved in the implementation of its recommendations; and (c) to focus attention on outstanding problems of which the most important is the introduction of optical-disc technology.

3. The Inspectors also wish to take this opportunity to commend the progress which has been made and to pay tribute to the strong spirit of co-operation on the part of many of those concerned with storage problems and to their willingness to resolve these problems in an efficient and economical way. The support of such UN leaders as the Under-Secretary-General for Administration and Management, the Under-Secretary-General for Conferences and Special Assignments, and the Director-General of UNOG has been an essential element in this progress.

4. The Inspectors were encouraged by the discussion of their report at the Interim Inter-agency meeting on Language Arrangements, Documentation and Publications (IAMLADP). They appreciate greatly the thoughtful comments on their report by the Administrative Committee on Co-ordination and the UN Secretary-General. The latter qualified it as a "most interesting analysis" approached in a "comprehensive and perceptive manner", and described recommendations contained therein as "judicious and workable". The Inspectors are also grateful to have received and utilized comments from other organizations containing views on how best to proceed with the introduction of new technology.

5. Both the basic report and the addendum are designed to contribute to appropriate solutions of existing problems of storage and those which the United Nations will inevitably face in the near future, and to do this within the context of difficult financial situations in various organizations of the United Nations system. The Inspectors confirm their recommendations contained in the basic report. In particular, the Inspectors continue to consider the optical-disc technology to be the most promising answer to problems of storage and retrieval of documentation and, therefore, they have decided, through the addendum, to stress the importance of the test project recommended in the report. In this connection, they would like to inform the General Assembly that they understand that the cost of the pilot project may be significantly lower than the manufacturers had originally estimated.
II. PROGRESS ACHIEVED

6. It will be recalled that the report on "Problems of storage and its costs in organizations of the United Nations system" contained nine specific recommendations relative to (a) volume of documentation (Recommendation 1); (b) management of storage and records (Recommendations 2 and 3); (c) management of space (Recommendations 4 and 5); (d) customary and advanced technology and machinery (Recommendations 6, 7 and 8); and (e) funding (Recommendation 9). During the preparation of the report and after it was printed, these recommendations were the subject of a number of discussions and exchange of views with the services and officials concerned. As a result, even prior to consideration by the General Assembly, it has been possible to initiate some measures in the United Nations to improve the warehousing situation and reduce relative costs. A brief description of the progress achieved is given below:

(a) Volume of documentation

7. In order to further limit the volume of documentation (Recommendation 1), the Inspectors recommended four kinds of action: (a) sending letters to Member States and other addressees, inviting them to reconsider the number of items and copies they receive with a view to reduction; (b) introducing two-column printing of documents and using similar print; (c) inserting a note on the cover page of all documents, informing delegations of the limited production of documentation for reasons of economy and inviting them not to request additional copies, and (d) charging Member States and other users of documents for copies requested above the established quota.

8. The Inspectors observe only limited progress with respect to Recommendation 1. As far as Recommendation 1a is concerned they have taken note of correspondence sent to governments and secretariats (recipients of UN documents) as well as of the intention of the Secretary-General to revise guidelines on distribution of documents and publications, and urge their recipients to be more responsive to such requests, bearing in mind that reduction of the volume of documentation is one of the most important means of achieving economy of UN resources.

9. The Inspectors have also taken note of the Secretary-General's proposed actions with regard to Recommendation 1(c) and believe that UNIDO's experiment with two-column printing may provide the decisive evidence with respect to Recommendation 1(b).

(b) Management of storage and records

10. In the field of management of storage and records the Inspectors formulated two recommendations: - Recommendations 2 and 3 dealt with management of records and Recommendation 4 with management of space.
11. According to the Secretary-General's comments (A/42/295, para. 6), the Publication Board has recently reviewed and issued an administrative instruction governing the regular monitoring and disposal of stock of official records, publications and documents, and has agreed to a drastic reduction in the number of books and documents to be retained.

12. With regard to management of space the rented warehouses in New York were a subject of the Inspectors' special concern since the matter had been raised at the General Assembly, as was a critical warehousing situation in the United Nations Office at Geneva. The Inspectors recommended, for financial as well as safety reasons, to vacate the UN headquarters warehouses in Long Island City and Park Avenue, and to move the stocks to the UN garage (Recommendation 4). In this respect, Recommendation 9(b) provided that "The agreement should be made with the Park Avenue Warehouse landlord to secure the buy-out money for moving it and the Long Island City Warehouse to the Headquarters".

13. Accordingly, the Inspectors were notified by the Department of Conference Services that as of 31 March 1987 the Long Island City warehouse had been vacated and the lease for the facility terminated. The stock of documents and publications that was maintained in the warehouse was reviewed and 50 per cent, amounting to 1,198 tons, was disposed of in the period 31 October 1986 to 31 March 1987. According to the latest information, the material to be retained has been transferred to Headquarters. Final relocation of converted garage space, on the basis of a computerized programme, is well underway with completion scheduled for October 1987.

14. The Secretary-General's comments suggest that as a result of the termination of the lease, savings in excess of $US 400,000 per annum may be achieved. The Inspectors are also satisfied that following their recommendation 9(b), negotiations are underway with the Park Avenue Warehouse landlord concerning the possibility of a buy-out agreement and moving the archives of the Organization to Headquarters, which will result not only in substantial savings but also in operational efficiency (see A/42/295, para. 9).

15. The JIU report identified a number of very critical situations existing in the storage of documents and publications in UNCO. A rapid relocation of the numerous storage facilities was urged (Recommendation 5). In accordance with this recommendation a relocation programme for storage facilities which also included a plan for the re-arrangement of office space, was proposed by a Joint working Group on the Publishing Service. The Inspectors have reviewed this programme and strongly urge its early and full adoption. The implementation of certain of its recommendations was already resulted in major improvements in the storage of documents. However, the programme is far from being completed and much remains to be done. The Inspectors believe that real opportunities for gains in efficiency are being jeopardized by a lengthy process of implementation.
16. In this regard the Inspectors made three recommendations. With regard to Recommendation 6, the computerized inventory and stock review system in the Distribution Section at Headquarters will be fully operational by the end of 1987. It is believed that the system will make possible closer monitoring of the demand for documents and publications, thus providing more data for use in determining roll figures, adjusted to accord with actual usage. Moreover, provision has been included in the 1988-1989 budget for continuing the acquisition of compact shelving. The shelving will be used to relieve storage space shortages at Headquarters, provide for more efficient handling and services to those using documents. The Secretary-General's comments suggest that a number of measures have been implemented or planned in OGS, UNOG and the Regional Economic Commissions (see A/42/295, paras. 11, 12, 13, 14). There seems to be a general eagerness to benefit from technological advances restrained only by financial constraints.

17. As far as implementation of two other recommendations dealing with optical-disc based systems and their funding (Recommendation 9) is concerned, the situation is significantly different. Therefore the status of implementation of Recommendations 7, 8 and 9 is given in a separate chapter.
III. STATUS OF IMPLEMENTATION OF RECOMMENDATIONS 7, 8, 9

18. The Inspectors observed that many organizations had shown a "keen interest in applying modern technology which would be cost-beneficial and allow them to provide efficient professional services". For example, certain organizations, including WIPO, had already been looking into the possibility of potential applications of various types of optical-disc systems. In its comments of 6 November 1986 on the basic report, WIPO stated that it was actively considering the installation of an optical-disc system in the near future for use as an operational archive for its trademark functions. With reference to Recommendation 8, it indicated that it would not be in a position to await the results of the suggested UNOG pilot project by delaying a decision in this matter.

19. With regard to Recommendation 8, it should be noted that the Inspectors did not intend, in any way, to hold organizations back from exploring possible applications of sophisticated technology. Their only wish was to avoid waste and therefore they believed that, once the pilot project had proved successful, conclusions might be drawn as to the most economical way of introducing optical-disc systems and obtaining cost-efficiency, bearing in mind the needs of the UN system, the possibility of their integration into existing computer systems, etc. Now, in view of the delay in considering Recommendation 8 by the General Assembly, the Inspectors actively favour WIPO's entrance into the new technology. The Inspectors recognize clearly, however, that fulfilment of WIPO's highly specialized requirements would have limited utility for the UN system and in no way may replace the recommended pilot project at UNOG.

20. The Inspectors are aware that WIPO has been examining new technologies in order to find one which would eliminate the need for the paper files of the international trademark registry (amounting to 4,200,000 pages of information) at least for normal, daily operations. The objectives were to preserve the full content of the paper files in a much smaller area, to make it easily accessible by machine, facilitate updating and increase security and integrity of files. On the basis of the said examination, WIPO authorities came to the conclusion that an optical-disc system was the most appropriate technology for transforming existing paper files, giving it preference over computer systems, microforms, etc.

21. The technical description, applications and implementation of optical-disc based systems suitable for the United Nations needs are given at length in the basic JIU report and therefore are not repeated here. It is perhaps worth noting that they allow storage of information in a very high density: each optical-disc contains, on average, images of approximately 50,000 A4 size pages (captured by scanning devices). Thus, for example, WIPO will require 84 optical-discs to store 4,200,000 pages of information, now contained in paper files.

22. With regard to the adoption of optical-disc based technology elsewhere in the UN system and especially in the UN Secretariat, the Inspectors continue to believe that it should be gradual and start with a pilot project based in the Palais des Nations. Cost is, of course, a problem. In this connection, the Inspectors would like to report to the General Assembly that according to the latest information available the optimum system may be purchased at approximately $US 200,000 (computer, two optical-disc drives, one scanner, one display unit and one printer). The price also includes one year's maintenance. It is worth mentioning that WIPO's complete system,
determined with the help of consultants, was estimated to cost $US 800,000 for expenditure of hardware and software, and $US 66,000 per year to cover maintenance costs. WIPO anticipated that its one time investment would be recovered in four to five years, not counting the space which would be made available as a result of this operation.

23. The Inspectors realize that resources for the pilot project will be somewhat difficult to find during this period of budgetary austerity, but are confident that this would be a worthwhile investment. It would be the first step towards achieving immediate access to UN documents within the Secretariat. Later the system might be extended to government missions in Geneva and New York (which would be connected to the control system) and eventually to national governments and any other institution wishing to be linked to the system. In addition to the convenience for users of UN documents, who would eventually be able to obtain all documents on their terminals, and to the increase in overall efficiency, an optical-disc system would result in substantial savings in paper, machinery, staff, postage costs, etc., as well as savings in space. When it is realized that it will take about ten years for a complete system to become fully operational in the UN context, it is clear that a start must be made immediately.

24. Other reasons for prompt action are as follows: First, the present technological level of the whole document processing, retrieval and storage operations, within the United Nations, is antiquated. Modernization has to be as much as modernization of the mind, as of the equipment. Staff will have to learn new skills and become accustomed to new ways of doing things. This certainly requires time. Hence the interest of starting on a small scale and expanding the system gradually, when the concept is accepted by all. Second, the UN is in an extremely critical situation with regard to storage space (and space in general). Every year, new documents have to be added to the old, making the space problem more and more acute. Third, in the case of production of new documents, the impact of optical-disc technology will be immediate. At present all documents in five languages (Arabic, English, French, Spanish and Russian) are produced in coded form (Wang diskettes) in New York and will be produced in 1988 in Chinese. As for UNOG, three languages have been taken up and others (Arabic and Russian) will be produced in 1988, and Chinese in 1989. In coded form the documentation produced in one full year may be stored on one single disc. Coded documents can be transferred directly on to discs and can also be relayed electronically. Fourth, the pilot project will make it possible to assess the potential extension of the optical-disc system to administrative services and other potential users.

25. It should be recognized, however, that the system will not be fully operational until the whole documentation of the United Nations has been scanned and stored on discs. A maximum of about 300,000 pages can be scanned annually by one operator working full-time. With ten operators (and ten scanners) it would take about ten years to put all the existing documentation on discs. During that time the present system of storage and distribution will have to be retained. In the Inspectors' estimation 18 man-months will be required to operate the equipment for inputting the documents during the one-year pilot project; supervisory capacity, on the other hand, could be made available by assigning additional functions to existing staff.

(a) Funding

26. As far as the implementation of Recommendation 9(a) and (c) is concerned, the situation is much less encouraging. No resources were found to be available to finance the suggested pilot project.
IV. CONCLUSIONS

27. In general, taking into account limited available resources, the Inspectors are encouraged by the progress achieved in improving the warehousing situation in the UN Secretariat. Substantial savings are expected as a result of termination of the United Nations lease of storage space in the Long Island City Warehouse, and the attention given by the Secretary-General to the rental of premises in Park Avenue.

28. The Inspectors note that eagerness to increase utilization of modern technology is now being translated into specific action, especially in WIPO, which intends to install and start operating an optical-disc system, subject to the approval of the Assembly of the Special Union for the International Registration of Marks (Madrid Union). With regard to their proposed optical-disc pilot project to be carried out at UNOG, the Inspectors would like to report that they are fully aware that obtaining the necessary financial resources in present circumstances is a problem. Nevertheless, they feel that every effort should be made to make necessary funds available. Otherwise, the introduction of this technology for storage and retrieval purposes in the United Nations will be delayed, which in the long run may well prove more expensive for the United Nations.

29. Therefore, the Inspectors confirm their Recommendation 9 with respect to authorizing the pilot project, and urge the General Assembly to arrange its funding. The Inspectors suggest that the General Assembly may wish to consider launching an appeal to Member States to contribute in cash, or in kind, as mentioned by the Secretary-General (see A/42/295, para. 21),