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PROPOSED PROGRAMME BUDGET FOR THE BIENNIUM 1980-1981

JOINT INSPECTION UNIT

Report of the Joint Inspection Unit on the Information Services Unit
Department of International Economic and Social Affairs

Note by the Secretary-General

The Secretary-General has the honour to transmit to the members of the General Assembly the report of the Joint Inspection Unit on the Information Services Unit Department of International Economic and Social Affairs (JIU/REP/79/12).

REPORT

ON THE INFORMATION SERVICES UNIT

DEPARTMENT OF INTERNATIONAL ECONOMIC AND SOCIAL AFFAIRS

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SUMMARY
(including principal conclusions and recommendations)

The chief purpose of the proposed Information Services Unit (ISU) is to make available, through a computerized information system, information contained in unpublished documents in the Department of International Economic and Social Affairs and the Department of Technical Co-operation. The proposal has been before the General Assembly since 1976 and has also been considered by the Committee for Programme and Co-ordination and the Advisory Committee on Administrative and Budgetary Questions. The General Assembly has called for a wide-ranging report on the matter, taking into account, inter alia, the conclusions and recommendations of the Joint Inspection Unit. The present study incorporates these conclusions and recommendations. The Inspectors express their thanks to all who helped them in their task (paragraphs 1-10).

The Unit has been set up in the Department of International Economic and Social Affairs on a provisional basis, and is now entering documents in a pilot data base with a view to the incorporation of the proposed information system as a sub-system of UNBIS, the system developed for the Dag Hammarskjöld Library. The pilot data base will be open to enquiries from the latter part of 1979 (paragraphs 11-13).

The Inspectors consider that the need, or otherwise, for the proposed system can only be demonstrated after a period of use. They recommend that it should be tried out for a period approaching one year, and that in consequence the Assembly should take its final decision on the continuance of the Unit in 1980 (paragraphs 14-20).

It appears that the annual direct costs of the Unit would come to about $250,000 (paragraph 21).

On the question of compatibility with UNBIS and other systems, the Inspectors point out that the MINISIS-based system of ISU is fully compatible with a number of other systems, and that technical measures can be taken, at a certain cost, to make it compatible with UNBIS. They recommend that the Inter-Organization Board for Information Systems should review the proposed system (paragraphs 23-26).

The Inspectors underline the importance of co-operation between ISU and the Electronic Data Processing and Information Systems Service and also the Department of Technical Co-operation (paragraphs 27-28).

Chapter I

HISTORICAL BACKGROUND

1. The proposal to create an Information Services Unit (ISU) within the former Department of Economic and Social Affairs (DESA) appears to have originated in the Department towards the end of 1975, and it was proposed as part of interdivisional sub-programme 2 in the Medium-Term Plan for 1978-81. Its purpose was at that time seen as "to improve the information available to Member States, the Department of Economic and Social Affairs, the regional commissions, field experts and others, by making the existing information in the DESA and the regional commissions better known and more readily available". The plan goes on to explain that valuable information is written up in the Department and the regional commissions but is lost to future users because no system exists to preserve the documents or make their existence known. It also sees a need for a central unit in the DESA to offer advice and assistance to divisions and regional commissions as they develop information systems of their own, and a need for participation by DESA in international work on information systems with a view to co-ordination and compatibility.

2. The Committee for Programme and Co-ordination (CPC) was the first inter-governmental body to consider this proposal (May-June 1976). It found the idea interesting, but expressed concern about its cost-effectiveness and thought that the work of any such unit should be reviewed after a trial period. It also expressed concern about the proliferation of proposals for information systems which did not appear to have been co-ordinated (document A/31/38).

3. The proposal was submitted to the 31st Session of the General Assembly in 1976, but was not discussed for lack of time. As presented in the Programme Budget for 1976-77, document A/C.5/31/69, it incorporates a number of refinements, in particular the exclusion of all published documents, whose bibliographic storage and retrieval had become a function of the Dag Hammarskjöld Library and the Electronic Data Processing and Information Systems Service (EDPIS). The Information Services Unit itself would be a sub-system linked to the proposed United Nations Bibliographic Information System (UNBIS) of the Library, which EDPIS would implement. The cost was estimated at about $235,000 a year, to be met from voluntary funds in the first instance, over a trial period of three years.

4. The Advisory Committee on Administrative and Budgetary Questions (ACABQ) considered the matter in June 1977 and reported its views to the Fifth Committee (document A/32/256 Add.1). The Advisory Committee agreed that it was desirable that the Department should have access to unpublished material of lasting value, but thought that such material must first be selected, in order to make possible a decision whether the amount of it would justify the institution of an information system.

5. The Fifth Committee of the 32nd Session of the General Assembly (1977) had before it, in addition to document A/C.5/31/69, a supplementary report by the Secretary-General, document A/C.5/32/47, which pointed out that the purpose of the Information Services Unit would be not merely the storage and retrieval of information as discussed by the ACABQ, but also the co-ordination of sectoral information systems in various units of the DESA and assistance to Member States in obtaining information, and in addition the co-ordination of the proposed system with those of other members of the United Nations family.

A trial period of two rather than three years was now envisaged, and revised
and reduced financial estimates for it were submitted, totalling $344,000.
The Secretary-General further suggested that at the end of the two year period
the Joint Inspection Unit might assess the desirability of continuing the
operation of the Unit and submit its recommendations to the 34th Session of
the Assembly.

6.   The discussion in the Fifth Committee indicated a good deal of hesitation,
but the Assembly finally adopted a resolution, no. 32/212-V, authorizing the
Secretary-General to make an inventory of the available material in computer-
ready form on a trial basis, deciding that the acceptance of the voluntary
funds (offered by the Government of Sweden) would not imply any commitment to
transfer the costs of the operation to the regular budget after the trial
period, and requesting a progress report to the 33rd Session.   At the same
Session, the General Assembly also adopted resolution 32/197, the "Restructuring
Resolution", in consequence of which the Department of Economic and Social
Affairs was divided into the Department of International Economic and Social
Affairs (DIESA) and the Department of Technical Co-operation for Development
(TCD).   The files to be searched for inventory material were therefore split
between the two Departments.

7.   In March 1978 work began on the selection of documents within DIESA files
for entering in the computer.   The Macro-thesaurus, which was being revised
during 1978 by OECD and a number of international organizations, was chosen as
the basic indexing and accessing list of terms;   the worksheet designed by the
DEVSIS (Development Science Information System) study team at the International
Development Research Centre, Ottawa, was chosen for recording bibliographic and
subject information and several hundred such worksheets were prepared, ready for
processing;   and in the general information systems field, contact was made with
various other active organizations of the United Nations family.   The
Secretary-General reported all this to the 33rd Session of the General Assembly
in document A/C.5/33/4.

8.   Commenting on the Secretary-General's report in October 1978, the ACABQ
(A/33/7/Add.2, paragraph 5) recorded its understanding that EDPIS had not been
associated with the work of the Unit, that the indexing vocabulary differed
from that used by the system (UNBIS) of the Dag Hammarskjöld Library, and that
the system being developed in the ISU could not be regarded as a sub-system of
UNBIS.   The Advisory Committee also noted (paragraph 6) a plan to establish an
information system in the TCD and warned against any emergence of unco-ordinated
systems in the economic and social sector.   It thought that all the parties
concerned should be brought together by the Information Systems Board, and that
a decision on the computerization of the DIESA material should be deferred to
the 34th Session.

9.   In the course of the discussion in the Fifth Committee in 1978, a number
of delegates expressed doubts about the value of the proposed Unit and the
apparent lack of co-ordination.   But the Assistant Secretary-General for
Programme Planning and Co-ordination gave some helpful assurances.   He told
the Committee that the Information Systems Board had reviewed and approved the
proposed system in 1977, that the ISU's system would be compatible with that
of the Library and that there would be no duplication with any work on an
information system for the TCD.   He admitted that communication between ISU
and EDPIS had perhaps not been as full as it should have been, but he gave
assurances that communications between the two would continue to improve.   In
the outcome, the Assembly adopted resolution 33/116-A which authorized the
Secretary-General to "use computerization in carrying out the work of the ISU

in 1979" on the basis proposed in the supplementary report of the previous year
(i.e. with EDPIS support), and requested him to ensure that the unpublished
material held in TCD was fully utilized and to make a wide-ranging report to
the 34th Session taking into account, _inter alia_, the conclusions and
recommendations of the Joint Inspection Unit.

10. The present study incorporates these conclusions and recommendations. In
making it, the Inspectors had a number of useful discussions with members of the
ISU itself, of the Department of International Economic and Social Affairs, the
Department of Technical Co-operation for Development, the Dag Hammarskjöld
Library, the Electronic Data Processing and Information Systems Service and
others. They express their thanks for the helpfulness and frankness of all
concerned.

Chapter II

CURRENT SITUATION

11. The ISU now consists of four established staff (a Chief of Unit, a Systems Officer, a Research Assistant and a Secretary) plus two temporary assistants (a second Systems Officer and a second Research Assistant) engaged for a six-month period. There was some delay in filling the posts with persons having the requisite technical qualifications, but this was completed in March 1979 and a start was soon made with the indexing of selected documents, mostly from DIESA, and processing them for computerization. The documents are selected by substantive officers within the Division, and comprise unpublished material such as mission reports, internal memoranda, special studies, etc. The worksheet and abstracts for each document are at present prepared in ISU, but it is the intention that once the system gets going, this should be done in the substantive divisions: in particular, substantive officers will be asked to write a short abstract at the time of drafting the document in question. The Inspectors believe that the substantive officers should be involved in this task as soon as possible. About 100 documents are being entered each week, and the plan is to have a pilot data-base of about 3,000 documents from DIESA and TCD ready for searching by September-October 1979, after a preliminary test in the summer. At present the Unit is using a mini-computer made available without charge by the Franklin Institute of Paramus, New Jersey, for data entry, during the pilot phase, but it is the intention - as is implied by resolution 33/116-A - to establish a data base in the computer of the New York Computer Centre as soon as possible. The pilot data base uses the MINISIS system, developed by the International Development Research Centre of Canada as an adaptation to mini-computers of the ISIS system which is used in a number of UN organizations; by technical means this can be made compatible with the UNBIS system now being developed by EDPIS for the Dag Hammarskjöld Library (entry of documents into this system began in mid-April 1979) and the ISU system can and will therefore be a sub-system of UNBIS for operational purposes.

12. It will therefore be possible for DIESA and TCD, and indeed for all Departments in New York, to use the data base from the last quarter of 1979. Access to the data base may also be open to other members of the UN family, to member governments and to the academic world and the general public. It is ISU's intention that the indexed documents shall be available in microfiche at the Dag Hammarskjöld Library.

13. The ISU is also co-operating with other substantive units which have information systems and related activities, such as the Office for Science and Technology, the Centre for Transnational Corporations and the Population Division, as well as the regional commissions. The Chief of the Unit attends the meetings of the Inter-Organization Board for Information Systems and other expert groups.

Chapter III

THE MAIN ISSUES

14. It appears to the Inspectors that the General Assembly will wish to consider the following issues in coming to a decision:-

(a) Need

15. The Inspectors believe that this is the most critical issue: the need, that is to say, for the proposed DIESA-TCD information sub-system. If the need for it at the costs in prospect can be demonstrated, then the other activities proposed for the Unit, such as advising divisions and regional commissions and participating in international work on information systems, can be taken up; but in the absence of a proven need for the proposed information system, these ancillary activities could not justify the continued existence of the ISU.

16. Many Departments/Divisions in the UN family maintain collections of background material accumulated in the course of technical operations. Such collections are not usually restricted to unpublished material but may include also government publications, extracts from newspapers, journals, etc. collected by staff on duty travel or otherwise and considered useful as background to future activities. Many of these collections are essentially personal to the officer or section that receives the material and out of context might be difficult for others to interpret.

17. Supporters of the proposed sub-system contend that it will produce savings and avoid unnecessary duplication of missions and studies. At the same time it will, they say, provide TCD and DIESA with an easily available source of information which is not now readily accessible through the Departmental filing systems. Some believe that the ISU sub-system will also provide information for the specialized agencies and the regional commissions as well as interested governments. It is also urged, on the basis of previous experience with information systems, that the mere existence of a system creates an awareness of its potential usefulness and a growing tendency to use it.

18. On the other hand, there are those who believe that the documentation now being prepared for the computer may be of little permanent value. They maintain that this information is out-dated very quickly and is not worth computerizing in any case. It is also contended that the sub-system will never be cost-effective and will serve only to support an office with a questionable mission. A connected argument is that it is not possible to justify the creation of a new system or sub-system when a Department/Division has access to a similar on-going system in the same or a related discipline; it is urged that it should be possible to use what already exists and save overhead costs, even if some give-and-take in adjusting requirements becomes necessary.

19. It is not possible at this stage to demonstrate conclusively the arguments in favour of the sub-system or the arguments against it. The Inspectors believe that the pilot sub-system must be in operation for a period approaching one year before the need for the sub-system can be demonstrated on the basis of the use made of it. Use by DIESA and TCD must be the first step. The use must be carefully monitored by valid statistical methods so that the results can be presented to the various bodies concerned, including the General Assembly. It

would be helpful if a users' group with a wider membership than the existing DIESA Information Systems Task Force were to be formed, to both guide the operation of the sub-system and oversee the monitoring of the testing period. If the sub-system proves to be needed in the UN itself at the costs in prospect, further experimentation and adaptation for the benefit of the specialized agencies and other members of the UN family might follow. But the first stage is "in-house" use.

20. If it is accepted that the pilot system should be given approximately a year in which the need (or otherwise) can be demonstrated, it follows that the Assembly's final decision should be deferred until the 35th Session in 1980. The Inspectors recommend this course, subject to the availability of further voluntary funds. In their view, the 1977 decision to limit the trial period of a total of two years was not really practical, because of the amount of preparatory work that has to be done before even the simplest information system can go into operation.

(b) Costs

21. In resolution 33/116-A, authorizing the use of computerization in the performance of the ISU's work in 1979, the General Assembly also recalled its previous decision that there is no commitment to transfer to the regular budget the costs of the operation of the ISU. It will be all the more necessary for the Fifth Committee to consider the financial aspect - in the light of any views which the ACABQ may wish to express - when the time comes (in 1980, if the Inspectors' recommendation above is accepted) to take a decision on the continuance of the Unit.

22. It will be recalled that in 1977, the costs of the two-year experimental period were estimated at some $344,000 (Chapter I above, paragraph 5). This figure is composed of $147,000 for the first year and $196,600 for the second. For future years, firm figures will be before the Assembly in accordance with paragraph 3 of resolution 33/116-A. At the time of writing, these figures are not yet available, but the Inspectors understand that EDPIS-NYCC annual costs for support for the sub-system are likely to come to about $40,000, and costs within the Unit to approximately $200,000. The total annual cost of the Unit may therefore come out not far short of a quarter of a million dollars a year, not counting the cost of time spent on preparing an abstract and a worksheet for each document in the two Departments.

(c) Compatibility

23. Resolution 33/116-A requires that the Secretary-General's report to the 34th Session should cover the extent of compatibility and co-ordination achieved with UNBIS as well as the relevant information systems of other United Nations organizations.

24. Compatibility is a highly technical issue. At the present stage, it appears that the MINISIS-based ISU system is fully compatible with a number of others in the UN family, such as the LABORDOC system of ILO and the CLADES system of CEPAL, which use ISIS. Although UNBIS uses commercial software (ENQUIRE) rather than ISIS, it appears that the format in which documents are entered in UNBIS can be extended to accept most, if not all, of the data, such as abstracts of documents, which prospective users of the ISU system are understood to require. It appears also that it would be possible to take technical measures in order to connect the MINISIS-based system of ISU and the ENQUIRE-based system of the Library in such a way that searches could be made

of both, though possibly not by simultaneous enquiry. These measures for adapting the ISU system to UNBIS would, of course, cost a certain amount.

25. In this context, it may be relevant to observe that there is, or appears to be, a difference of emphasis in the purpose of UNBIS on the one hand, and ISU, LABORDOC, etc., on the other. UNBIS is above all a bibliographic system, oriented towards library requirements, such as the production of catalogues, indexes, etc. The other systems are information systems, oriented towards users of documentation. Any proposed information system in the New York headquarters therefore faces the choice between functional compatibility with systems not in New York and local compatibility with a system having different functions. The technical measures referred to in paragraph 25 above will in most respects bridge this gap.

26. The IOB exists, in part, to serve as a forum for the exchange of views on the introduction of new information systems and to assess the compatibility of new systems with already existing ones in the UN organizations. Even at this late date, a useful purpose could be served if the proposed system were presented to the IOB for review and comment, both generally and with specific regard to its compatibility with existing systems. The Inspectors recommend that this be done. This will also serve to project through the UN system an awareness of the services which ISU hopes to offer to other members of the UN family.

(d) ISU and other organizations

Relationship with EDPIS

27. It became clear to the Inspectors that, as the Assistant Secretary-General for Programme Planning and Co-ordination told the Fifth Committee in 1978, communication between ISU and EDPIS had not in the past been as full as it should have been. They share the Assistant Secretary-General's hopes that communication and mutual confidence between the two bodies will improve. The General Assembly's resolution of 1978 authorizes the continuance of ISU's work on a basis of EDPIS support; the Inspectors cannot think that any other basis than close co-operation could prove fruitful in the future, and they welcome recent efforts to bring this about. The General Assembly may wish to satisfy itself on this matter.

Relationship with Department of Technical Co-operation for Development (TCD)

28. It will be recalled that the ISU was first proposed as a service for the old DESA which was responsible for both substantive and project work in the developmental sector. Now that these two functions have been divided between two Departments, ISU's field of service straddles the line between the new DIESA and TCD. The proposed system could in fact perform a useful bridging function between the two, if properly used, for its data bank should not differentiate between TCD documents and those of DIESA, and should make both categories available to both Departments. A start has only recently been made with the systematic entry of TCD documents into the ISU system and it will be very necessary in the future for all concerned to bear the needs of both Departments in mind when selecting documents for entry into the computer. At a later stage, Departments should also take into account any likely use for the document in question by other members of the UN family.

Chapter IV

CONCLUSIONS

29.   This appears to be the first major attempt to base a computer-assisted information system on unpublished material alone.   One specialized agency's system includes unpublished material, but does not distinguish it from published material;   and the Inspectors were informed that another specialized agency had planned a system based on unpublished material but did not pursue it as the cost was found too great.

30.   It is not possible to determine at this stage the two fundamental questions concerning the future of the ISU: is there a need for an information system based on the unpublished documents of DIESA and TCD?   And, if there is such a need is it worth the money?   A case has certainly been made out for the need.   It may well be that amongst the 20,000 or so unpublished documents in the files of the two Departments (which are growing at a rate of at least 4,000 documents a year) useful information is to be found.   But the only way to verify this point and to measure the use which can be made of it, is to give the system a proper "field trial";   and then use must be measured against cost.