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FINANCIAL, BUDGETARY AND ADMINISTRATIVE
MATTERS

Integrated Systems Improvement Project

Progress Report of the Administrator

Summary

The Administrator's progress report is presented to the Council for its information. The report summarizes the status of implementation as of April 1981 of the information systems projects, started under the aegis of ISIP, and describes the functional capabilities and benefits of the initial versions of these systems. It also covers the utilization of funds for work begun under ISIP and an estimate of the costs for developing the initial versions of these systems as conceived by ISIP.

The organizational arrangements in DMIS for completing the work of ISIP and for continuing the information system activities are also covered.

BACKGROUND

1. In response to the Governing Council's request to improve the quality, timeliness and organization of management information, the Administrator established the Integrated Systems Improvement Project (ISIP). The objective of ISIP was to develop new management information systems for financial reporting, cash management, project monitoring and to help improve the effectiveness and efficiency of all management and administrative functions in UNDP. ISIP was organizationally distinct from the on-going activities of the Division of Management Information Services (DMIS) and reported directly to the Deputy Administrator. The Managerial Policy Group (MPG), chaired by the Deputy Administrator, provided over-all guidance for effective co-ordination of systems design and installation during ISIP and has continued these functions since DMIS took over the activities of ISIP in June 1980.
2. The main elements of the conceptual design, developed in Phase I of the Project, were presented to the Governing Council in June 1978 and the Administrator was then authorised to proceed with Phase II. Following the detailed review and modification of Phase I, the second phase of ISIP proceeded with the development and implementation of a comprehensive, computerized UNDP information system. More detailed information on the conceptual design of the ISIP systems and their progress was reported to the Council in DP/378 (March 1979) and DP/471 (April 1980).
3. As originally planned and reported to the Governing Council in DP/471, ISIP, as a separate organizational entity, was dissolved in 1980 and its functions were taken over as a regular part of the operations of DMIS. Specifically, the Administrator reported to the Council that DMIS had to be strengthened in order to maintain the new systems developed under ISIP, to provide for continued required enhancements of these systems and to operate the new UNDP data processing facility efficiently.
4. Under the Director of DMIS, work is continuing to strengthen the capabilities of the Division so it can, in response to the needs of users, provide the necessary co-ordination, leadership and service for implementing and enhancing information systems in UNDP. It is particularly important for DMIS to be in a position to ensure the continuity of the support and maintenance of the new systems developed with outside consultants, as well as to manage the further development of these systems in close collaboration with user departments after the departure of the consultants.
5. Some of the systems initiated by ISIP became operational during the past year; and, apart from some minor exceptions, the rest will become operational by the end of 1981. It should be understood that the operational systems constitute the first working versions and considerable effort will be needed to accommodate new user requirements that will result from the experience gained during the first years of usage.

I. SYSTEM CAPABILITIES

6. The systems developed under the ISIP project support all the major manage-

ment functions of UNDP, and each of the main systems has been designed to incorporate as many as possible of the specialized requirements of particular organizational units such as the Office for Project Execution (OPE), the Trust Funds and UNFPA. For example, the new accounting system will provide some financial reports designed to meet the special requirements of each of these entities. However, the large main systems started under ISIP were not intended to serve highly specialized management functions that are unique to certain specialized organizational units. As noted in paragraph 32, the development of specialized systems to meet these unique management requirements is part of DMIS's current and future work programme.

7. The information systems under ISIP are structured according to the following major categories of management activities:

- a. Programme and Project Management: Project Budget System; Project Expenditure System; Project Institutional Memory; and the Country Programme Management System.
- b. Accounting: The General Ledger and Financial Reporting System.
- c. Income and Cash Management: Income and Cash Management and Cash Forecasting Systems.
- d. Administrative Budget Formulation and Control: Budget Formulation and Appropriations Control Systems.
- e. Personnel Management: Automated Personnel System.

Programme and Project Management System (PPMS)

8. PPMS is designed to provide UNDP field offices and headquarters units with more detailed project information for project planning, monitoring and evaluation that is more easily accessible, complete and timely than the information currently available. The PPMS cluster of integrated sub-systems make information available on project budgets and expenditures in addition to descriptive information on projects.

9. Project information can be retrieved for any combination of this data according to the selection criteria specified by the user. The latter capability is particularly useful for programming as well as for making historical and current analyses of UNDP activities and trends. Information is available on approved projects, on projects that are being planned, as well as on completed projects.

10. The PPMS cluster of systems is designed to provide users with the capability of accessing information using interactive computer terminals distributed throughout headquarters. The system also generates hard copy reports on the basis of pre-arranged schedules which have been planned to meet the particular needs of field offices, headquarters units and the Executing Agencies.

Accounting

11. UNDP's new accounting system, the General Ledger and Financial Reporting

System (GLFRS), is designed to overcome the major weaknesses of the existing accounting system; specifically, to upgrade the quality and timeliness of financial information currently available to UNDP management on UNDP and the Trust Funds.

12. The system will facilitate the preparation of interim and annual financial statements through the introduction of a new Chart of Accounts and will provide a broad range of summarized financial information on assets, liabilities, income, project expenditures and administrative expenditures. Regular reports will be provided monthly within three working days of the month-end. Also, users will be able to request ad hoc reports at any time during the month. Certain information will also be available on-line through terminals located in user areas.

13. The main users of the GLFRS are the Division of Finance (DOF), OPE, UNFPA, the Trust Funds, the Division of Personnel, the Division of Administrative Management Services and the Regional Bureaux. Certain reports such as the annual financial statements will be distributed to a much wider audience both within UNDP and outside the organization.

Income and Cash Management (ICM)

14. ICM maintains the detailed ledgers for cash, contributions, investments and disbursements for UNDP and UNDP-administered Trust Funds and provides information to the accounting system with respect to income. It is specifically designed to respond to the operational needs of the Treasury Section in DOF and to support the needs of senior management for special reports for financial planning and decision-making. On implementation, the system will enable the Treasury to monitor more closely its cash and investment holdings and cash and currency flows. It will also enable closer follow-up on contributions and other receivables. Implementation of the system is expected to result in a reduction in non-interest bearing cash balances and also to facilitate higher interest earnings for UNDP and the Trust Funds.

15. The Cash Forecasting System will provide cash flow and currency forecasts for all currencies managed by UNDP over a 12-month time horizon in addition to aiding the day-to-day management of cash and investments. It will project the funding requirements for agencies, field offices and UNDP headquarters as well as provide the information for projected income statements and balance sheets for presentation to the Governing Council and management. These forecasts are intended to improve the effectiveness of the cash planning function of UNDP and of the Trust Funds administered by UNDP.

Administrative Budget Formulation and Control

16. The Budget Formulation System is used by the UNDP Budget Section for the preparation of the biennial budgets for UNDP and associated funds. The system provides for the calculation of payrolled staff costs based on projected cost increases for each duty station. The computer-calculated staff costs are then merged with data on the cost estimates for all other objects of expenditure in order to produce budget schedules both at an aggregated and a detailed level,

including comparative figures for the previous biennium.

17. The main advantage of this system is its capability to provide information rapidly on alternative levels of activity: e.g., changes in the numbers or the grading of posts. Once the budget has been approved by the Governing Council, the data base is modified as necessary to reflect any changes made during the approval process and becomes the appropriations data base for the Appropriations Control System and for the issuance of allotments to specific organizational units.

18. The Appropriations Control System is to provide a much needed tool for close monitoring of programme support and administrative expenditures. It provides information on appropriations approved by the Governing Council, allotments issued to field offices and headquarters units, expenditures incurred (based on information from the accounting system) and expenditures extrapolated for the budget period on the basis of expenditure projections and past experience. Summary reports will be available to management, while the detailed analyses will be carried out by the Budget Section. Allotment advices and reports, comparing allotments and projected expenditures, will be forwarded regularly to field offices and headquarters units.

Personnel Management

19. The Automated Personnel System (APS) is designed to provide those officers concerned with personnel management with comprehensive information on all UNDP staff members at headquarters and in the field. This greatly enhanced system will provide users with easy access to timely data on an on-line and interactive basis as well as with periodic hard-copy reports. The system is expected to facilitate more effective and efficient manpower planning and personnel administration.

II. CURRENT STATUS

Programme and Project Management

20. PPMS was originally made up of four separate subsystems: the Project Budget System (PBS), the Project Expenditure System (PES), the Project Institutional Memory (PIM) and the Country Programme Management System (CPMS). The integration of these individual system components into a coherent whole was achieved by mid-1980 which was earlier than originally anticipated. As a result, information from all these systems can be combined to answer specific queries; thus, users view the PPMS as a single system rather than four independent subsystems.

21. The on-line enquiry facility, which allows users to access information without knowledge of a computer programming language, was initially implemented to access information on project budgets and has been extended to include project descriptors of PIM and project expenditure data of PES. An integrated on-line facility has been operational since mid-1980. About 60 end users have been trained since then, and staff from ten organizational units retrieve on-line information regularly.

22. Information based on project descriptors is available on all projects

approved between 1974 and 1980, as well as current approvals. Project descriptors for the entire country programming cycle, including projects operational before 1972, will be accessible by November 1981.

23. The initial version of the Project Budget System including historical budget information dating back to 1975 has become operational as planned. A subsequent version of the system, completed in May 1981, provides a marked improvement in the quality of information on project budgets.

24. The Project Expenditure System (PES) began in late 1980 to produce aggregate expenditure reports utilizing the new system. This year, the PES has begun to process expenditure information on individual projects, as provided by the Executing Agencies, in an improved format that responds more to the user requirements of UNDP.

25. Following an analysis and modification of the current manual system, the software required by the Country Programme Management System (CPMS) has been developed on schedule. The initial version will be available in June 1981.

Accounting

26. The testing of the new General Ledger and Financial Reporting System is almost complete. It is expected that DOF will begin entering data and producing reports in the new format during July 1981. The new system will be run in parallel with the existing accounting system to compare the outputs of each for as long as necessary for users to be satisfied that the new system is achieving the expected results. The system will be fully operational by the end of 1981.

27. In order to facilitate the successful implementation of the initial working version of this system, its design will be frozen for some time after its start-up. Considerable effort will be devoted, however, to monitor user satisfaction and to identify potential areas for enhancement based on the experience gained during the first months of operation. Necessary modifications to the system will be implemented on a phased basis throughout 1982 and 1983 using resources approved within UNDP's administrative budget.

28. As part of UNDP's efforts to improve the quality and timeliness of accounting information, activities for the improvement of field office accounting practices are continuing. This work is being partly funded under a special contribution of \$100,000 from the Government of Japan for this purpose. Of this amount, \$44,356 has been used in 1980, principally for hiring consultants who have assisted in the preparation of revised and comprehensive instructions covering the financial and accounting procedures applicable to field offices, as well as the headquarters examination of field office accounts. These instructions incorporate revised and improved procedures for the preparation of monthly field office accounts which had been introduced by a series of training courses for field office finance staff held between 1978 and 1980 in each geographical region. Following consultations with the agencies in 1980, a number of changes will be introduced in order to improve the handling of agency disbursements by UNDP field offices. As a result of these activities, further important improvements in the timeliness and accuracy of field office accounts are expected in addition to

improvements which have already occurred. Work will continue in this area, taking into account other priorities and the stage of development of accounting systems at headquarters, with a view to consolidating the progress made to date and to ensure the utilization of the remaining balance of the Japanese contribution in the most appropriate and effective manner.

Income and Cash Management

29. The initial processes of the ICM System became operational in May 1981. It is presently anticipated that the balance of the system will be operational in the third quarter of 1981. The Cash Forecasting System is in the final design specification phase. The implementation date will be determined at the end of this phase.

Administrative Budget Formulation and Control

30. The Budget Formulation System is operational and was utilized to prepare the schedules of the 1982-1983 budget. Some modules of the Appropriations Control System are operational and the allotments to UNDP field offices are currently being generated by this system. The system is scheduled to be fully operational by the end of June 1981.

Personnel Management

31. The Automated Personnel System (APS) as originally specified is scheduled to be operational by August, 1981. Most of the data is loaded on the system, programming is virtually complete, and testing is at an advanced stage.

III. CONTINUING INFORMATION SYSTEMS ACTIVITIES

32. As mentioned in paragraph 3 above, in June 1980 ISIP was dissolved as a separate organizational entity. The co-ordinating role played by the ISIP staff in implementing the initial working versions of the information systems under development were assumed by the Division of Management Information Services. Application leaders in user divisions, backstopped technically by DMIS, continue to be responsible for the successful implementation of the initial versions of the systems first started under ISIP. As these systems become operational, fulfilling the mandate of the ISIP project, DMIS will gradually assume responsibility for:

- Providing technical support to make operational systems continuously available to users;
- Developing the current operating versions of systems further to meet changing user needs;
- Developing systems to serve the unique needs of specialized organizational units within UNDP as well as of UNFPA;
- Responding to initiatives by agencies wishing to access operational UNDP systems and concerning co-operation aimed at making UNDP information systems more compatible with those of other members of the UN family;

- Managing all data within the automated information systems in UNDP; and
- Providing computer service.

IV. ORGANIZATION AND RESOURCES FOR DMIS

33. In order to carry out the mandate described in the preceding paragraph, the organization of DMIS has been revised. The permanent staff of DMIS will provide the minimal core that is required to ensure the continuity of system development in UNDP. This permanent core will be augmented by personnel on flexible, fixed-term contracts and, when required, by short-term consultants. The current changeover from a period of intensive system design and development to a more operational orientation will reduce the dependence on outside consultants.

34. A more detailed account of the DMIS organization is included in the supplementary budget estimates for 1980-1981 (DP/550), and in the budget estimates for 1982-1983 (DP/548). The main functions of the three major organizational blocks in DMIS are as follows:

(a) A Computer Operations Section responsible for the physical operation of the computing facilities and the maintenance of system software;

(b) A Data Administration Section to ensure the proper maintenance and future development of the UNDP data base which will include full implementation of the UNDP automated data dictionary to ensure consistency in all data definitions; and

(c) A strengthened System Development Section which will take over the application development responsibility from ISIP and the outside consultants funded under ISIP.

V. IMPLEMENTATION PROBLEMS

35. The systems development effort initiated by ISIP is now in its final stages. Before the end of 1981, all the systems envisaged - with one or two minor exceptions - should have been implemented and become fully operational in their initial versions.

36. This does represent a slippage in time in relation to what was reported to the twenty-seventh Session of the Governing Council (cf. DP/471 and DP/505 and Corr. 1, section IV). However, it was indicated to the Council at that time that problems might occur which could necessitate a higher level of effort. The problems encountered in the last few months of development work have been greater; thus, their solution has been more time-consuming than foreseen. This has caused the delay in the implementation of the systems in question.

37. The problems which have surfaced pertain primarily to the large financial systems (the General Ledger and Financial Reporting System, the Income and Cash Management Systems and the Appropriations Control System) which have accounted for a major share of the ISIP funds and UNDP staff dedicated to systems projects.

The following can be mentioned as being of particular importance:

- The software packages acquired on the recommendation of the consultants have proved much more difficult to adapt to UNDP's requirements than originally envisaged. This has caused slippage both in time and in costs;
- The input of the consultants has had to be considerably increased both in time and cost because during the course of systems development the effort required turned out to be far greater than originally estimated;
- The integration of the Income and Cash Management System, the General Ledger and Financial Reporting System and other related systems has proved to be more time-consuming and difficult than originally estimated;
- Some technical problems at the time of installation of the new computer and new systems software at UNDP have led to delays due to the additional time required by the vendors of hardware and software to solve these problems; and
- The underestimation of the level of user involvement needed to test and install some of the systems as well as the additional time and cost required to mobilize and train users has led to some delay.

VI. FINANCIAL SITUATION

38. Expenditures for ISIP during the period 1979-1980 were estimated in DP/471 at \$2.43 million, excluding the estimated costs of \$0.42 million for external systems consultants to be met by user departments. The actual expenditures for ISIP during the years 1979-1980 are shown in Table I below.

39. As will be seen in Table I, because of the delays caused by the problems outlined in paragraph 37, ISIP expenditures for 1979-1980 were in fact \$2.27 million, or slightly less than projected in June 1980. In addition to this amount charged to ISIP, UNDP user departments as stated above, also spent an additional \$0.42 million on systems consultants during 1980 bringing total expenditures to \$2.69 million for 1979-1980. It was hoped in June of 1980 that these costs of \$0.42 could be met by user departments. However, due to the general rise in costs indicated in the supplementary budget estimates (DP/550), it has not been possible to generate the expected savings to offset these costs.

40. As of 1981 the system's work started under ISIP was fully integrated with other functions of DMIS. Necessary DMIS staff participation in these activities and the costs related thereto can no longer be isolated and are now an integral part of DMIS operations. However, consultancy costs remain identifiable and as shown in Table 2 below, it is calculated that an amount of \$1.0 million will be needed in 1981 for completing the work programme initiated under ISIP and now in progress.

41. The supplementary estimates for the period 1980-1981, include a request in paragraph 53 for approval of \$3.0 million for EDP external services. Of this, a total of \$2.2 million is actually needed^{1/}. As shown in Table 2 and as reported

^{1/} The balance of \$800,000 is for EDP hardware and software and is offset by equivalent savings under object 931 for UNDP's share of NYCS and ICC.

in paragraphs 54 and 55 of DP/550, the total requirement for 1980 and 1981 is \$2.20 million for EDP external consultants, of which \$1.2 million is for 1980 actual costs and \$1.0 million is for 1981 projected costs. Of the amount of \$1.2 million for 1980 for EDP external consultants, \$0.9 million was conditionally approved by the Council but unfunded in conjunction with ISIP, and \$0.15 million was brought to the Council's attention as a possible cost over-run in June 1980 making a total of \$1.05 million^{2/}. Further, as stated in paragraph 39 above, last June it was hoped that the \$0.42 which is included in the \$1.2 million spent in 1980 would be offset by savings in user departments. Unfortunately, these savings did not materialise due to the rapid rise in other costs.

42. Also, as noted in DP/550, no provision was made in the 1980-1981 administrative budget for the continuation of systems development consultant costs in 1981 for work initiated by ISIP. At its twenty-seventh Session the Governing Council endorsed the Administrator's intention to bring to the Council's attention in June 1981 the resources that would be required to ensure the successful completion and operation of UNDP information systems. (Decision 80/51, paragraph 3). Further, since ISIP costs were conditional whereby no provision was made for them in the budget, and since no savings have materialised in user departments, the full amount of \$1.2 million for 1980 must now be provided for. Therefore, a total of \$2.2 million for EDP consultants (\$1.0 million for 1981 and \$1.2 million for 1980) is requested in the supplementary budget estimates (DP/550, paras. 52-54) as part of the total \$3.0 million requested for EDP external services in 1980-1981.

^{2/} Decision 79/42 pertaining to ISIP approved appropriations conditionally in the amount of \$1,320,000 for 1980 to be funded from special external contributions, unless these additional resources did not become available. In decision 80/51, the Council accepted the progress report on ISIP (DP/471) and the funds allocation therein for projected 1980 ISIP expenditures and, further, endorsed the Deputy Administrator's report to the Council alerting them of a possible additional cost overrun of \$.15. In DP/471, the costs for external EDP services were projected to amount to \$.9 million (objects 040 plus 370 in column 4, Annex 1 to DP/471 showing projected 1980 costs for ISIP).

Table 1

Actual 1979-1980 expenditures for system development
activities started under ISIP

Category of expenditure	ISIP 1979-80 projected expenditures DP/471 (March 1980)	ISIP 1979-80 Actual expenditures (March 1981)	User Departments 1980 Actual expenditures (April 1981)	Total 1979-1980 Actual expenditures
	\$ 000	\$ 000	\$ 000	\$ 000
011-013 Salaries and wages	797.3	710.1		710.1
100 Common staff costs	<u>182.2</u>	<u>150.4</u>		<u>150.4</u>
Sub-total	979.5	860.5		860.5
040/375 Consultants	1,456.8	1,400.0	424.2	1,824.2
180 Training	1.0	-		-
240 Travel on official business	49.7	37.5		37.5
330 External printing and binding	0.2	0.2		0.2
370 External data processing	71.0	66.0		66.0
410 Rental and maintenance of office premises	45.6	48.6		48.6
420 Utilities	3.4	2.5		2.5
430 Rental and maintenance of office equipment	6.6	7.0		7.0
440 Communications	8.4	8.0		8.0
510 Stationary and office supplies	1.5	5.6		5.6
610 Office furniture and equipment	2.4	2.4		2.4
930 Subvention to the UN	-	<u>5.8</u>		<u>5.8</u>
Total gross	2,626.1	2,444.1	424.2	2,868.3
Estimated income	<u>(194.6)</u>	<u>(171.8)</u>	-	<u>(171.8)</u>
Total net	<u>2,431.5</u>	<u>2,272.3</u>	<u>424.2</u>	<u>2,696.5</u>

Table 2

1980 actual and 1981 projected costs for consultants for
ISIP system development activities continued by DMS and
funded under the UNDP Administrative Budget

Application	1980 expenditures for consultant services <u>a/</u> (ISIP and user departments)	1981 projected costs for consultant services	Total 1980-1981 projected expenditures for consul- tant services <u>b/</u>
	\$ 000	\$ 000	\$ 000
Project Budget System/Country Programme Management System	216.4	195.5	411.9
Project Expenditure System	61.7	33.2	94.9
Project Institutional Memory	39.0	33.0	72.0
Income and Cash Management and Cash Forecasting	281.9	262.3	544.2
General Ledger and Financial Reporting System	441.3	377.2	818.5
Appropriations Control System and Budget Formulation System	81.1	7.8	88.9
Payroll Interface	35.8	19.9	55.7
Automated Personnel System	39.0	71.0	110.0
Total	<u>1,196.2</u>	<u>990.9</u>	<u>2,196.1</u>

a/ In 1980, \$772.0 thousand was financed under ISIP funds and an additional \$424.2 thousand was spent by user departments on systems consultants. These figures appear under consultants in Table 1 which also includes \$628.0 for 1979 expenditures.

b/ The Administrator's Supplementary Estimates in DP/550 for the period 1980-1981 requests an appropriation of \$3,010.9 million for EDP external services and equipment (object 370). The total of \$2.2 million for consultant services is required in 1980-1981 to complete development of the systems authorized under ISIP and comes under object 370 in the Supplementary Estimates. As noted in DP/550 paragraph 5h, \$0.9 million was conditionally approved for EDP external services (objects 040 and 370, Annex II, DP/471) referred to in decision 80/51 on the ISIP appropriations for 1979-1980. Further, the Deputy Administrator alerted the Council that this amount could be exceeded by an additional \$0.15 million.