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Integrated Management Information System project

Eleventh progress report of the Secretary-General

Summary

Since the tenth progress report (A/53/573 and Add.1), many new developments have taken place, the Integrated Management Information System (IMIS) has been institutionalized and is being implemented at all major duty stations, and its maintenance has been fully assumed by United Nations staff. The estimated costs for the completion of the project have remained within the projections contained in the tenth progress report.

The present report comprises:

- (a) An overall description of the status of the activities related to IMIS development and implementation, a description of the programme of work over the next year and a summary budgetary status;
- (b) A detailed description of the activities undertaken over the past 10 months, which is contained in annex I;
- (c) A description of the actions taken in response to the recommendations of the Board of Auditors, which is contained in annex II;
- (d) IMIS monthly usage statistics, which are contained in annex III.

Over the past year, the new version of Release 2 (Staff entitlements) was implemented at Nairobi, two new versions of Release 3 (Finance and support services) were implemented in New York, Release 3 was successfully implemented at Vienna and Beirut, and the "Time and attendance" component was implemented at Headquarters. Progress has been achieved in the development of Releases 4 (Payroll and related functionalities) and 5 (Operational applications); the reporting facility continued to be enhanced and new human resources functionalities were introduced. Globally, the usage of the system has increased.

The next steps for the completion of the system will see the implementation of Release 3 at all offices away from Headquarters by November 2000 and the implementation of Releases 4 and 5 in New York by the first quarter of 2000 and at all major duty stations by December 2000. These completion dates represent a delay as compared to the projections made in 1998. This slippage is due to two main reasons: the implementation plans for Release 3 at offices away from Headquarters had to be modified to better take into account the implementation support requirements by these offices; and the testing of Release 4 has been expanded. The decision was made to give priority to successful implementation of the system more than to a schedule of implementation, while keeping the expenditures within the projected budget. The successful implementation of Release 3 at Vienna and Beirut confirm the correctness of this decision.

Although major progress has been achieved, the implementation of Release 3 at five duty stations and the implementation of payroll at all duty stations will continue to require a very high level of effort on the part of staff at Headquarters and at the offices concerned. Those efforts will primarily concern the data preparation, implementation and initial operations of Releases 3 and 4. Based on the most recent experience, however, there are reasons to believe that the targets will be achieved while remaining within the approved budgetary provisions.

The present report, in particular its annex II, describes the actions taken in response to the requests contained in General Assembly resolution 53/219.

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I. Introduction

1. The purpose of the Integrated Management Information System (IMIS), which was approved by the General Assembly in section XII of its resolution 43/217 of 21 December 1988, is to develop an integrated system for the processing of and reporting on administrative actions at all major duty stations. IMIS is progressively replacing the numerous independent systems, many of which, built many years ago and mostly for regular budget activities, are no longer able to provide the support needed by management at a time of rapidly changing needs and increasing demands by extensive peacekeeping activities and those financed from extrabudgetary resources. The main areas covered by the system are personnel management; post management; accounting; procurement; travel; payroll; and budget execution. The Secretary-General has submitted 10 progress reports, in 1989 (A/C.5/44/8), 1990 (A/C.5/45/20), 1991 (A/C.5/46/24), 1992 (A/C.5/47/27), 1993 (A/C.5/48/12), 1994 (A/C.5/48/12/Add.1), 1995 (A/C.5/50/35), 1996 (A/C.5/51/23), 1997 (A/52/711), 1998 (A/53/573 and Add.1).

2. Release 1 (Human resources and central controls) of the IMIS system, comprising personnel applications, was installed at Headquarters in September 1993. Releases 2 (Staff entitlements) and 3 (Financial and support services applications) were implemented in April 1995 and 1996, respectively. An improved version of Release 2 was implemented in April 1998. In early 1994, a thorough reprogramming and rebudgeting of the project was undertaken with the aim of redefining the level of resources that were estimated at that time to be required for its completion. The difficulties that followed the implementation of Release 3 at Headquarters and the observations and recommendations made by the Board of Auditors led to a further revision of the project budget at the end of 1997. In July 1998, at the request of the General Assembly, a team of independent experts conducted a review of the system and of the project (see A/53/662). The system is currently installed at the eight major Secretariat duty stations — New York, Addis Ababa, Bangkok, Beirut, Geneva, Nairobi, Santiago and Vienna.

II. Status of the project

3. The period being reported saw the standardization of the system worldwide, the completion of enhancements to the system to facilitate its implementation at offices

away from headquarters, the implementation of new versions of the software at all duty stations, the implementation of new releases both by offices away from Headquarters and other user organizations, and the completion of the set-up of the IMIS maintenance team. Currently, the system is installed at 11 different sites in eight different locations around the world. It is being used by almost 2,500 staff members in the United Nations Secretariat alone. Due to new functionalities that were added and expanded facilities provided by the reporting module, the usage of the system has considerably increased, in particular at Headquarters. This confirms once more the sound design of the system and its reliability. Through IMIS, the United Nations Secretariat is the only organization of the United Nations system that has at its disposal a fully integrated management system consisting of personnel, finance, support services and payroll processes.

4. The progress was made possible thanks to the hard work and commitment of staff at all duty stations, in particular in the Department of Management, who managed to carry the duties related to the above tasks in addition, in most cases, to their ongoing work. Due account should be taken of the fact that in the industry, additions of new functionalities (such as the time and attendance and the recruitment functionalities), which were implemented during the period under review, are considered major projects in themselves, while within the framework of the entire project these are marginal although essential additions.

5. Since its inception, the development of IMIS has included several parallel and interdependent activities: definition of requirements, documentation of most administrative business processes, programming and implementation of the system, development of a training strategy and of procedural and other manuals, development of structured reports, standardization of processes among duty stations etc.

6. As documented in previous reports, one of the main difficulties was the definition of requirements and the documentation of processes. In a way, the technical part, the development of the code, was relatively easy. The structure of the database, the definition of the data and the detailed documentation of business processes are probably the most important achievements of the development process. This knowledge is the foundation of the system, and to a large extent is definitive, requiring only updates based on new needs but no further basic research, study or reengineering. On the other hand, technology has evolved dramatically since the beginning of the development of the

system, mainly from two points of view: easier users interaction with systems in general and broader accessibility to systems, mainly through the Internet. This trend is bound to continue and accelerate. The development effort since the inception of the project was geared towards the codification of the requirements and the development of as many specific functionalities as possible. Not to hamper the development process, it was necessary to maintain a stable technical environment. The development effort will come to an end, basically, by the end of 1999. This will allow the maintenance team to progressively and incrementally redirect its efforts towards aligning the IMIS system to the new mainstream tools, improving user interaction, in particular in the human resources area, and developing easier and global remote access through the Internet while at the same time addressing other users' requests, in particular in the human resources area.

7. Since February 1999, with the implementation of Release 2 at the United Nations Office at Nairobi, the human resources functionalities are in full use at all major duty stations. This ensures consistency in the granting of benefits, in data and in reporting. Copies of the databases are sent electronically to Headquarters on a regular basis, and are used by the Office of Human Resources Management and the Office of Programme Planning, Budget and Accounts for monitoring and global reporting purposes.

8. The main activities in the human resources area during the period under review consisted in the development of new processes or the enhancement of old ones to better support payroll processing, the enhancement and implementation of the recruitment tracking functionality, and the development and implementation of the new time and attendance functionality.

9. The main tasks that will be undertaken by the Office of Human Resources Management over the next year aim to support offices away from Headquarters in implementing the new functionalities, and to ensure that all data is clean and complete for the implementation of Release 4 (Payroll and related functionalities).

10. Concerning Release 3 (Finance and support services), one set of major enhancements that had been initiated in 1998 was implemented on schedule in January 1999, while others were and continue to be implemented incrementally during the year. They aim to facilitate the processing of specific transactions, to add functionalities for the processing of payroll, including disbursements, and to better meet the needs of offices away from Headquarters and facilitate electronic inter-office voucher processing and

the consolidation of financial data. In parallel, changes to the code were made by the IMIS team to further enhance the internal operations of the system, mainly in relation to accounting and disbursements. Finally, new functionalities to support technical cooperation activities were introduced. They will be used mostly by those duty stations where a high percentage of activities are financed by extrabudgetary resources.

11. Diagnostic tools continue to be run on a regular basis to verify the data integrity of the accounting functionalities. Financial statements for 31 December 1998 and 30 June 1999 were completed on schedule.

12. Major efforts had to be made and will continue to be made, especially by the Office of Programme Planning, Budget and Accounts, to support the implementation of Release 3 at offices away from headquarters. Several staff members travel to all duty stations for data preparation, technical installation, conversions, training and post implementation support. The benefits derived from this type of support to offices away from Headquarters goes far beyond the implementation of Release 3 itself. In fact, these missions by staff members highly skilled and competent in specific areas of accounting, treasury, budget, travel and procurement present a unique opportunity for a review of local processes and policies, for a transfer of knowledge to local staff, and for staff from Headquarters to learn more about the needs and operations of these offices. This will facilitate the ongoing support that will be provided to them.

13. In the area of support services, enhancements were introduced in travel and procurement to meet the specific requirements of offices away from headquarters and to facilitate certain types of transactions.

14. The main development effort that has continued over the period under review concerns Release 4 (Payroll and related functionalities), including the time and attendance, insurance, and rental subsidy functionalities. This took longer than planned due to additional complexities that arose during the process. The entire payroll code has been received by the United Nations and is under extensive testing. In addition to the complexities that are related to the essence itself of the United Nations payroll, payments in multiple currencies, multiple locations, using hundreds of different salary scales, applying complex entitlements and retroactive calculations, the payroll functionality must fully integrate with the other parts of the system, in particular the human resources, accounting, travel and treasury functionalities. The testing is therefore comprehensive and broad-based, providing an opportunity

to verify the data integrity of the system, and at the same time the quality of the data that has been entered over the years.

15. The scope of the testing has been progressively expanded to ensure that once moved to production the system is as free of errors as possible. The IMIS Steering Committee, which monitors on a regular basis the activities and progress of the project, determined that Release 4 will not be implemented until a high level of confidence in the accuracy of the processing has been gained. This, together with the additional complexities referred to above, have lead to a slippage in the implementation date of Release 4, now scheduled for the first quarter of 2000. The related insurance and rental subsidy functionalities will also be implemented at that time. Due to the advanced stage reached by the testing process, this date can now be considered firm.

16. Work is also progressing as far as additional functionalities of a global nature are concerned, improved queuing of transactions between users, automated data distribution of reference tables, consolidation of data and automated processing of inter-office financial transactions. Queuing and data distribution are currently being implemented. The other parts are at an advanced stage of design or development and are expected to be completed by early 2000.

17. As indicated above, the implementation at offices away from headquarters is a major undertaking, and each such implementation requires an unprecedented level of effort on the part of staff both at Headquarters and at these offices. In addition, the dates have to be established in a way that avoids any negative impact on regular accounting cycles (preparation of financial statements, the closing of the biennium and annual accounts for peacekeeping operations). Finally, the decision to increase the support to offices away from Headquarters by sending to each duty station larger teams for longer durations has made it impossible to proceed to the implementation of Release 3 at two duty stations at the same time as originally foreseen. There has therefore been a reordering of the implementation dates of Release 3. Based on the experience gained in the successful implementations at Vienna and Beirut, the new schedule foresees a completion of the implementation by November 2000 (the completion date had previously been scheduled for August 2000). Preparatory activities are already ongoing at all the remaining duty stations.

18. Due to the reordering of the implementation date of Release 4 at Headquarters from September 1999 to the first

quarter of 2000, the implementation of Release 4 at offices away from headquarters is not expected to be completed before December 2000. Subject to the satisfactory operations of the new payroll in New York, in some duty stations its implementation may be done concurrently with the implementation of Release 3. The legacy payroll systems at all duty stations have been made year 2000 (Y2K) compliant so that this delay will not have any negative operational impact.

19. Major efforts continued in the area of reporting. The number of standard reports was increased by 56 per cent, others were modified to better meet the users needs or new requirements and the application was enhanced from a technical point of view.

20. A new, Y2K-compliant version of IMIS, was introduced in July 1999, and enhancements were made to the application to improve its response time. New servers are being procured for all offices away from headquarters and for Headquarters itself to meet the increased power required by the implementation of Releases 3 and 4 and by the growing usage of the system.

21. The maintenance of the system has been completely taken over by the IMIS team, while the main contractor continues to work on the remaining parts of the system under development.

22. The establishment of a training programme as part of the overall training plan of the United Nations is in progress, and the IMIS training module and users procedures are being updated and made available to the staff through the Intranet. As indicated above, a major effort has been made to provide a level of support and training to offices away from Headquarters higher than initially foreseen.

23. Discussions with the other organizations using IMIS towards the creation of a common maintenance structure are progressing. United Nations Development Programme (UNDP) representatives have been associated to the work of the IMIS Steering Committee.

24. In parallel, the United Nations is actively considering the implementation of the recommendation of the Advisory Committee on Administrative and Budgetary Questions concerning the possible merger of IMIS with the Information Technology Services Division. The United Nations concurs with the belief of the Committee that this could benefit the maintenance process of the system through the synergy of technical staff in both areas. Upon conclusion of the discussions concerning the creation of a common service, a formal decision will be made for its

possible implementation in the year 2000. This would have no budgetary implications.

25. Progress was made for the remote accessing of IMIS. The present technical solutions are however not completely satisfactory for remote high volumes of transactions such as those required by peacekeeping missions. Research will continue both to improve the performance of the remote access using the current tools and to explore other Internet-related techniques.

26. The implementation of IMIS in peacekeeping missions, which was mandated by the General Assembly in its resolution 53/237, will require that technical solutions be determined, depending on local conditions, and that procedures and documentation be reviewed. Remote accessing to IMIS is one of the critical requirements for the implementation of the system at many of the missions. The issue of the application of IMIS to peacekeeping operations is under review, and will be further addressed in the context of the next progress report on IMIS.

27. The Assistant Secretaries-General for Programme Planning, Budget and Accounts and for Central Support Services meet on a regular basis with senior staff of both offices to review in detail the implementation plans of Release 3 at offices away from Headquarters and determine corrective actions, as necessary. The implementation teams report on a regular basis on progress made and issues that arise at each location. The IMIS Steering Committee meets on a regular basis to review progress made in the development and testing of the system, and in addressing issues as they may arise or as they are reported by its members.

28. The Under-Secretary-General for Management recirculated Secretary-General's bulletin ST/SGB/276, "Integrated Management Information System: definition of responsibility for the implementation and operation of the System and terms of reference of the Steering Committee" to all heads of offices away from headquarters, and, where applicable, to the heads of administration of such offices. Each office was requested to prepare its own implementation plan. In preparation for the implementation of Release 4, bulletin ST/SGB/276 will now be circulated to heads of departments and offices to ensure that due attention is given to the quality and reliability of data and processes delegated to their offices.

III. Budgetary matters

29. At its fifty-fourth session, after reviewing the tenth progress report, the report of the Independent Experts and the report of the Board of Auditors, the General Assembly approved overall budget estimates of \$77.6 million until the project end. This was expected to be completed in August 2000. As indicated above, due to the need to expand the testing of "Payroll" and to increase the level of assistance to offices away from Headquarters for the implementation of Release 3, the estimated completion date had to be moved to December 2000. The unappropriated balance of \$3 million is being requested for appropriation within the framework of the proposed programme budget for 2000/2001 (A/54/6, sect. 27D, para. 27D.51). As reflected in table 1 below, the projected overall level of expenditures is currently expected to remain within the approved amount of \$77.6 million. As could be expected, some adjustments had to be made in the distribution of projected expenditures based on the actual expenditures during the period November 1998 to date. Due to the delayed implementation of Releases 3 and 4 at offices away from Headquarters, part of the expenditures, in particular for training and travel foreseen for 1999, have been postponed to 2000.

30. The staff cost projections, based on actual expenditures to date, show a projected lower expenditure of \$336,820. The projected expenditures until the project end concern the salaries of the local coordinators at offices away from Headquarters, the salaries of project staff assigned to the implementation of Releases 3 and 4 worldwide, the salaries of temporary staff assigned to the Office of Programme Planning, Budget and Accounts during the testing and implementation of the payroll functionality, and resources for offices away from headquarters to assist during the implementation phases of Releases 3 and 4.

31. The projected travel costs, related exclusively for implementation activities at offices away from Headquarters, show an increase of \$242,850 due to the higher number of staff assigned to preimplementation and implementation activities and to technical support.

32. The projected training costs show an increase of \$115,440, mainly related to the increased number of staff assigned to training activities to offices away from Headquarters.

33. The projected expenditures for contractual services show a decrease of \$410,210 due to the lower than expected need to rely on external contractors.

34. Projected expenditures for hardware have increased by \$392,990 due to the need to provide more computing

capacity at all duty stations due to the higher than expected usage of the system. Slight adjustments have also been made for software costs, and for supplies and miscellaneous expenses.

Table 1
Revised estimates for the development and implementation budget of the Integrated Management Information System

(Thousands of United States dollars)

	<i>Overall budget estimates approved by the General Assembly</i>	<i>Expenditures as of 31 December 1997</i>	<i>Expenditures for the period January 1998 to September 1999</i>	<i>Projected expenditures for the period October 1999 to project end</i>	<i>Revised total cost of the project</i>	<i>Increase/decrease</i>
General temporary assistance	20 521.37	12 309.02	5 290.45	2 585.08	20 184.55	(336.82)
Travel	1 149.89	603.62	66.14	722.98	1 392.74	242.85
Training	4 681.31	2 218.31	1 426.79	1 151.65	4 796.75	115.44
Contractual services	45 759.11	37 581.11	6 967.79	800.00	45 348.90	(410.21)
Communications	301.76	283.86	0.00	18.00	301.86	0.10
Supplies/miscellaneous expenses	235.71	187.71	6.45	20.00	214.16	(21.55)
Hardware	3 105.28	2 815.28	52.99	630.00	3 498.27	392.99
Software	1 824.47	1 724.47	72.20	45.00	1 841.67	17.20
Total	77 578.90	57 723.38	13 882.81	5 972.71	77 578.90	0.00

IV. Conclusions and recommendations

35. In summary:

(a) Most of the activities that had been planned for the period under review have been completed or are progressing. Delays have been incurred in the completion of the implementation of Release 3 (Finance and Support Services) at offices away from Headquarters and in the implementation of Release 4 (Payroll and related functionalities). The estimated final completion of the project has been moved from August 2000 to December 2000;

(b) The maintenance of the system has been completely assumed by the United Nations;

(c) The overall level of expenditures is projected to remain within the estimates contained in the tenth progress report;

(d) As of the beginning of 2000, the maintenance team will work at enhancing the system using new technologies both to make the system more user friendly and to facilitate remote accessing while addressing other user concerns;

(e) The system has been institutionalized, as demonstrated by its increased usage and by the growing involvement of staff at all duty stations in testing, training and implementation-related activities. The reporting from the system has been improved through modifications to the code and the implementation of more than 100 new reports.

36. The General Assembly may wish to take note of the present report, the revised completion date of the project and the planned activities for the next 12 months.

Annex I

Activities undertaken since the tenth progress report

A. Release 1 (Human resources and central controls)

1. Release 1 supports, *inter alia*, the processing of all personnel actions required for the management of staff of all categories and grades at all duty stations; the skills inventory of staff and the rostering of applicants; the monitoring of the recruitment process, including job classification; the security set-up for accessing the system and performing specific transactions; the security access mechanism and the maintenance of values in reference tables used for the processing of all types of transactions. A total of 72 reference tables are maintained centrally in New York, mainly by the Office of Human Resources Management, concerning, *inter alia*, salary scales, duty stations, posts and entitlements.

2. The human resources applications continue to be heavily used. Since the last quarter of 1998, the number of personnel actions processed at Headquarters, for example, consistently exceeded 2,000 per month, reaching almost 3,000 in July 1999 (see annex IV).

3. The recruitment tracking module underwent major enhancements made by the United Nations team at the request of the Office of Human Resources Management. The Office implemented it at Headquarters on 1 July 1999. It will be implemented at offices away from Headquarters by the end of 1999. The module allows the entering and queuing of recruitment requests, thus streamlining and computerizing the workflow, making it possible, *inter alia*, to produce statistics on the duration between the different steps of the recruitment process. Some 200 pending recruitment cases were loaded upon implementation; close to 150 new cases have been entered since. Almost 150 users were trained at Headquarters, while the focal points from the offices away from Headquarters will be trained in November 1999.

4. New functionalities were added, *inter alia*, to provide flexibility in the payment and administration of staff members from other organizations or to staff members on temporary assignment/detail to other duty stations and peacekeeping missions.

5. The main activities planned in the human resources area for the next 12 months include:

(a) Preparation for Release 4 (Payroll and related functionalities) implementation: this activity, to be

conducted under the leadership of the Office of Human Resources Management, will concern mainly a comparison of data between IMIS and the current payroll, and data review and clean-up (especially work experience/mobility for the determination of the mobility and hardship allowance);

(b) A functionality to facilitate the correction of some types of personnel actions, thus eliminating the need of multiple actions and data fixes;

(c) Introduction of simplified transactions, possibly using new technologies;

(d) Enhancements to the methodology for the creation of historical reports (as of date reporting).

B. Release 2 (Staff entitlements)

6. Release 2 automates the determination of staff benefits by applying, after each personnel action, the staff rules and related calculations to the contractual situation of each staff member. The output forms the basis for the payroll computations. A new version of this release was introduced in April 1998. Since February 1999, with implementation at Nairobi, it is being used by all major duty stations.

7. The following 13 entitlements are currently determined and calculated by the system: gross salary; staff assessment; dependency allowance; adjusted dependency allowance; post adjustment; hardship, mobility and non-removal elements of the mobility and hardship allowance; pension contribution; language allowance; recruitment allowance; salary differential; and non-resident's allowance.

8. Several enhancements were made to this release to support payroll implementation. In particular, a new end of service functionality has been developed and will be implemented with payroll. This is a very complex process that establishes the basis for the computation of the final pay due to staff (or their eligible dependants) when they separate for any reason from the Organization. Moreover, the end of service functionality also expires all of the staff's other entitlements (human resources, rental, insurance etc.).

9. The following eight entitlements have been developed as part of the new end of service functionality: repatriation

grant computation for gross salary; repatriation grant computation for gross salary for staff on board before 1979; repatriation grant computation for staff assessment; repatriation grant computation for staff assessment for staff on Board before 1979; computation of termination indemnity for gross salary; computation of termination indemnity for staff assessment portion; death benefits computation for gross salary; death benefits computation for Staff assessment.

10. In addition, the system also computes the education grant for eligible staff. Since its introduction (June 1997 for advances and April 1998 for claims processing), almost 6,929 advances (in multiple currencies) have been processed in New York.

11. Since the implementation of the new version of Release 2, more than 40,000 personnel actions have been approved at Headquarters. Benefits have been determined for more than 9,500 individual staff, creating close to 130,000 records that will be used for payroll processing. At offices away from Headquarters, almost 26,000 personnel actions have been approved for some 9,300 individual staff, resulting in more than 83,500 records that will be used for payroll processing (see table 2).

C. Release 3 (Financial and support services applications)

12. Release 3 comprises finance and support services applications, and is by far the most extensive and complex of the system. It supports, *inter alia*, budget execution, funds control and obligations, payables, receivables, cash management, accounting, procurement, travel and inter-office vouchers (see A/C.5/50/35, paras. 30 to 51).

13. The main activity consisted in the refinement of this part of the system, with the introduction of 37 main changes plus some other changes developed by UNDP. These aimed at reducing the number of transactions required for the most frequently used processes, such as request for payment and applied deposit for offsetting receivable documents; pre-encumbrance, obligation and request for payment to allow some flexibility, in accordance with the financial rules and regulations, for liquidation against pre-encumbrance and obligation documents; payments for non-obligated lines when processing requests for payment within the ceiling allowed by the financial rules and regulations. Some changes were introduced, *inter alia*, to allow different regrouping of objects of expenditure from one funding period to the next

for purposes of budgeting and issuing allotments. All these enhancements add flexibility to the system.

14. A considerable amount of work was also done by the IMIS team in cooperation with the Treasury and the Office of Programme Planning, Budget and Accounts for the processing of transactions in multiple currencies and electronic funds transfer payments through electronic interchange with financial institutions. The module for the electronic transfer of funds with United States financial institutions will be implemented in October 1999. A new commercial software for the electronic transfer of funds with international financial institutions was purchased and installed at Headquarters. Work is under way to integrate it with IMIS.

15. Pending the introduction of the functionality for processing inter-office financial transactions between IMIS sites referred to below, changes are being developed to improve the processing between those offices that are not yet using Release 3 at Headquarters. A new version of the inter-office voucher import bridge already allows obligations to be liquidated automatically without the need for manual data entry.

16. As indicated in the tenth progress report, the travel and transportation functionality was implemented in September 1997, which date 21,442 travel requests have been processed (2,833 in 1997; 10,504 in 1998; and 8,105 to date in 1999) (see annex III).

17. On average, about 900 travel requests (see table 1) and 700 travel claim documents (travel vouchers, lump sum payments, ticket payments, shipping and insurance payments) are issued in IMIS every month.

18. Enhancements to the travel functionality were also introduced to deal with the processing of travel advances at offices away from Headquarters, where procedures differ from those in New York. In addition, an interface to automate to a large extent the payments to the travel agency upon receipt of electronic invoices was developed by the United Nations team and implemented. It facilitates the processing of such transactions that each have a high number of records to be reconciled.

19. In the area of procurement, it was determined that in some duty stations, the relatively low volume and value of procurement did not justify the implementation of the procurement software used at Headquarters and Geneva and integrated with IMIS. IMIS was therefore enhanced to allow for the issuance of purchase orders from IMIS directly in multiple languages, maintaining the same funds

controls and security existing in the version used at Headquarters.

20. During the reported period, over 6,700 procurement related requisitions were processed by IMIS (see annex III): 1,667 requisitions for goods, 1,034 requisitions for services, 140 blanket requisitions and 3,900 stock requisitions. From

Table 2
Integrated Management Information System usage, August 1999

	<i>UNHQ</i>	<i>UNOV</i>	<i>ESCAP</i>	<i>UNOG</i>	<i>ECLAC</i>	<i>UNON</i>	<i>ECA</i>	<i>ESCWA</i>
Live date								
Release 1	9/93	6/96	8/96	3/97	4/97	6/97	10/97	2/98
Release 2	4/98	8/98	8/98	8/98	9/98	1/99	8/98	7/98
Release 3	4/96	7/99	11/2000	4/2000	2/2000	9/2000	7/2000	10/99
Registered users	1 612	190	54	221	73	189	25	79
Personnel actions approved	177 967	10 918	2 975	30 314	3 469	11 442	5 499	1 856
Database size								
Staff member records	8 258	900	606	3 577	588	1 265	756	245
Household member records	12 975	1 452	1 337	8 107	1 465	2 936	2 215	675

these requisitions, 2,608 purchase orders (1,717 for goods, 891 for services and 140 blanket purchase orders) were issued using the procurement package, which is interfaced with IMIS.

21. During the period 1 September 1998 to 31 August 1999, 226,336 financial documents were processed in IMIS. They included 41,544 payment requests, 28,819 receivables, 13,350 pre-encumbrances of funds, 29,472 obligations and 17,763 disbursements (see annex III).

22. IMIS financial diagnostics are run routinely (either daily or weekly) to examine the integrity of the IMIS posted accounting data. For example, on the detailed and summary ledgers, postings are verified for consistency. Due to their volume (more than 6.7 and 1.8 million entries, respectively), these are run and examined weekly. If any discrepancies are found (the last occasion was in April 1999), corrective action is taken immediately. Other diagnostics also examine the consistency of the documents, such as pre-encumbrances, obligations, receivables and payables. These are run daily. For the current biennium, the number of documents that have been identified for further analysis is very small. As a sample in the case of obligations, less than 10 documents out of more than 64,000 needed to be analysed.

D. Release 4 (Payroll, time and attendance, insurance and rental subsidy)

23. Release 4 of the IMIS system comprises the components that fully cover the payroll, rental subsidy, insurance, and time and attendance functionalities. The software code has been completed and is under test. Overall, Release 4 comprises 600,000 lines of code. The payroll functionality is fully integrated with the human resources, entitlements and accounting functionalities of the system. It is the last major component of the system to be deployed, and the one where most efforts have been concentrated during the past 12 months.

Rental subsidy

24. This process determines eligibility and computes the amount of the subsidy for all staff members, irrespective of their duty stations and the currency of payment of the subsidy.

Insurance

25. The insurance module deals with personal insurance coverage (medical, dental, life or an optional plan) for staff members of the United Nations and for eligible staff members of other United Nations system organizations,

whether active or retired, and their eligible dependants. This module determines the eligibility for insurance for any insurance plan available to the various groups of staff at each duty station.

Time and attendance

26. The time and attendance functionality was implemented in New York in August 1999. This module was created to record annual, sick and special leave and overtime entitlements of the staff. The implementation of this module at Headquarters, led by the Office of Human Resources Management, required the training of over 250 users by United Nations trainers, as well as the collection in electronic format and conversion of historical annual and sick leave data for the past four years (a total of 155,310 records were converted to IMIS). Offices away from Headquarters are expected to implement this module in 2000.

Payroll

27. The payroll functionalities not only calculate salary, based on any of the more than 325 existing salary scales (835 considering the salary scales used for retroactive processes) related to more than 200 duty stations, but also disburses salary in any of the 154 currencies in which those pay scales are denominated. The system retrieves the most up-to-date information on each staff data (e.g., single/dependent), all of the relevant salary scale amounts for that staff, by duty station, at the time the action was effective, whether for a current period or retroactively. The payroll module also retrieves information from the other Release 4 functionalities (rental, insurance, and time and attendance), and includes these elements in the salary computation. All accounting transactions, including expenditures, income, receivables (as well as billing to other agencies) and payable postings, are automatically processed by payroll. In addition, all pending recoveries against staff, in whatever currency they are recorded, are deducted from the monthly salary.

28. The processing of payroll is structured in eight phases:

1. *Initialization*: the system determines the type of payroll to be run and the staff concerned.
2. *Edits and validations*: the system evaluates the situation of each staff member retrieved in the first phase and verifies that they have a valid appointment, post incumbency, payment instructions etc.

3. *Pay period amount*: the system calculates the staff entitlements and prorates them if the staff is not entitled to the full amount.
4. *Net pay*: the system retrieves all outstanding receivables and deducts them from the staff member pay determined in the prior phase.
5. *Accounting*: this phase includes the posting of the accounting records in the general ledger, inter-office and billing arrangements, liquidation of obligations and retroactive accounting.
6. *Salary apportionment*: in this phase, the net salary of the staff is computed in the disbursements currencies.
7. *Payroll disbursement*: in this phase, the system processes the checks and electronic transfers, as applicable.
8. *Monthly payment orders*: in this phase, the system creates the disbursement lists provided to the UNDP resident representatives in the field for disbursement, mainly to local staff.

29. It is of course essential that this sensitive part of the system be tested thoroughly because of both its financial and its accounting implications. The first stage of testing was dedicated to verifying the proper operations of each individual component. This testing was finalized at the beginning of 1999. The second stage of the testing, currently under way, is to test the payroll components integrated with the other parts of the system. A team of 15 testers from the Office of Programme Planning, Budget and Accounts, with the additional participation of IMIS, the Field Administration and Logistics Division, the United Nations Office at Geneva, the United Nations Office at Vienna, the ILO and UNDP staff, is engaged in this effort. This stage of testing is the most complicated since testing must follow the sequential, chronological order of payroll processing. Thus, each phase must complete successfully for the next phase to be tested, and each scenario is tested and retested until the results of all phases are correct for each scenario. It is planned to test a total of about 700 different scenarios through the eight phases.

30. The third and final stage of testing will be the "parallel run", when the output of IMIS will be compared against the output of the current mainframe payroll system. This will cover several months of pay.

31. Some of the features of the new functionalities include:

(a) *Trial/actual runs*: this provides the user with the ability to verify the data of payroll without committing the accounting entries. Thus, the payroll programmes can be run many times over to identify in advance possible errors;

(b) *Ad hoc payroll runs*: although the normal payroll processing is once a month, this feature provides the ability to process and disburse payroll in a timely manner, if the need arises, for a particular group of staff, without having to wait for the regular monthly payroll run;

(c) *Pay through payroll*: IMIS has the ability to request the payment of non-salary items (e.g. travel claim reimbursements) to be disbursed along with the monthly salary. This feature reduces the volume of transactions for the Treasury department and increases the base of compensation available for the recovery of staff receivables.

E. Release 5 (Operational applications)

32. Release 5, which is being developed in parallel with Release 4, is being implemented in stages. Although it was planned to have it completed by mid-1999, it was felt preferable to give priority to Payroll and to concentrate efforts on the latter. Consequently the completion of this Release was delayed. It is expected to be completed during the first quarter of 2000. It comprises the components set out below.

Data distribution

33. This includes the following five sub-components, all under various stages of development:

(a) *Centrally maintained reference tables* (e.g., salary scales) is a process by which reference data, once updated at Headquarters, will be automatically distributed to other offices and organizations. This facility is under system test;

(b) *Transfer in/out* is the process by which IMIS data on a staff member or a post is permanently or temporarily (e.g., mission assignment) transferred from one IMIS database to another. The functional analysis is in progress and expected to be completed by November 1999;

(c) *Consolidated extracts* is the process to merge data from Headquarters and the major duty stations into a single repository. The functional design, technical specifications, construction and unit test are complete.

System test and implementation are scheduled for the end of 1999. Once the consolidated extracts are complete, a functional consolidation of the data needs to be specified and developed in order to automatically produce worldwide reports;

(d) *Inter-office vouchers* is a process to automate the processing of inter-office vouchers between Headquarters and the major duty stations and possibly other organizations, using Release 3 of IMIS. The functional requirements and the technical design for the on-line portion is complete; construction and unit test should be completed by November 1999. The technical design for the interface/batch portions are scheduled to be completed by November 1999;

(e) *Person table replication* is the process that will make the same basic set of data on staff members and other persons available at each Secretariat, to reuse this information worldwide and thus, for example, avoid issuing duplicate index numbers. The functional requirements are complete and the technical design is expected to be completed in October 1999.

Enhanced queuing

34. The queuing mechanism is being used to notify users that a transaction is required to be completed by them. It also allows the monitoring of the completion of the various processes that require many steps and approvals. It is expected to be implemented in October 1999.

Enhanced word-processing integration

35. Word processing is already used for the procurement processing. Functional analysis of word processing for the job description and vacancy processing is scheduled to begin in December 1999.

F. Offices away from Headquarters

36. As previously indicated, Releases 1 and 2 are in operation at all major duty stations. Statistics on the usage of the system in all offices are contained in table 2.

37. Release 3 was implemented by the United Nations Office at Vienna in July 1999. Since it was the first implementation away from Headquarters, it served as a test for future implementations. Following the experience gained for Releases 1 and 2, conversion programmes were developed by the IMIS team in New York to be used for all duty stations. Staff from offices away from Headquarters participate in the implementation at other offices, both to

train colleagues and to gain valuable experience for future implementation at their respective offices.

38. ESCWA successfully implemented Release 3 on 4 October 1999. Approximately 150 staff were trained in 40 training sessions. The success rate of conversions exceeds 99 per cent, and the reconciliation is well under way. It was imperative to implement Release 3 before the year 2000 since the current accounting system is not Y2K compliant and cannot be upgraded. Implementation in the remaining duty stations will take place during 2000.

39. Given the complexity of Release 3, the nature and extent of the preparatory activities and the support required from Headquarters, it has been determined by the Steering Committee that intervals of not less than two months are needed between implementations, and that it will not be possible to proceed to two parallel implementations at the same time, as had been originally envisaged. This is also related to the decision to rely almost exclusively on United Nations staff for implementation activities.

40. The Headquarters implementation team assists the offices away from Headquarters in planning, preparatory activities, conversions and data clean-up and training, and provides post-implementation support. This team consists of eight staff from the Office of Programme Planning, Budget and Accounts, five IMIS staff and one staff each from the Treasury and ITSD. In addition, a transition team of contractors assisted in the preparatory activities at Vienna, Beirut and Geneva. The documentation that they developed to determine workflows and resolve issues has been provided to the remaining locations. At each duty station, there is approximately one month of full-time support prior to implementation and one month of support post-implementation. In addition, issues relating to policy, workflow and procedures are referred to Headquarters during the pre-implementation stages of preparation. In the post-implementation phase, the Office of Programme Planning, Budget and Accounts team assists local staff in establishing a finance help desk function.

41. All duty stations have reported that legacy systems which will remain in use in 2000 are Y2K compliant. All are scheduled to implement the Y2K version of IMIS by the end of October 1999.

G. Technical research, infrastructure and remote accessing

42. The IMIS system, with the implementation of Release 4, will consist of more than 3.6 million lines of code, of which about 17 per cent are for the reporting application.

43. The Y2K version of IMIS was implemented in July 1999 at Headquarters. It comprises the upgraded Y2K-compliant versions of the commercial software used by the system. After some technical work to make IMIS compliant with the versions of the various software tools, IMIS staff, assisted by Department of Management and Field Administration and Logistics Division staff, retested the entire system from a functional point of view in the Y2K laboratory set up by the Information Technology Services Division.

44. All offices away from Headquarters have received the upgraded software, and some have already upgraded to the Y2K versions of the commercial software. UNDP and UNICEF are scheduled to be upgraded in the next few weeks.

45. The Procurement Division, IMIS and the Information Technology Services Division migrated the procurement software to a new hardware platform, "Windows NT", and to the Y2K-compliant windows version of the system. In this case, the Y2K laboratory of the Information Technology Services Division was used to test the compliance of the bridges and interfaces between IMIS and this software. This migration is also the first step in the implementation of the fixed assets module of the system in the first half of 2000.

46. New hardware is being procured for Headquarters and for offices away from Headquarters to accommodate new requirements for Releases 3 and 4 in offices away from Headquarters, and to recycle some obsolete servers which will be kept in some cases for back-up purposes.

47. The major increase in the usage of the system (see annex III) — with more than 900 individual users accessing the system every month, more transactions being performed and a larger database with additional functionalities — have led to occasional slowness in the system performance. As a temporary measure pending the delivery of the new hardware, an additional application server was put in production. In addition, in order to accommodate increased workload in peacekeeping operations, the hours of operation of the system have been expanded and the system was made available seven days per week.

48. Since the start of 1999, technical support for IMIS at offices away from Headquarters has been provided by Geneva staff, which report to the Information Technology

Services Division in New York but is strategically located at Geneva to accommodate offices away from Headquarters issues and problems that arise during the course of the day in their appropriate time zone. In addition, a knowledge-base database for offices away from Headquarters staff is expected to be available from Geneva via the Web by December 1999. This consists of frequently asked IMIS technical questions and answers, downloads and documentation of IMIS releases, IMIS desk procedures and a discussion area. The Geneva staff also provide support for the installation of the new Releases and servers at offices away from Headquarters.

49. All the technical activities related to IMIS development and production support have been taken over by the United Nations, either by the IMIS team or the Information Technology Services Division. The Division is in the process of upgrading its network infrastructure with offices away from Headquarters with more modern, Y2K-compliant technology, which will facilitate the remote support, diagnostic and problem resolution by both ITSD and IMIS staff.

50. During 1999, a new utility was introduced for the batch processing of IMIS (batch manager). This tool was developed in-house by the infrastructure team, and provides the ability to create custom batch job streams without hard coding. This is extremely useful for implementing batch jobs in offices away from Headquarters and for common system customers that have different requirements than the United Nations. It also contains logic to check for the completion of previous job steps, and includes a Web component which can be used to remotely monitor the status of batch jobs.

51. Due to the heavy workload related to Y2K, development and implementation activities, the project for electronic forms to upload data in IMIS is only at its initial stage. A first phase of the project led by the Management Policy Office and the Office of Human Resources Management is under way to make electronic forms available to the staff through the Intranet. As indicated above, as of the second quarter of 2000 it is planned to start looking at ways to progressively upgrade the system to new Internet-based user interfaces, both to facilitate the remote access to the system and to make the system more user friendly. It should be understood, however, that this is a medium-term project that will require a considerable effort on the part of the maintenance team. The other user organizations will be approached to determine whether they would be interested in joining in this effort.

52. Concerning remote accessing to the system, the results of the test have demonstrated the easy feasibility of such a project when land lines are available. Tests were successfully conducted accessing IMIS in New York from Santiago, Geneva and Paris (in the latter case using commercial telephone lines) and at Geneva from Bonn. As a consequence, as of January 2000, the United Nations Framework Convention on Climate Change and the United Nations Convention to Combat Desertification secretariats will start using IMIS at Geneva remotely from Bonn, and tests are being conducted to determine the feasibility of progressively consolidating IMIS operations into a smaller number of sites.

53. The United Nations Office for Project Services (UNOPS), following a review of available alternatives, has begun implementing remote access to IMIS for its decentralized offices using the same technology tested by the United Nations. UNOPS has successfully conducted on-line IMIS training to all staff at decentralized offices at Copenhagen and Kuala Lumpur.

54. Though IMIS remote access has proven to be very successful during the months UNOPS trained its staff on-line, it was decided to start access to the IMIS production server with a small but well trained pilot group. Four finance assistants in the UNOPS Asia Office have been given access to the system since September 1999. Due to time zone differences, the system is available to that office for half a working day only.

H. Reporting

55. The reporting system is now stabilized and its usage is increasing. There are currently 450 active users of the facility. On average, more than 117 users access the reporting facility every day, sometimes several times a day, more than 2,400 reports are generated every month and more than 230 individual users access the facility every month (see annex III).

56. During the period under review, 144 new standard reports were delivered to production, bringing the total number of reports available to 392; 64 additional reports are under development (see table 3). In addition, during the same period, 45 existing reports were enhanced, 29 in the financial area and 16 in other areas. Reports were delivered in the following business areas, where none was available last year: budget, insurance, payroll, technical cooperation, time and attendance, treasury.

57. The reports are based on extracts, specialized databases where the data is compiled and denormalized every night based on the processes of the previous day.

Users authorized to access the reporting database can access the extracts and download the data or selected sets of data for ad hoc reports. There are currently 190 such extracts, while 64 others are under construction.

58. A copy of the databases from offices away from Headquarters is also received on a monthly basis, and is used by Office of Human Resources Management and Office of Programme Planning, Budget and Accounts staff for enquiries and global reporting, such as the annual staff list.

59. It is unquestionably necessary to provide users at all duty stations with a series of standard operational reports, such as those developed to date. This is required to provide offices away from Headquarters and users in departments with consistent, detailed and reliable information to support their decision-making process. The development phase of standard reports is reaching an end, and it is necessary to identify appropriate tools to facilitate the development of other reports by Department of Management offices and other main users to supplement existing reports, create new operational reports and create management reports that can be distributed electronically to senior managers on a regular basis. UNDP, after a rigorous selection process, identified a reporting tool that was adopted as a standard tool for all its reporting requirements. UNDP therefore used it to re-engineer existing United Nations IMIS reports and to develop new financial reports.

Table 3
**Standard reports in production and under development as of September 1999:
 IRFA report statistics, by subject area name within category**

<i>Subject area</i>	<i>In production</i>	<i>In progress</i>	<i>Total</i>
Reference			
Accounting reference	79	1	80
Entitlement reference	25	3	28
Geographic location reference	34	0	34
Personnel reference	23	0	23
Payroll reference	0	1	1
Travel reference	0	0	0
Reference total	161	5	166
Business areas			
Budget	3	3	6
Insurance	0	12	12
Payroll	2	21	23
Personnel administration	41	1	42
Post management	0	0	0
Procurement	0	0	0
Standard financial	78	3	81
Standard financial TC ^a	6	19	25
Time and attendance	6	0	6
Travel and transportation	5	0	5
Treasury	2	0	2
User security	31	0	31
Business areas total	174	59	233
Grand total	335	64	399
Executive offices			
Standard financial	25	0	25
Personnel administration	32	0	32
Executive office total	57	0	57
Grand total	392	64	456

^a Technical cooperation (TC) standard financial reports are counted separately since they are significant in number.

60. The IMIS Steering Committee decided to launch a special project to test the suitability of a tool for United Nations IMIS reporting. More than 20 staff, technical and substantive, from the Office of Programme Planning, Budget and Accounts, the Office of Human Resources Management, the Information Technology Services Division, the Field Administration and Logistics Division,

IMIS, the Treasury, and the Office of Central Support Services attended training in the various technologies related to the tool, and prototypes will soon start to be developed. The United Nations will leverage on the experience and work already done by UNDP, and it is hoped that if the pilot project is successful, both

organizations will be in a position to share further development efforts.

I. Training and user support

61. During the period under review, the following training activities were undertaken:

(a) Training in the implementation of new functionalities, namely in time and attendance and recruitment;

(b) Training for Release 3 implementation at Vienna and Beirut;

(c) Training for implementation of Release 2 at Nairobi;

(d) Training, on a recurrent basis, in the usage of the reporting facility;

(e) Ad hoc training by the IMIS team, the Office of Programme Planning, Budget and Accounts and the Office of Human Resources Management to selected groups of staff on specific issues;

(f) Training to representatives of offices away from Headquarters in the usage of the new recruitment functionality;

(g) Ad hoc internal training by the Office of Programme Planning, Budget and Accounts staff to other office staff on selected functionalities of the system;

(h) Production of a training video on time and attendance for offices away from Headquarters.

62. Training of super users at offices away from Headquarters in the usage of time and attendance and technical training of offices away from Headquarters staff are scheduled for November 1999 at Headquarters.

63. The Office of Human Resources Management completed the update of the human resources desk procedures, while the Office of Programme Planning, Budget and Accounts is in the process of completing the same exercise. The IMIS team updated the procedures related to procurement and travel. They have been uploaded onto a new IMIS desk procedures Web site available through the Intranet. It comprises 3,703 pages. The desk procedures are fully indexed, and a search engine is part of the site for easy identification of the subjects of relevance. The Web-enabled desk procedures are distributed on a regular basis to offices away from Headquarters.

64. The reporting manuals (general, human resources, finance and reference tables) are also being converted into a Web-enabled format, and will incrementally be made available through the Intranet.

65. The Office of Human Resources Management help desk receives more than 100 requests per day. Most of those are about the use of the IMIS functionalities or about administrative rules/policies, while there are also requests for data fixes (300 a year) and transfers of data (400 a year). Based on the number and types of queries, it was concluded that more training in the use of the system and administrative training would be helpful both to improve the usage of the system and to reduce the number of requests.

66. The Office of Programme Planning, Budget and Accounts is in the process of establishing a help desk for all users of the finance components of Release 3. An internal help desk has been in place within the Office for more than one year. The IMIS team is performing Release 3 help desk activities for non-Office users.

67. The on-line training exercises and related data sets are also being updated by the Office of Programme Planning, Budget and Accounts and the Treasury and for implementation at offices away from Headquarters. They are currently being uploaded into the training database. The exercises are being uploaded in the IMIS Web on the Intranet to ensure that all staff have available on-line updated training material.

68. As of 2000, IMIS training will be incorporated into the regular training programmes of the Organization. The Office of Human Resources Management, in cooperation with the user departments and the IMIS project team, is developing a comprehensive training plan and will provide the logistical support for the implementation of the training. Substantive training and updating of materials will be provided by the relevant offices. In preparation for the transition of responsibility, the Office of Human Resources Management has initiated consultations to assess the current status of training, identify future requirements and elaborate an overall strategy. The purpose of the training is to provide the staff members:

(a) With a knowledge of the basic concepts on which United Nations administrative work is based as supported by IMIS (*instructor-led courses and videos*). It should be noted in this connection that any training in IMIS requires a prior knowledge in the applicable rules and regulations of the Organization, hence the importance of this training to supplement any other training that staff

may have received in administrative processes in the United Nations;

(b) With the knowledge required to access all the training and support tools available (*hands-on courses, desk procedures, videos etc.*);

(c) With the tools that will allow them to learn how to use IMIS in support of their activities and of their decision-making process (*reporting and querying*).

J. Other organizations

69. Currently, IMIS is being used by the following other organizations, funds and programmes:

(a) UNDP (Releases 1, 2, 3, and in future the payroll functionality);

(b) UNFPA (through UNDP);

(c) UNOPS (through UNDP);

(d) UNICEF (Releases 1 and 2, and in future the payroll functionality);

(e) The ILO (Release 1, Release 2 in January 2000, and in future the payroll functionality);

(f) ITC (Releases 1 and 2, and in future Releases 3 and 4 through the United Nations Office at Geneva);

(g) UNFCC (Releases 1 and 2, and in future Releases 3 and 4 through the United Nations Office at Geneva);

(h) UNCCD (Releases 1 and 2, and in future Releases 3 and 4 through the United Nations Office at Geneva).

70. UNDP implemented IMIS Release 3 on 20 January 1999. The UNDP system is also used by UNFPA and UNOPS. UNDP introduced 35 enhancements to adapt IMIS to UNDP's business needs. These changes were in the areas of budget allotments and appropriations, banking, deposits, procurement, revaluations and electronic interfaces to and from feeder systems. In addition, extensive changes to account postings were introduced.

71. During implementation of IMIS, UNDP conducted over 500 training courses, through which 3,900 staff participated. A total of 1,100 new users were given finance security rights.

72. Finally, UNDP and the Information Technology Services Division are working closely together to move the hardware and software that IMIS is running to Y2K compliance.

73. UNICEF successfully implemented Release 2 early in 1999, and is planning to implement the time and attendance functionality by the end of 1999.

74. The ILO is currently using Release 1, and is planning the implementation of Release 2, which is linked to the delivery of Release 4 (Payroll and related functionalities) by the United Nations, in early 2000. Concerning Release 4, the ILO has established a plan which targets implementing the payroll functionality (for parallel tests) at the ILO before the end of 2001. Although the ILO has no plans to use Release 3 (Finance and support services) globally, some limited parts of Release 3 might be used because of their integration with the payroll functionality. The ILO expects to begin a project in 2000 to develop and implement a new financial system. This project may consider IMIS Release 3 as an alternative.

K. Common services

75. The cooperation among United Nations organizations has continued in 1999, and the knowledge of the system by the United Nations IMIS team and the IMIS teams in the other organizations has continued to increase.

76. The development of enhancements both in the Release 3 (Finance and support services) and Releases 1 and 2 (Human resources and central controls, and staff entitlements) has been closely coordinated with UNDP, UNICEF and the ILO. Both UNDP and UNICEF have assigned staff to work with the United Nations IMIS team. Changes were made to Release 2 by the ILO due to some differences in the staff rules and regulations of that organization. Other changes were also made to common system entitlements at the initiative of the ILO and were adopted by the other user organizations.

77. UNDP and UNICEF have entrusted the Information Technology Services Division with the technical set-up and operations of their systems.

78. As mentioned in the tenth progress report, a study was initiated in mid-October 1998 within the framework of the working group on IMIS as part of the Task Force on Common Services in order to prepare a comprehensive report outlining possible alternatives for the creation of a common service. Several meetings were held early in 1999 to discuss possible scenarios for the future maintenance of IMIS, including (a) a full common service, (b) a central service with substantive and financial input from other users, and (c) a combination of both (a) and (b) above, by which some organizations would participate in a common

service while a central service is provided to other organizations. The United Nations, taking into account the investments of the Organization, proposed to have a combination of a full common service with UNDP (UNFPA and UNOPS), and a central service with substantive and financial inputs from the other organizations (UNICEF and the ILO). UNDP (UNFPA and UNOPS) and UNICEF agreed to the United Nations proposal. The ILO is still considering the proposal. The final report will be presented to the Task Force shortly.

79. The proposed IMIS maintenance and development governance framework recommends that it be located as a central service within the division of the Department of Management, Office of Central Support Services, and that it consist of three layers: the IMIS Steering Committee, with United Nations and UNDP representatives; the IMIS Division; and the substantive interest groups to be formed in the areas of human resources management, financial management, support services and information technology. These groups would prioritize the work programme requests, and participation in their work would be from all user organizations (UNDP, UNFPA, UNOPS, UNICEF, the ILO, ITC, and the United Nations Framework Convention on Climate Change and Convention to Combat Desertification secretariats). In addition, there would be an IMIS users meeting held annually, to be attended by senior officials from all the IMIS user organizations. The possible integration of IMIS within the Information Technology Services Division would not entail any change in the proposed arrangements for a common service.

Annex II

Actions taken in response to the recommendations contained in the report of the Board of Auditors of 10 December 1997 on the Integrated Management Information System (A/52/755, annex, para. 7)

<i>Recommendation</i>	<i>Comments</i>
(a) The Administration should draw up a plan of action for completion of the personnel-related tables in the database within a specified time-frame, and should periodically review the accuracy of the data;	It was indicated to the Board of Auditors that the tables referred to concerned only 5 per cent of all human resources data in the system, and that in some instances they were not required until implementation of Release 4, of travel and of education grant. With the implementation of Release 2, most of the reference tables have been populated. The remaining will be populated in conjunction with the implementation of payroll, and within the framework of human resources reform activities. A project to populate the staff skills-related data is under way. The recruitment functionalities were implemented in July 1999 (see annex I, para.3).
(b) The Administration should analyse the reasons why Release 2 did not work, draw up a plan of action to enable Release 2 to align with the staff entitlement rules, and formulate a timetable for activating the system;	Action along the lines recommended by the Board of Auditors was already well advanced when the report was issued. By then, the Office of Human Resources Management, the Office of Programme Planning, Budget and Accounts, and the IMIS project team had established a detailed plan and changes to the system were being made and tested. It has been implemented at Headquarters in April 1998, and since then at all other duty stations, UNDP and UNICEF. It will be implemented by the ILO in early 2000.
(c) The Administration should expedite development of a formal set of diagnostic tools to improve the quality and reliability of data recorded in IMIS;	Since February 1998, eight diagnostic tools have been developed and run on a regular basis. They monitor the status of funds, ledger balances and ledger entries, funds and documents balances in ledger entries, interfund balances, obligations and pre-encumbrances, obligation document details and payable documents. The results confirm both the audit ability, the reliability and stability of the system (see annex I, para. 22).
(d) The Administration should treat as a high priority the development of regular reports in IMIS to facilitate the preparation of financial statements, in addition to resolving data integrity problems;	As of September 1999, there were 200 financial-related reports in production. These are supplemented by standard queries that have been made available to specialized users in the Office of Programme Planning, and Budget and Accounts (see table 3; and annex I, para. 56).
(e) The Administration should draw up a comprehensive plan of action indicating time schedules and resources needed to resolve all the outstanding problems generated in IMIS;	Release 2 was implemented at all duty stations. Enhancements to Release 3 were implemented at Headquarters in January 1999 and subsequently. Release 3 will be implemented at all duty stations by November 2000.

Recommendation	Comments
	Releases 4 and 5 will be implemented at Headquarters in early 2000, and at the remaining offices by December 2000.
	Many issues and problems have been addressed, as described in the previous reports and the present report, and major enhancements to Release 3 were implemented during 1999. It will never be possible to address all the issues, both of a policy or a technical nature, that are identified. Priorities are established and are addressed on an ongoing basis. The level of resources estimated to be required until the completion of the implementation of the system at all duty stations as contained in the tenth progress report, has remained unchanged (see present report, paras. 29-34).
(f) The Administration should amend the IMIS contract to update the list of deliverables and the work plan and use them to monitor payments and deliverables;	The list of outstanding deliverables for Releases 4 and 5 has been defined, and an amendment to the contract to reflect all of them was finalized.
(g) The Administration should clearly define system enhancement requests in order to ensure the contractor bears responsibility for carrying out work that is within the scope of the contract;	The contract has been revised and all tasks that have to be performed by the contractor as out of scope have been itemized and clearly identified.
(h) The Administration should secure adequate in-house expertise on the logic, hard codes and other technical features of the system in order to reduce dependence on the IMIS contractor;	Apart from the enhancements that have been requested from the contractor, ongoing maintenance is already being performed by United Nations staff. All posts but one have been filled.
(i) The Administration should deploy sufficient qualified manpower to develop in-house capacity to manage the system;	In the Office of Human Resources Management, the Human Resources Management Information Section has been strengthened within existing resources, and plans are being made to better define its role and responsibilities, including in monitoring and reporting. Within the Office of Programme Planning, Budget and Accounts, both technical and substantive expertise is being strengthened. Training courses are being held regularly to enhance the substantive knowledge of the system.
	Within the Office of Conference and Support Services, the Procurement Division and the Travel and Transportation Service provide support to users in their respective areas of responsibility.
	Resources are being requested in the proposed budget for 2000-2001 for the Office of Human Resources Management, the Office of Programme Planning, Budget and Accounts, and offices away from Headquarters to further strengthen their capability to manage the system from a user's perspective.
(j) The Administration should regard as a high priority the full implementation of the long-term maintenance plan of IMIS, which should take into account the requirements and responsibilities of user offices;	See comments under recommendation (i) above. Maintenance activities are currently performed exclusively by the United Nations IMIS team.

<i>Recommendation</i>	<i>Comments</i>
(k) The Administration should overhaul the existing IMIS reporting facility application to make the extract tables easier to use, and develop a comprehensive reporting system to meet the requirements of different users for regular retrieval of information, thereby minimizing the necessity for ad hoc queries on the database.	<p>The number and quality of the reports made available to the users as standard reports required by a large population on a regular basis has been increased by 144. Some needs required by the Office of Programme Planning, Budget and Accounts for the monitoring of its operations are and will continue to be satisfied through standard queries, as was the case with the old systems. Since they are needed by a limited number of highly specialized staff, these need not be incorporated into the main reporting facility.</p> <p>The capability added early in 1998 to the reporting facility to download selected data to standard office automation tools has greatly improved the availability of data for end-users. The response time of the facility has been improved.</p> <p>The independent experts were satisfied with the work undertaken in this area (see also annex I, paras. 55-60).</p>