Report

on cost measurement systems in the organizations of the United Nations family and the possibility of developing them into cost-benefit systems integrated into comprehensive management systems

by

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Geneva
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REPORT ON COST MEASUREMENT SYSTEMS IN THE ORGANIZATIONS OF THE UNITED NATIONS FAMILY AND THE POSSIBILITY OF DEVELOPING THEM INTO COST-BENEFIT SYSTEMS INTEGRATED INTO COMPREHENSIVE MANAGEMENT SYSTEMS

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FOREWORD

1. This report has been prepared in response to a resolution on overhead costs of extra-budgetary programmes which was adopted by the Governing Council of UNDP at its 439th meeting, inviting the Joint Inspection Unit to comment upon the final report of the CCAQ Task Force (paragraph (f)) and "to submit recommendations on the extent to which the present cost measurement system should be continued beyond 1 January 1975" (paragraph (i)).

2. Inspector Maurice Bertrand agreed to undertake the preparation of this report.

3. For reasons that will be explained, the report has been drawn up in a form in which it can also be addressed to the various organizations that are using or intend to use a cost measurement system - in particular, to the United Nations (including UNIDO and UNDP), FAO, the ILO, UNESCO and WHO - and its recommendations are also intended for their governing bodies and secretariats.

4. It consists of five chapters and six annexes as shown in the table of contents.

5. The author of the report assumes that his readers are acquainted with the broad organizational outlines of the various cost measurement systems. He saw no point in repeating here information that can be found either in the previous Joint Inspection Unit report (JIU/REP/72/10) or in the various reports of the CCAQ Task Force.
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Chapter I

STATEMENT OF THE PROBLEM

Purpose of the report

1. At its eighteenth session (June 1974) the Governing Council of UNDP, having considered the question of the overhead costs incurred by the agencies for extrabudgetary programmes and, in particular, the provisional arrangements proposed by the Administrator of UNDP in document DP/65, decided inter alia to consider the question of "overhead costs" again at its nineteenth session, in January 1975, on the basis of the final report of the CCAQ Task Force and the comments made thereon by the Joint Inspection Unit and the Advisory Committee on Administrative and Budgetary Questions. The Governing Council also invited the Joint Inspection Unit, on considering the Task Force report, to submit recommendations on the extent to which the present cost measurement system should be continued beyond 1 January 1975 (resolution on overhead costs adopted at the 439th meeting of the UNDP Governing Council, paras. (f) and (i)).

2. The present report has been prepared mainly in response to this request from the Governing Council. However, the complexity of the subject-matter has prompted us to examine the question from a wider angle than that of the relationship between the cost measurement system and the calculation of overhead costs and, in particular, to consider how, in time to come, cost measurement systems might fit into the set of mechanisms used to check and improve management: programme budgets, plans, machinery for monitoring the execution of work, cost-effectiveness systems, evaluation, etc. Hence the report leads to some conclusions that are intended not only for the UNDP Governing Council but also for the governing bodies of the various organizations concerned.

3. We shall not review the historical background to the question in detail again here. Annex V lists the main documents in which the course of the experiments can be traced from the outset. It will be seen that the CCAQ Task Force has prepared five reports on the problem, that the Joint Inspection Unit has already taken it up three times and that the UNDP Governing Council and the governing bodies of the various organizations have followed the experiment with interest.

The latest word on the subject is document CCAQ/SEC/327(FB), which contains (a) the final report of the CCAQ Task Force (annex B) and (b) the report of the special session of CCAQ itself on financial and budgetary matters (29 April to 1 May 1974).

Summary of the reports of CCAQ and the Task Force

4. The report of the Task Force gives the results obtained in five organizations (or parts of organizations) with regard to the amounts of overhead costs and the percentages those amounts represent:

Namely, an average of 23.3 per cent, varying from 19.3 per cent in the case of FAO to 31.2 per cent in that of UNIDO, the other proportions being 22.5 per cent for the United Nations, 27.4 per cent for WHO and 29.7 per cent for the ILO. More detailed figures are given to show how the overhead costs are divided between the various
functions distinguished by the Task Force – planning, formulation, implementation (technical and non-technical backstopping) and evaluation – and into cost groups.

The report then comments briefly:

By way of comparison of the results obtained (paras. 4-13); On the various options with regard to the reimbursement of overhead costs (paras. 14-17); And ends by considering the possibility of costing to project level or by project type. Adverse conclusions are reached on grounds of expense and the difficulty of obtaining sufficiently accurate results.

5. The report of the special CCAQ session deals mainly with possible ways of reimbursing overhead costs. After stating the average distribution of the components of overhead costs as follows:

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<thead>
<tr>
<th>Percentage</th>
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<tr>
<td>Programme planning</td>
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<td>Project formulation</td>
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<tr>
<td>Project implementation:</td>
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<tr>
<td>technical backstopping</td>
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<tr>
<td>non-technical backstopping</td>
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<tr>
<td>Evaluation and follow-up</td>
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<td><strong>Total</strong></td>
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the report selects the following four options from among the various solutions put forward by the Task Force:

a. A reimbursement option of 21 per cent arrived at by adding together the full costs of project formulation and project implementation (technical and non-technical backstopping), i.e. $1.7\% + 7.5\% + 11.6\% = 21\%$;

b. A reimbursement option of 21 per cent in which it is proposed to distinguish:

The inclusion of the direct costs of project formulation and technical backstopping among the direct project costs, representing 7.7 per cent rounded up to 8 per cent;

Direct reimbursement to the agencies of the costs of non-technical backstopping, viz. 13 per cent;
c. A reimbursement option which would leave the costs of technical backstopping relating to project implementation (i.e. about 7.5 per cent of project costs) as a charge on the agencies' budgets and would require UNDP to reimburse:

The costs of project formulation, through the inclusion in individual project budgets of a standard 2% of costs;

The costs of non-technical backstopping relating to project implementation, representing about 12 per cent;

d. A fourth and last option which would produce a reimbursement rate of 17 per cent by including the "direct costs" incurred in technical units for project formulation (1.5%), non-technical backstopping (3.3%) and technical backstopping (6.2%), and non-technical support for projects under the heading of budget and finance (2.1%), personnel services (2.4%) and procurement (1.1%).

The questions to be examined

6. The UNDP Governing Council has invited the Joint Inspection Unit to comment on this document and has added a question concerning the extent to which cost measurement systems may be of interest in the future. The connexion between the problem of reimbursing overhead costs and the development of cost measurement systems will be readily perceived. Inasmuch as, in most of the large agencies, the decisive impulse for these systems was the desire to learn the actual amount of overhead costs, it is reasonable, once an initial answer has been obtained, to raise the question whether the systems should be kept in being and, if so, in what form.

7. However, our study of the subject leads us to conclude that, at the stage of development they have now reached through the advances made by the Task Force and the agencies, cost measurement systems have become instruments in their own right, whose importance and potential uses go well beyond the problem of reimbursing overhead costs. In our view, for the price of a perfectly feasible change of orientation, they should even furnish answers to such important questions as how to effect a real reduction in the amount of overhead costs, how to monitor the implementation of operational activities, and how to evaluate the results obtained. In order to give a useful answer, therefore, it will be well to examine the two problems separately.

8. The problem of reimbursement of overhead costs, as presented in the document under consideration, requires us, in particular:

To consider the value and significance of the quantified results obtained and the reasons for the differences found;

To study the reimbursement formulae.
The problem of cost measurement systems, on the other hand, seems to me to require study of:

On the one hand, the types of problems they might help to solve: scope for economies, monitoring of implementation, and methods of evaluation;

On the other hand, the potentialities of these systems for dealing with such problems. This will necessitate consideration of:

- The nature and value of the experiments begun over the past three years;¹
- The indications supplied by the Task Force concerning the feasibility of costing to project level;
- The scope for reorienting these systems;
- The place they might occupy in the set of mechanisms for the guidance and control of management.

These various questions arise both in relation to activities in support of operational projects, which more particularly concern the UNDP Governing Council, and in relation to other activities financed out of the organizations' regular budgets, which more specifically concern the governing bodies of the various agencies.

9. For these reasons we shall examine in the succeeding chapters:

1 The problem of reimbursing overhead costs;

2 Other problems which cost measurement systems might help to solve; and

3 The possible reorientation of the existing systems.

¹ The starting dates of these experiments are: 1972 for FAO, 1973 for most agencies, 1974 for UNDP and 1975 for UNESCO.
Chapter II

THE PROBLEM OF REIMBURSING OVERHEAD COSTS

Value of the results obtained

10. The joint exercise in cost measurement carried out in 1973 by the agencies participating in the CCAQ Task Force yielded some results, the most important of which were outlined in the previous chapter. Obviously, however, the following comments will be of use only if they are read in conjunction with the CCAQ report itself (CCAQ/SEC/327(FB)).

11. From the study we have made of the operation of the cost measurement systems we can say only that the quantified results they produced in 1973 may on the whole be regarded as valid orders of magnitude. It should be realized that, in order to achieve such results, a number of difficulties had to be overcome. It was, in particular, essential not only that the staff who had to complete the reports on time spent on particular activities (time reporters) should understand the exact nature of the exercise they were asked to perform and should be willing to keep to the rules, but also that they should be sufficiently interested in the efficient operation of the system to accept such tight discipline. It was also necessary that the systems for centralizing the results should limit the risks of error to a minimum and, lastly, that the methods of distributing total costs should be standardized and applied by competent specialists. In most of the agencies, as we shall see below, every possible precaution has been taken on these various points. Thanks to the efforts of the CCAQ Task Force, the cost distribution methods which have been applied appear to provide all necessary safeguards. Those agencies which have computerized the process of centralizing the results of the time reports also seem to have eliminated the risk of error so far as possible. On the other hand, margins of error which are difficult to assess certainly exist in the case of some agencies which did the centralization manually, particularly the United Nations (New York Headquarters). In the United Nations, again, the conditions under which the experiment was carried out afforded no assurance that the time reporters would be given all the information and support they needed in order to maintain the necessary accuracy. However, since the overall percentages obtained by the United Nations coincide with the average results of the other agencies, the situation just described does not appear to affect the general assessment made above.

1/ Appendix III to the CCAQ document is reproduced in annex II to this report so that any readers of this report who do not have the CCAQ document before them may grasp the essentials of the comments made here.
Difficulties encountered in explaining differences between results

12. Therefore, if the orders of magnitude obtained are accepted as valid, the differences observed — which are substantial — have still to be accounted for. It is found in particular that:

The total percentages vary from 19.3 per cent at FAO to 31.2 per cent at UNIDO — a difference of 11.9 per cent, which represents more than half of the average percentage for the agencies as a whole, namely 23.3 per cent;

The structure of overhead costs by function shows in three agencies — FAO, the ILO and UNIDO — a distribution of implementation expenditure in which technical backstopping expenditure is less than non-technical backstopping expenditure, whereas in two organizations — the United Nations and WHO — the reverse is true.

13. The comments made by the Task Force on the comparison of results (CCAG/SEC/327(FB), annex B, paras. 4-13) may be summarized as follows:

Variations may in general be attributed to the differences in the spheres of activity of the agencies and in the levels of technical expertise required;

The overall percentage for FAO might be adjusted in order to reflect the direct support it receives from UNDP (in which case a figure of 22 per cent would be obtained) and an adjustment of the same order should be made in the case of UNIDO;1/

The United Nations figures do not take into account the regional economic commissions or the Office at Geneva, whereas the other agencies have conducted their experiment on a world-wide basis, including in it the activities of the regions and local units. The assistance rendered to the United Nations by UNDP Resident Representatives should also, perhaps, be taken into account;

Overhead costs consist essentially of salaries; account should therefore be taken of variations in salary levels between the various headquarters and regional offices in different locations. The Task Force lacks the necessary data for these calculations;

It is probable that, on the overall programme, economies of scale can be made, larger programmes being proportionately less expensive, and that the size of individual projects will also be a factor: the diagram given in appendix VI to annex B shows that the percentage of overhead costs increases as the size of individual projects diminishes;

1/ Consequently the difference is not reduced.
The differences observed between the proportions of total implementation costs represented by technical backstopping and non-technical backstopping respectively might be due to differences in the nature of the projects being carried out by the various agencies;

The Task Force did not have time for a fully detailed study of the reasons underlying the differences noted. Further studies on this question might show that methods of operation were more effective in some agencies than in others.

14. Thus the comments just summarized indicate that, in their present state, the cost measurement systems do not in themselves provide an explanation for the differences found. Such a result is ruled out by the very design of the systems, for two reasons:

The structure of overhead costs by "functions" as adopted by the Task Force (planning, formulation, implementation and evaluation) including, within the "implementation" function (which undoubtedly incurs the lion's share of overhead costs), a distinction between technical and non-technical backstopping, did not, in our opinion, make for the clearest analysis. The decision to adopt this classification was taken, it appears, at a special session of CCAQ on 9 and 10 May 1972, after consideration of the various possible formulae, "in order to avoid over-elaborate accounting procedures and to achieve a balance between the need for simplicity of application and a reasonable degree of accuracy" (CCAQ/SEC/248(FB) of 10 May 1972, para.10).

However that may be it now appears certain in the light of experience that the choice of a more specific functional structure itemizing, for example, the recruitment of experts, backstopping for experts in service, the administration of fellowships, procurement, supply of equipment and so on would have been infinitely more valuable for the purpose of analysing workloads. Moreover, although the guidelines defining the distinction between technical backstopping and non-technical backstopping are very precisely worded, it is obvious that the list of activities covered by these two functions (appendix VII to annex B to the CCAQ report) must be studied very carefully in order to determine in each specific case whether an operation comes within the one or the other of these categories;

If, as the report of the Task Force maintains, the differences noted are attributable to the characteristics and, in particular, the size of the various projects, it is obvious that this view can be confirmed only by a system of costing to project level or by project type. As we know, however, this project-by-project approach has not so far been adopted by CCAQ. We shall revert to this problem in paragraphs 39-43.

1/ An average of 80 per cent, varying between 75.7 and 84 per cent according to the agency concerned.
Choice of a method of reimbursing overhead costs

15. The comments made in this report concerning the method of reimbursing overhead costs will inevitably be limited by the fact that any decision on the amount of such reimbursement is a political decision concerning which the Joint Inspection Unit does not feel able to express an opinion as to the substance. Consequently we shall present in this report only technical comments, implying no preference as to what level of reimbursement should be adopted.

16. The various formulae proposed by CCAQ are based on the distinction between the various "functions" which we described in paragraph 14 above as lacking the full clarity and precision that might have been desirable in order to draw a clear dividing line of financial responsibility between UNDP and the agencies' regular budgets. It should also be noted that the formulae proposed are based on average percentages which do not correspond to the real expenditures incurred in each of the agencies. For these two sets of reasons, the technical value of the various formulae proposed remains of the same order in so far as it is not contemplated that UNDP should take over a share of the actual expenditure incurred in each of the agencies. The only hope that can be expressed here is that, if a fixed percentage is eventually adopted as a reimbursement formula, it will be possible, through the results of the cost measurement systems, to make clear to the governing bodies of the various agencies exactly what proportion of project overhead costs continues to be borne by the regular budgets. It would even be desirable to consider a way of making the expenditures in question stand out clearly henceforth in the budgets themselves.
Chapter III
PROBLEMS WHICH COST MEASUREMENT SYSTEMS MAY HELP TO SOLVE

Existence of a new situation

17. Before examining the problems that cost measurement systems should help to solve, we must describe the characteristics of what is undoubtedly a new situation by comparison with that which prevailed before this experiment was begun.

18. In the first place, the fact that such systems have been introduced and are capable of functioning properly with fairly comparable methods in most of the large organizations and UNDP is in itself an important new development. The members of the CCAQ Task Force have accomplished a great deal in devising concepts and methods, and the necessary machinery has been installed. Systems of analysis by the time reporting method have resulted in collaboration between a great many staff members working in substantive divisions and in management. The fact that difficulties have been encountered in no way detracts from the value of the experiments, for in most cases a good proportion of the difficulties have been overcome. On a number of points, admittedly, the writer disagrees with some aspects of the methods adopted, and these points of disagreement will be explained; on the whole, however, he regards the construction of these systems as an outstanding feat on which those responsible, particularly the members of the Task Force, are to be congratulated. It would be extremely unfortunate if the fruits of such extensive efforts were to be lost at one stroke through a decision purely and simply to abandon the experiment.

19. Secondly, one aspect of the results achieved should also be stressed. The mere fact that these results have been published has clarified the traditional debate on overhead costs. Even if the figures and percentages supplied by the CCAQ Task Force were of only relative accuracy, they would make it possible to state the problem in terms that seem clearer and more precise than before, namely the following:

20. The various organizations which execute field projects with extra-budgetary funds from UNDP spend on the preparation, implementation and supervision of such projects sums varying between approximately 20 and 32 per cent of the cost of the projects themselves. The wide gap between these two approximate limits is not at present readily explicable but could probably be made so in future if efforts were continued in that direction. To this body of expenditure must be added UNDP's own administrative costs, 1/ representing some 13 per cent of total project costs. This gives a total varying between 33 and 45 per cent of total direct expenditure.

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1/ In 1973 UNDP expenditure on projects came to $267.7 million. The UNDP administrative budget for that year totalled $36 million. Administrative expenses therefore accounted for 13.4 per cent of total project expenses.
21. The States members of the UNDP Governing Council and of the governing bodies of the various organizations consider these expenses too high and want to reduce them for the legitimate purpose of increasing the proportion of "effective assistance". The aim, therefore, has long been to devise and implement a method of reducing these expenses and at the same time, if possible, increasing the effectiveness of the projects themselves. The method which is applied by the UNDP Governing Council for this purpose, and which is also approved by the Advisory Committee on Administrative and Budgetary Questions, has hitherto consisted in reimbursing only what have long been known (for want of a precise definition) as "clearly identifiable additional expenses" and in fixing a percentage ceiling which has been raised only very gradually. This method tended to subject the secretariats to a financial pressure designed to spur them to greater savings in the organization of their support systems. Ultimately, of course, the total expenditure is covered by the same member States - albeit in proportions which differ slightly for each of them - through their contributions to the regular budgets of the existing organizations; but there again, when the budgets came up for scrutiny in the governing body of each organization, the member States could hope to exercise strict budgetary control and to exert pressure to the same end. However, the process set in train by the establishment of cost measurement systems should provide a new method of making a real reduction in project overhead costs and of measuring the reduction. If so, the problem of choosing the best method of calculating the overhead costs to be reimbursed by UNDP to the agencies would lose some of its importance in relation to the main goal, which would then become attainable.

22. There is no question but that the experiment in progress has already revealed a number of important phenomena. Despite the fact that the CCAQ Task Force refused to embark on an experiment which would have made it possible to cost by project, I/ related research activities undertaken mainly because of the need to explain some of the recorded differences have provided some indication as to why some types of projects incur greater overhead costs than others. It is clear from studies and research carried out at FAO, UNESCO, the ILO and UNIDO that the overhead costs for some projects will be well over 60 or even 80 per cent, whereas for others they are sure to be under 10 per cent.

23. This does not mean that research should be done for the sole purpose of, for example, making it possible to reduce the overall proportion of overhead costs by abandoning those types of projects whose overhead costs are found to be highest. It is obvious that a project type selection policy cannot be based solely on the cost of the projects. Account must also be taken of their effectiveness and of the results it is hoped to obtain. Nevertheless, a clear cost-consciousness with regard to the work undertaken is still an important factor in policy-making. It would become a decisive factor if the information on cost could be accompanied by information on benefits.

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I/ Contrary to the recommendations made in the report on the introduction of cost accounting in the organizations of the United Nations family (JIU/REP/72/10).
Types of problems

24. In the circumstances, before examining how the various cost measurement systems might be reoriented, improved and possibly integrated into wider systems, it is reasonable to try to determine what types of problems they might help to solve. Here, undoubtedly, the interests of the member States on the governing bodies of the various agencies and UNDP, those of the directors responsible for programme planning and execution in the secretariats, and those of the staff converge.

25. After reading through the proceedings and resolutions of the UNDP Governing Council and the governing bodies of the agencies, it seems fair to say that profound concern has been repeatedly expressed over a long period with regard to the following objectives:

- That of saving expense by reducing the administrative costs of operational projects;
- That of monitoring the effectiveness and speed of implementation of programmes and projects;
- That of evaluating the results.

Formulation of policies of economy

26. We have seen in paragraphs 21-23 above that the "cost-consciousness" attainable through cost measurement systems may in itself make it easier to effect savings. Nevertheless, certain conditions must be met if precise policies are to be effectively implemented for this purpose. The main condition is that the systems should be oriented towards the costing of outputs. Such a self-evident point would need no emphasis if the present systems had not from the beginning been oriented towards obtaining a better knowledge of inputs rather than outputs, and if the CCAQ Task Force had not contended that it was very difficult, if not impossible, to organize systems of costing by "projects" or "types of projects" which, in operational activities, are precisely what the "outputs" consist of. The conditions under which outputs can be costed will be examined in the next chapter. Here we shall merely state that, if such an orientation should not be possible, the future advantages of cost measurement systems would be practically nil.

27. It is not possible to formulate a policy conducive to savings on management without knowing in advance why certain products of administrative activity, or "outputs" - a particular type of project, document or publication, a particular method of organizing meetings, etc. - cost more than others, taking as the basis of comparison similar elements within an organization, or the same outputs as they develop over time or, again, similar outputs in different organizations. The comparisons may, of course, be made by many different methods, but it is necessary in every case to identify the outputs and the cost of each output or type of output: that is to say, so far as overhead costs are concerned, the expenses incurred by project or by type of project. In the case of activities in support of operational projects it is necessary to know, for example, which factors are liable to cause variations in the cost of recruiting an expert, or
in the ratio of procurement costs to value of equipment, or in the cost of granting a fellowship or formulating a project of a particular size, etc. According to whether the replies received show:

That there are or are not significant differences in costs either by type of project within a single organization or between agencies;

That these differences are attributable to the administrative structures adopted, to the procedures followed, to differences in the characteristics of the projects implemented, to special, hitherto poorly diagnosed difficulties, etc.,

it seems clear that policies could be devised for changing the structures, procedures, project selection processes and implementation of methods of overcoming the difficulties revealed in ways which, by reducing or removing the causes of excessive costs, could produce significant savings. These comments are applicable mutatis mutandis to the savings policies which could be applied if the cost of the products (outputs) of substantive activities financed from the agencies' regular budgets were known.

Monitoring of Implementation

28. Furthermore the project (or output) approach would certainly make it much easier to monitor implementation. It does not seem possible, with the present monitoring systems, to make sufficiently precise periodic checks on the execution of the programmes and projects in hand: to say, for example, how many projects are being kept up to schedule and how far, and for what reasons, the others have fallen behind, or to prescribe the measures needed to catch up. The absence of systematic monitoring machinery of this type leaves a big gap in the present management system and undoubtedly deprives the UNDP administrative system, in particular, of sufficiently precise information on programme implementation. The information which the Administrator of UNDP supplies in his report each year is certainly of interest in this connexion, but is insufficiently detailed for the purpose of comparing programme time-tables with actual implementation times, and no reason is given for the delays observed. There is no doubt that support activities (programming, formulation, recruitment of experts, etc.) are vital to the implementation of the projects, and that a regular report on such activities project by project would afford a very precise picture of compliance with time-tables, the performance of essential operations, the reasons for delays, the identification of difficulties encountered and so on. In this field too, the

1/ The Resources and Programme Planning Office of the United Nations Department of Economic and Social Affairs has sent us an internal document describing in very precise terms a possible method of monitoring project implementation, and clearly explaining the relationship between the machinery for that purpose and a cost measurement system. This document, which we consider very useful, should not only be circulated for study within the United Nations Department of Economic and Social Affairs and Department of Administration and Management but should also be sent to other organizations for their consideration.
supply of detailed information would make it possible to apply policies making for greater regularity in implementation and to check on their effectiveness. The procedures already in existence for this purpose (cf. UNDP Operational and Financial Manual, chapter VI, Project monitoring, review and reporting) would certainly be strengthened and made more specific if the cost measurement systems were generally oriented towards a project approach.

Evaluation of results

29. It is obvious, however, that if policies are to be devised for systematic improvement of the functioning of the international organizations, knowledge of the costs must be supplemented by knowledge of the benefits. It is a well-known fact that in the field of evaluation of results, whose vital importance has so often been emphasized, it is hard to make progress because the problems faced are so difficult from both the methodological and the institutional point of view. We shall merely point out:

Firstly, that a precise knowledge of the immediate effectiveness of the projects themselves (characteristics of training given, quality of studies made, immediate usefulness of feasibility studies, quality of institutions built, etc.) and of their real influence on the programme's long-term objectives would obviously be a decisive factor in the selection of technical co-operation programmes by each of the countries concerned;

Secondly, that the calculation of benefits is conceivable only on the basis of well-identified outputs, in this instance with the aid of a good typology of projects showing their principal characteristics. On the other hand, as we shall see, the project approach may lead to the establishment of a comprehensive output cost system under which both immediate effectiveness and long-term benefit are measured: a cost-effectiveness system and a cost-benefit system combined.

Value of such measurements to management and staff

30. The foregoing considerations show how far, and for what problems, the arrangement of UNDP, the Governments of the countries concerned and the agencies stand to gain from properly oriented cost measurement systems. It is obvious, however, that the problems just mentioned are also of concern to the directors in charge of the organizations' activities at the level of the substantive divisions, main departments and overall arrangement. For example, it is plainly in the interest of those responsible for the implementation of substantive and operational programmes to be able to monitor the detailed execution of those programmes and, in particular, compliance with the time-tables they have laid down. As is known, some of the large organizations issue internal documents in the form of detailed work plans, called "Programme Activity Details" in UNESCO, "Programme Decision Minutes" in the ILO and "Programme Element Proposals" in FAO. These documents go into as much detail on the planning and co-ordination of

1/ The methodological problems in this connexion are discussed in the next chapter.
activities as do the plans of operation for each project. It seems self-evident that unit chiefs ought normally to be able to supervise implementation of the "detailed work plans" for which they are responsible. It is to be regretted that such detailed programming systems do not exist in some of the large organizations (WHO, United Nations) and that systematic monitoring of implementation has been instituted in hardly any of the agencies. Network analysis techniques are, of course, sometimes used to improve the programming of activities at that level and to provide better control. Whatever the degree of sophistication of the method employed, however, a cost measurement system organized by "output" (and thus by project) should clearly provide the unit chiefs concerned, through the use of time measurement methods, with a valuable tool for systematic monitoring.

31. The need to ensure good implementation is not the only reason why the installation of this type of machinery may be considered indispensable. It is also a necessary tool - it could even be called a normal component - of a planning, programming and budgeting system. In fact, programming methods and methods of monitoring programme implementation are complementary: from year to year and from programme to programme they should result in mutual improvement of both systems, in particular by making for an easier and more rational process of setting objectives and determining the types of "outputs" needed to attain them. In this way it should gradually become easier to resolve the difficulties encountered in implementing programme budgets and plans.

32. In addition the directors of the various units should, of course, be associated with the design and implementation of programmes and of systems for supervising their execution; this has not always been the case hitherto. The installation of such machinery is useful and really effective only if the directors are given a chance to express their particular needs and to ensure that those needs are taken into account at the design stage. The same is, of course, true of the officials responsible for implementing programmes. They cannot be expected to accept the discipline imposed by the systems unless they are at the same time afforded an opportunity to participate in the general design of the management policy thus launched.

33. We have attempted in this chapter to state some important problems (for member States as well as for directors and staff) which cost measurement systems could help to solve: formulation of savings policies and of policies to improve implementation, evaluation of results, and better association of all concerned in the pursuit of these objectives. It is now necessary to examine the conditions of reorientation, integration, simplification, etc., under which such systems could supply the solutions expected of them.

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1/ Cf. the report on medium-term planning in the United Nations system (JIU/REP/74/1, paras. 54 and 55).
Chapter IV
POSSIBLE REORIENTATION OF EXISTING SYSTEMS
TOWARDS COST-BENEFIT SYSTEMS INTEGRATED
INTO MANAGEMENT SYSTEMS

Plan of the chapter

34. In order to determine how far the existing systems could be reoriented towards objectives corresponding to the problems just raised and, at the same time, be fitted into a set of methods designed to facilitate good management, it is necessary to consider:

- The nature and value of the experiments already in hand;
- The possibility of moving towards costing by output or by project;
- The problem of prior studies of workload;
- The possibility of using sampling methods; and
- The possibility of measuring benefits.

These problems will be briefly examined below.

Nature and value of the experiments already in hand

35. In paragraphs 10, 11 and 18-23 above we have already made some appraisal, firstly of the value of the results obtained, and secondly of the new situation created by the very existence of the systems. We must now give more general and more detailed consideration to the qualities and characteristics of the systems in use. The experiments which have been carried out in the various organizations are reviewed in as much detail as possible in annex III to this report. Here we shall merely sum up the results of that review.

36. The general design of the existing systems has naturally been influenced considerably by the fact that the organizations' first concern was to answer the question asked by the Governing Council of UNDP concerning the calculation of the amount of overhead costs. It was fully recognized by the Task Force that the systems to be developed should so far as possible also constitute management tools, but that aspect was regarded as secondary. The fact that, when the systems were being set up, the quickest possible answer was needed to one specific question has given these systems very different characteristics from those they would have possessed if they had been required from the outset to answer more and diverse questions. As a result, it is found that:

- Attention has been given mainly to operational activities;
- The chosen orientation has encouraged the calculation of inputs rather than the costing of outputs;
- Insufficient proposition has gone into the analysis of non-operational activities.
Moreover there can be no doubt that the inherent difficulties of pooling complex systems and the obligation to render them operative without delay have led to the adoption of decisions without time being allowed for all the preparatory work that might have been desirable. The conditions in which the Task Force had to work render the results obtained all the more remarkable. In this connexion it may be noted that:

With regard to the use of "time reporting" as an analytical tool, most of the agencies have expressed, with some minor differences, a preference for a system of weekly reports compiled on a daily basis and for some degree of precision in analysis which would attempt to describe input by source of funds and by functions (five in the case of support activities) and which would classify the whole according to the existing budget structure;

On the other hand the UNDP secretariat attempted in 1974, also by means of weekly reports compiled on a daily basis, to take the analysis down to project level. UNESCO plans to follow an appreciably different procedure in 1975: analysis by project (or by UNESCO-type budgetary units corresponding to outputs), but with far less precise time recording by month and by percentage. It should also be noted that certain agencies - particularly the ILO - have begun to vary the nature of their time reports according to the "types of work" to be analysed, although the single-report system has remained in operation in most cases;

The study of methods of collecting and centralizing data have revealed, in addition to differences of a secondary nature, difficulties in maintaining interest and discipline among the time reporters. By and large these difficulties have been overcome, but they have aroused a widespread desire for more straightforward and less burdensome procedures.

Lastly, the results obtained reveal the following:

For overhead costs, some global figures which, as we have seen, appear to have been calculated with all necessary safeguards. However, the substantial differences between those figures cannot be explained away purely on the basis of the information provided by the cost measurement system;

Such other data as the agencies have succeeded in using on the basis of the existing systems vary in interest and value according to the intensiveness of the use made of them. The following in particular may be mentioned:

The communication of the results obtained to the heads of substantive divisions at FAO, the ILO, UNIDO and so on, and the positive use some of them have made of those results;
The very detailed analysis made by the ILO, in a comprehensive report (internal working paper), of all the data obtained;

The use of the results of cost measurement systems through incorporation in the general accounts (FAO).

These results are not to be despised but, taken as a whole, do not give the impression at the present stage of the experiment, of providing a genuine "management tool", i.e. an instrument which would be helpful in framing a policy of improved organization, savings and increased benefits. Nor does it seem possible to devise such an instrument merely by making improvements in the existing systems while maintaining their present structure and orientation.

The possibility of an "output" or "project" orientation

39. The considerations just advanced confirm that a new orientation will have to be adopted if the cost measurement system is to solve the problems examined in the previous chapter. We must therefore study the feasibility of an orientation towards projects or outputs. At this point it will be pertinent to recall the arguments put forward by the CCAQ Task Force against such an orientation.

40. These arguments (paras. 18-27 of the Task Force report and para. 19 of the CCAQ report) may be summarized as follows:

It is possible to institute such a system. The cost of a project system and that of a project-type system would be roughly the same;

1/ In the United Nations no attempt has been made to put to use, for purposes other than operational activities at the central level, the many data required of the staff in the time reports. This is a regrettable situation which, to say the least, does nothing to encourage the reporting staff; it is doubtless due to the fact that, in contrast to the procedure followed in most of the agencies, no one person has been made responsible in the United Nations for the operation as a whole. In the future it would be desirable to appoint a project manager for cost measurement systems and to give him the necessary resources to conduct the entire operation efficiently. Serious consideration should also be given to the idea of consulting the directors and staff concerned.

2/ CCAQ/SEC/327(FB) and annex B.
But the accuracy of such a system would depend on the resources devoted to it. The Task Force members representing the agencies currently applying the system 1/ had strong reservations about the degree of accuracy that could be obtained, particularly in view of certain specific difficulties connected with methods of recording working time project by project;

The time sampling methods which might be applied to selected organizational units, selected projects or selected fund programmes would be sure to lead to errors by tempting the reporting staff to exaggerate the time spent on the projects thus selected. Furthermore, to produce useful results, information would have to be collected throughout the life of a project before the slightest conclusion could be drawn from it;

The combination of a system of analysis by individual project with analysis according to the five functions chosen by the Task Force would impose an additional burden on the time reporters;

The imputation of the remaining overhead costs (recruitment, translation, printing, etc.) to individual projects would require a method different from the "cost groups" method at present in use and would be extremely difficult;

There would thus be a substantial increase in the amount of work required to collect and analyse current information and, according to the estimates made by members of the Task Force, the cost of such a system would be substantially greater than that of the present system;

In conclusion, the Task Force feels that "costing to the project level ...... would yield results of questionably superior value, and ...... could lead to undesirable bias towards implementation of types of project which are superficially cheaper in support costs but which may yield smaller benefits for the total investment made";

The Task Force did not, however, rule out "the conducting of periodic special studies of activities within technical units which may well provide, for certain management purposes, pertinent information on individual projects".

41. The author of this report does not, on the whole, find these arguments very convincing. It may be pointed out that:

UNESCO, which was not an active member of the Task Force when its report was prepared, has just decided to institute a project-by-project system with effect from 1 January 1975, while the UNDP secretariat operated such a system for six months in 1974;

1/ This certainly excludes UNESCO and, possibly, the UNDP secretariat.
The argument that such a project-by-project system would be more expensive is based, not on calculations of any kind, but solely on impressions;

The time sampling methods to which the Task Force report ascribes all manner of defects are now used in various agencies, including UNIDO and the ILO, and are expected to come into fairly general use in the future;

The argument that results presented by project or by project type could lead to over-hasty conclusions and that in consequence, for example, types of projects whose overhead costs seemed excessive might be reduced in number or even eliminated regardless of the benefits they yield, is tantamount to claiming that it is better to disregard costs than take decisions on the basis of incomplete information. If that were the case, taking the reasoning to its logical conclusion, cost measurement systems might just as well be abandoned altogether. It is also possible, however, to draw the opposite conclusion - as the author of this report has done - that, on the contrary, efforts should be made to obtain all data that might genuinely throw light on the choices to be made.

42. These aspects of the question had to be explored. The discussion of the problem of the project approach should not, however, merely arouse controversy; in many cases it is more a matter of clearing up misunderstandings. The Inspector has talked to virtually every member of the Task Force in the various agencies and is convinced that it should be possible to find common ground and to develop the systems in the future in whatever manner is most useful and most effective for everybody. It is true that systems of costing to project level or by project type are at first sight more complex - and theoretically, therefore, more burdensome and more expensive - than systems which merely supply overall figures for inputs. It is also true that, if the workload imposed by the preparation of time reports were to increase, the difficulties already encountered would be hard to overcome and would make it almost impossible for the systems to work. In fact, however, this is not the situation.

43. In the first place, the problems to be solved - those we described in the previous chapter - lead us to view cost measurement systems from a different angle. These systems are only one of the tools available. Consequently they should be integrated into a more comprehensive set of management mechanisms. The use of such mechanisms can both help to make cost measurement systems more readily workable and widen the scope for their use. In other words, it can be said that:

If sampling systems could be used,

If measurement of the direct costs of projects (excluding the calculation of full costs) was sufficient to supply usable data,

If the work of completing time reports could be simplified, and
If, in some cases, benefits could be made easier to calculate, the nature of the problems would be drastically changed. From the information already available to us, we can state that this is indeed the case.

**Preliminary work on workload analysis**

44. In this connexion it seems essential to examine the information supplied by the workload studies that have been carried out by a number of agencies, and to consider under what conditions studies of this kind might, in the future, form a valid concomitant to cost measurement systems. In three organizations - FAO, UNESCO and the United Nations - studies have been made, for quite different reasons, in order to determine in advance, in consultation with the Professional staff responsible, the workload associated with each project or, at any rate, with each type of project. The internal documents relating to these studies have been kindly made available to me and should, I think, be described here.

45. The FAO enquiry. This inquiry was carried out at FAO in the first quarter of 1974. Its purpose was to determine the factors influencing agency overhead expenditure. The report on the inquiry sums up the results of a questionnaire sent to all project operations officers.

Fifty-five questionnaires were completed and the results were recorded in a number of statistical tables.

The essential purpose of the questionnaire sent out was to determine for two projects selected by the project operations officer - one small-scale and one large-scale project - how much time had been spent in preparing them and what were the main factors affecting the workload of preparation, implementation and so forth.

46. The results obtained are extremely interesting. The workload of support activities for each project varies according to the following factors:

A. **Factors determining project type: 1/**

- **Size of project:** Very small-scale projects ($1,500) represents, on the average, a workload in proportion to their size which is approximately three times that of very large-scale projects ($275,000). 2/ In other words, in percentage terms, their overhead costs are three times as large.

- **Other important intrinsic factors:** The projects which require the greatest efforts (and which consequently incur the highest overhead costs) are, in order of the factors involved in increasing the workload:

  1/ The factors considered were: size; economic or social subsector; size of equipment component; size of subcontracting component; level of development of the country; degree of multidisciplinarity; and means used (research, training, survey, etc.).

  2/ For a project 18 times the size of a small-scale project, the actual workload is only six times that of the small project.
Those which have a high equipment component;

Those of the experimental/research or institution-building type (as opposed to training projects, which are considered the least expensive);

Those carried out in countries with a relatively high level of development (in contrast, those carried out in the least-developed countries are the least expensive).

On the basis of the replies to the questionnaires it should be possible to calculate the quantitative effect of each of these factors on workloads; it appears difficult to make precise calculations from the results obtained, but variations due to each of these factors would seem to result in a twofold or threefold increase or decrease in the workload.

B. **Extrinsic factors**

The results obtained in this area have not yielded any very new information: efficient recruitment, excellent project formulation, sound administrative procedures and so on obviously have the effect of reducing the workload considerably.

The lesson of this study, therefore, is that, solely on the basis of the factors classed as intrinsic for the purposes of the study (factors determining project type), the relative workload may easily vary according to project type by factors of one to eight or even one to 10.

47. **The UNESCO inquiry.** UNESCO conducted its inquiry between April and September 1974. It aimed to analyse workloads from another angle, laying the main stress on distribution by type of function performed and on the average load in man/days represented by each type of function rather than on the differences between types of projects. This study was confined to the Education Sector in which, according to the statistics given in the relevant document, there were 202 projects in hand on 1 April 1974 (88 of them employed only one expert each, 32 two experts each and 82 three or more experts each, representing in all 819 experts already recruited and 288 expert posts to be filled). The inquiry showed first of all that, because of the administrative structure of this sector, it was necessary to distinguish between the activities of four different categories of personnel:

- **Project officers;**

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1/ The 17 extrinsic factors investigated include: calibre of project staff, quality of project formulation, recruitment problems, procurement difficulties, etc.
Personnel of the division dealing with the administration of fellowships;
The administrative unit for the Education Sector;
Specialists in various subjects (audio-visual techniques, technical education, curricula, etc.) who are consulted by the project officers on specific points.

48. The questionnaires used in the inquiry were concerned mainly with the project officers (to whom a score of questionnaires were distributed) and fellowship administrators. It was learned from the investigation that the project officers' average workload could be estimated as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Man/Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory work per project employing six or seven experts</td>
<td>45.7</td>
</tr>
<tr>
<td>Recruitment per expert</td>
<td>12.7</td>
</tr>
<tr>
<td>Support activities at headquarters, per project</td>
<td>30-40</td>
</tr>
<tr>
<td>Support activities at headquarters, per expert</td>
<td>6</td>
</tr>
</tbody>
</table>

The figures for fellowship administration were as follows:

<table>
<thead>
<tr>
<th>Task</th>
<th>Man/Days</th>
</tr>
</thead>
<tbody>
<tr>
<td>Preparatory work (award of fellowships, files, programmes, etc)</td>
<td>9.5</td>
</tr>
<tr>
<td>Support for fellowship-holders during studies</td>
<td>3.8</td>
</tr>
<tr>
<td>Evaluation</td>
<td>1.1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>14.4</strong></td>
</tr>
</tbody>
</table>

No quantitative data could be obtained concerning programme specialists. On the administrative unit only total figures were supplied. One of the most important findings of the inquiry is that, so far as the workload is concerned, the expert posts to be filled represent approximately twice as much work (over a year) as the expert posts filled. The study also brings out the significance of the administrative structure for the distribution of the workload. Lastly, it suggests that a classification of project support activities different from that adopted by the CCAQ Task Force might be envisaged and would perhaps elicit information of greater practical value.

49. At all events the UNESCO study is of a preliminary nature. It is now being followed up in UNESCO by the establishment of a system for advance calculation of the workload for each existing project by allocating to each project a number of points (representing a certain number of man/days) calculated in accordance with clearly defined criteria (characteristics of each project plus particular difficulties). This system should make it possible to compare detailed
forecasts with the results forthcoming from the cost measurement system. It should thus lay the foundation for a workload analysis of support activities which might help to make the problems better understood and to formulate a management policy. In addition this system should be progressively improved as the cost measurement system yields more precise information.

50. United Nations study. In the United Nations, the Office of Technical Co-operation of the Department of Economic and Social Affairs launched a study of the same type in the second half of 1974, which had not been completed by the time of writing this report. This study, like the UNESCO study, has attempted to estimate work times for a number of standard operations relating to each project (project preparation, budget approval, budget revision, recruitment and service of experts, fellowships, ordering of equipment, etc.). The resultant man/hour figures do not represent the same orders of magnitude as those arrived at by UNESCO, because in this case they refer only to the Office of Technical Co-operation and because the administrative structure of the United Nations is such that a large proportion of support operations are carried on in other units responsible for the recruitment of experts (Technical Assistance Recruitment Service), technical support (substantive divisions), procurement (General Services) and so on. In order to be comprehensive, therefore, the United Nations study would have to be extended to the other units which carry on operations directly in support of projects.

51. The following more general points emerge from these various studies:

These studies are mutually complementary: even though the information forthcoming from them is based only on estimates, the orders of magnitude obtained at least indicate the directions in which research should be continued. They provide a preliminary diagnosis which calls for checking;

These studies have admittedly been prompted by different and in some cases opposing considerations. In FAO the purpose of the study was to serve as a basis for the report which was submitted to the Governing Council of UNDP, and which reached the conclusion that it was impossible to use projects as the basis of calculation for a cost measurement system. In UNESCO, on the other hand, the study was carried out in order to enable sound preparations to be made for a cost measurement system which the Organization intends to establish on precisely such a project-by-project basis. In the United Nations the aim was to achieve a more precise system of budget estimation. The main point to note, however, is that the pursuit of studies of this type as a general practice in all the agencies which have adopted the cost measurement system might provide the basis for a general system of information - it might even be called a system of X-rays - on support activities;

1/ This document has been issued under the symbol DP/77/Add.5 of 1 November 1974.
If such analyses are to be genuinely useful, they should be capable of providing information not only concerning the effect of the various characteristics of projects on workloads, but also concerning types and rhythms of work, taking into account the differences in administrative structure between the various agencies.

52. From all the information compiled through the experiments with cost measurement systems and the studies we have just described, it may be concluded that the various factors which need to be more exactly known in order to formulate policies for improving the management of support activities and to construct simpler and more effective cost measurement systems are the following:

The administrative structure of the units performing support activities;

The effects of the different intrinsic characteristics of the various project types on the workload;

The cost in days or man/hours of the principal functions performed in support of projects (recruitment of experts, backstopping of experts, procurement, administration of fellowships, etc.);

The description of the various types of work done by the various categories of officials engaged in support activities (project officers, miscellaneous specialists, specialists in the recruitment of experts, fellowship administrators, administrative staff, etc.) and even the description of the rhythms of work of these various categories of officials.

It is plain that, on these various problems, inquiries by questionnaire could supply information which, even if did not conform to a rigid pattern, would be extremely valuable if the methodology adopted was the same in all the agencies. The CCAQ Task Force would certainly be the most appropriate body to devise such a methodology if it was asked to do so. We shall now consider the further advantages that might be derived from such studies with a view to devising simpler and more precise cost measurement systems.

Possibility of using sampling methods

53. Various methods may be used to simplify the work of the time reporters. In this connexion we may mention in particular:

- Simplification of presentation and of the time-table for the submission of reports;
- Sampling by specimen of working time;
- Sampling by specimen of type of output.

Only the last two are sampling methods.

54. By using such simplification techniques as extending the period for which estimated working times are requested (from a day to a month or six months) and calculating times only in percentages instead of hours — techniques which UNESCO
proposes to adopt it will obviously be possible to reduce considerably the efforts required of the staff, but at the risk of substantially lowering the level of precision. In fact this method may be very precise in some cases and almost unusable in others. The scope for its application depends on the type of work done by the time reporters. Those who divide their time between two or three projects (or outputs) can perfectly well supply useful and precise information by submitting only monthly percentage reports (this is the case, for example, with officials who prepare studies or reports). On the other hand, those who are called upon to deal with ten or more outputs or projects as project officers in certain divisions often have to do can supply valid information only if they record their work by the hour. The school of thought which predominated in the Task Force during the recent experiment held that all the time reporters should be compelled to account for their working time hour by hour and day by day. The preliminary studies we have recommended on types of work should make it possible to diversify methods by laying down procedures and timetables for the submission of time reports suited to the type of work covered. Moreover, by applying the sampling methods which we shall now examine, it might be possible to combine the use of very precise time reports (based on samples) with questionnaires by percentage and by month, or by longer periods, distributed to all the staff concerned. In the final analysis, this supplementary use of the various formulae is the best means of combining accuracy of results with some lightening of the efforts required of the time reporters.

55. Sampling methods whereby calculations are made on the basis of specimen work periods have already been used:

At UNIDO, where since 1 June 1974 the weekly time report has been required only one week per month;

At the ILO where, for the purpose of analysing the various ways of dividing up working time in the administrative units, work sheets have been distributed for only four weeks a year;

The UNDP secretariat, which is visibly somewhat overwhelmed by the mass of information it has compiled in six months under a strict and relatively sophisticated system, is looking for ways of continuing to compile valid information while at the same time simplifying its methods; the same holds good for several other organizations.

56. Such methods cannot, however, be used without precautions. On this point we considered it useful to obtain the opinion of specialists in the United Nations Statistical Division. The results of these exchanges of views are as follows:

There is no scientific reason why the use of such formulae should not produce valid results or, at all events, results whose margins of error are no greater than those of the extensive methods now used. It is common knowledge that, when samples are selected either at random or from a sufficiently well-prepared programme, they give results very close to those produced by exhaustive methods of analysis;
It would seem that, in order to ensure the accuracy of the information base used, care should first of all be taken to ensure that the time reporters are still required to account for the whole of their time and activities over a given period, whether it be a day, a week or a month, and not merely to state the time spent on certain particular problems (projects, specified outputs, etc.);

Moreover, in order to choose the sampling periods it is obviously necessary to know the "rhythm of work" of the official whose working time is being analysed. This problem of rhythm of work is somewhat different from, although very close to, the problem of type of work. What is involved here is not the nature of the work performed but the distribution of the official's activities over the year: for example, a project officer who performs many operations for many projects maintains approximately the same rhythm of work throughout the year, and his work may be sampled by selecting a few weeks or even a few days spread over the whole year. On the other hand an accountant, for example, who works to a monthly pattern and whose work varies in nature between the beginning and the end of the month or even assumes a distinctive form at the end of the year would not fit into the same sampling system (in this case it would seem necessary to select at least one month a year). Before the sampling method is selected, therefore, an inventory of work rhythms must be drawn up. It should be possible to prepare this inventory without difficulty in the course of the studies on workloads (cf. para. 52 above).

57. Lastly, the method of sampling types of outputs - for example, the selection of a certain number of projects in order to study the characteristics of an agency's projects as a whole - is also feasible but requires special precautions. This method of selection is of value only in so far as it makes it possible to select the time reporters according to a specific list of projects on which cost information is sought. By this method it might be possible to obtain full information on certain projects (or certain products of the activity of substantive divisions, publications, meetings, documents, etc.) while limiting the number of time reporters. It nevertheless appears more difficult to handle than the previous method inasmuch as the degree of precision of a sample survey of this kind depends in the last analysis on three factors: the total number of projects (about 1,000 in the principal organizations), the number of variables (characteristics of the projects on which information is sought) and the number of projects taken as samples (the sampling fraction). In order to attain a reasonable degree of precision with this method, it would seem that a high sampling fraction - probably 20-30 per cent of the total number of projects - should be used. However, the combination of this method with the previous one should be feasible and should consequently make it possible to simplify the time reporters' work even further.

58. In short, therefore, the use of sampling methods seems to us to be not only feasible but highly desirable provided that it is preceded by the necessary analytical work, particularly as applied to rhythms of work, and provided that its application can be planned and supervised by skilled specialists.
Comparison of project costs: no point in calculating total costs

59. At this stage of our analysis we must consider a very important objection raised by the CCAQ Task Force to systems of cost measurement by project. This is the observation (cf. para. 40, fifth sub-para., above) to the effect that the imputation of the remaining overhead costs (recruitment, staff, administration, printing) to individual projects would require a different method from the "cost groups" method at present in use and would accordingly be a difficult and expensive process. At this point it seems appropriate to quote verbatim paragraph 24 of the report of the Task Force (CCAQ/SEC/327(FB), annex B), which expresses this objection as follows:

"The costing of staff time to individual projects, even given the limitation on accuracy imposed by reporting in small fractions of time, would be less difficult than accurate allocation to projects of the remaining support costs, which represent between two and three times the cost of support directly identifiable to projects from time reports. Costs of office accommodation and office services would necessarily continue to be related to the staff occupying buildings and would have to be pro-rated. Other non-technical support costs such as recruitment, personnel administration, procurement services, editing, translating, printing, etc., would require considerably more detailed statistical data, institution of accurate time reporting, or job-costing, if costs are to be related to individual projects. Thus, the difficulty of allocating costs to projects, other than those obtained from time reports, is at least as great and the results would probably be less reliable than the methods used in CMS to allocate these costs to the cost groups defined in the present system."

60. On this point I have two comments to make:

Firstly, the workload studies have shown that comparison of the "direct costs" of individual projects is a very interesting exercise in itself (cf. paras. 45-50 above), but this presupposes that certain conditions are met. In particular, the direct measurement of costs (in a cost measurement system, the time reports) must cover — as was apparently the case in FAO and UNESCO — all units which play an active and direct part in the implementation of projects, and especially in operations, such as the recruitment of experts, which are clearly too important to be treated as "indirect costs". Thus in a system of costing to project level it would be appropriate to measure, through time reports, all direct support activities, and consequently the methods used for distributing such reports in the various organizations would have to be revised.

This revision should follow upon a revision of the classification adopted by the Task Force for the various categories of support activities. The distinction between technical and non-technical activities, the classification of "functions" and the "cost components" method are highly ingenious but have in practice made it possible to avoid making any precise allowance for differences in administrative structure from one organization to another. Working time was simply measured in certain units without any attempt to determine whether the staff of those units were doing the same kind of work in different organizations.
It is clear, however, that project officers in FAO, UNESCO and the United Nations (Office of Technical Co-operation) perform work that is not at all comparable, for some of them deal with the whole operation of recruiting experts, whereas others leave the greater part of that operation to other units; some combine technical with non-technical support activities, while others are concerned with only one of those aspects.

61. Consequently, in order to make comparisons between agencies, it will obviously be necessary first to decide exactly which are the activities whose relative weight is to be measured and, once the list has been drawn up, to apply to them the same methods of direct time-measurement. If such a system were adopted I do not think it would be possible to maintain, as the Task Force does in paragraph 24 of its report, that direct costs represent between two and three times the cost of the activities measured through time reports (moreover it should be noted that, even under the Task Force's present classification, this proportion varies considerably from one organization to another). On the contrary, it should be possible to measure a very large proportion of overhead costs directly through the time reports, and some relatively simple distribution keys would then suffice for the distribution of the additional cost components. It may even be thought that it should be possible to make comparisons between projects without adding the indirect costs, provided that the activities taken into account were the same in all the organizations - a requirement which, of course, could only be met by prior analysis of their administrative structures. These remarks suggest that systems of costing to project level would need to be appreciably different in structure from the systems adopted hitherto, but there should be no insuperable difficulty in devising a structure to meet the requirements described above.

The problem of calculating benefits

62. The problem of calculating benefits is merely one specific aspect - though an important one - of the more general problem of evaluation. The desire to obtain an evaluation of results has, as we know, been expressed on many occasions (second report of the Ad Hoc Committee of Experts to Examine the Finances of the United Nations and the Specialized Agencies (A/6343), para. 73; Consensus Approved by the Governing Council of UNDP, paras.50 and 51; etc.). Such an evaluation of results may be made:

- By those who have endeavoured to achieve the results: e.g., the Directors-General and Secretaries-General of the organizations in their annual reports on the work of the organizations;

- By co-operation between the various participants in an activity: e.g., the tripartite system (countries, agencies, UNDP) set up in 1973, pursuant to the provisions of the above-mentioned Consensus, to evaluate UNDP operational activities;

- Or by external or specialized bodies (inspection system or specialized evaluation units, etc.).

63. As is also known, attempts have been made to develop a methodology of evaluation. The Administrator of UNDP reviews this question in his report for 1973 (DP/48, paras.104-117) and indicates inter alia:
That UNDP adopted a system of evaluation at the beginning of 1967 and that a small staff with a degree of independence was established to consider methodological problems;

That the first task undertaken was to develop a methodology of evaluation and a set of techniques to carry it out; close working relationships were established with FAO in particular. 1/

The work of UNDP was concentrated on selected projects in progress, and the task of post-project evaluation was left to the agencies;

That a tripartite review system was launched in 1973 and that more than a hundred in-depth evaluations were undertaken in that year by missions constituted for the purpose. However, "it became clear that the Programme required a 'memory bank' to identify success and failure and to store the lessons and apply them to the improvement of the Programme. Finally, it was evident that even as certain evaluation responsibilities became decentralized, programme evaluation and analyses should be strengthened as a central function in tandem with studies of policy issues."

The report goes on to make some interesting comments on the notion of effectiveness and on the lessons to be drawn from evaluation activities.

64. The indications given by the report suggest some lines of inquiry. Apparently, however, it has not yet been found possible to derive from the evaluation operations any specific rules for improving methods in the future. The conversations we have had with the official responsible for UNDP thinking on evaluation 2/ do not warrant the expectation that results usable for this purpose will be forthcoming in the near future, although some outstanding efforts have been made, resulting in some interesting reports on particular evaluation missions in a number of countries. As the Administrator of UNDP recommends in paragraph 109 of his report, efforts should certainly be made to centralize the conclusions to be drawn from these studies. Some reinforcement of the evaluation unit staff would probably be of help in this respect.

65. However, it is not for the author of this report to deal here with the whole body of problems relating to methods of evaluation, but only to determine how far it would be feasible to devise a system for measuring benefits (as a complement to the cost measurement system) and to indicate how such a system might contribute to the solution of the very difficult problem of evaluation. It would seem that such a contribution could be made by establishing a precise typology of projects; and, as the workload studies have shown, the system of costing to project level requires precisely such a typology.

---

1/ The report also mentions the Inter-Agency Study Group on Evaluation, but this Group does not appear to have met since 29 February 1972. At that meeting it examined some draft instructions on evaluation.

2/ The "small staff" mentioned in the Administrator's report has now been reduced to one.
66. The FAO study (described in paragraphs 45 and 46 above) showed, in particular, how projects could be classified according to a number of intrinsic factors, and we have given a brief description of the factors selected. If such a typology could be refined and generally adopted by all the agencies, and if it thus became feasible to give an exact description of all projects merely by listing the standard characteristics adopted, it would then be possible to observe and store in a "memory bank" - as suggested by the Administrator in his report - any correlations that might exist between those characteristics and the proportion of successes or failures recorded. Such correlations would make it feasible, if not to draw immediate conclusions, at any rate to focus research and studies on the causes of success or failure. Consideration could then be given to the formulation of rules for improving the machinery in the light of the results recorded, and the Governments of the countries concerned, UNDP and the agencies could take advantage of these in preparing new programmes.

67. An example of what should be possible in this respect is suggested by the indications given by FAO in document E/5227/Add.2 of 29 May 1974. On 83 large-scale projects examined in detail at FAO in recent years, it proved possible to make a classification which produced the following table:

<table>
<thead>
<tr>
<th>Rating</th>
<th>Effectiveness</th>
<th>Clarity of objectives</th>
<th>Project design</th>
<th>Project management</th>
<th>Government support</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfactory</td>
<td>31</td>
<td>48</td>
<td>25</td>
<td>29</td>
<td>30</td>
</tr>
<tr>
<td>Fair</td>
<td>31</td>
<td>20</td>
<td>32</td>
<td>38</td>
<td>28</td>
</tr>
<tr>
<td>Poor</td>
<td>21</td>
<td>15</td>
<td>26</td>
<td>16</td>
<td>25</td>
</tr>
</tbody>
</table>

Results of this kind give an idea of the nature of the information produced by the methodology at present in use. They are of obvious interest inasmuch as they make it possible to identify projects that have failed and are thus of help in tracing the causes of failure, but it would obviously be far more instructive if precise relationships could be established between the characteristics of the projects, as defined in a typology of the kind envisaged above, and the successes or failures recorded. If, for instance, it should turn out that one or two characteristics tended to recur more often in projects that failed, there would clearly be an urgent need to investigate whether there was any cause-and-effect relationship. Be that as it may, the establishment of correlations between detailed results of this kind and projects systematically defined in terms of a precise typology would certainly provide some useful information.

1/ This would also make it possible to convert these indications into quantified formulae for feeding into the computer.

2/ Operational activities for development. Comprehensive policy review of operational activities throughout the United Nations system. Reports of the specialized agencies..............: FAO.
68. In our view operational activities constitute the most promising area for research \(^1\) and the CCAQ Task Force should give some attention to this problem. In the case of substantive activities financed out of regular budgets, a precise typology of outputs would be at least equally useful for calculating benefits. Evaluation experiments are admittedly less advanced in these areas, but research could be done on specific points. In this area too it would seem possible to find some "effectiveness indicators" that could be applied, for instance, to the various media of dissemination of ideas or standards (publications, research, studies, publicity campaigns, films and broadcasts) in an endeavour to measure, by \textit{a posteriori} market studies (which are not, of course, incompatible with \textit{a priori} studies), the impact of the various media brought to bear. However, caution will be needed in dealing with such difficult questions. We do not think that, in most of the organizations, questions of this kind are yet ripe for inter-agency examination, and some preliminary studies appear to be needed in order to clarify these problems.

69. On the other hand it seems necessary to draw attention here to the recommendation we made, in our previous report on cost measurement systems, concerning \textit{statistical methods of time measurement for repetitive work (JIU/REP/72/10, recommendation 3)} - i.e., the calculation of standard costs: the cost of typing, printing and reproducing one page of a given type of document; the cost of producing a recruiting document, a pay slip, a purchase order or a travel authorization; the cost of one hour of interpretation; and so forth. In \textit{annex VI} we reproduce paragraph 50 of that report, and we reiterate this recommendation, which up to now does not seem to have elicited any comment or produced any effect, \(^2\) because it seems to us to form the starting point - a modest but readily applicable one - for a cost-benefit system in so far as this means measuring the cost of well-known and easily identifiable outputs which thus represent a predetermined unit of benefit.

\(^1\) Of course other research areas are also conceivable. For instance it should be possible gradually to develop some "effectiveness indicators", at least for certain types of projects; the ILO informs us that it has devised such indicators for a number of applications. As regards training, for example, it would seem feasible to set up machinery for determining not only the number of trainees and the characteristics of the training given, but also the degree of success achieved in fitting the persons trained into economic and social life; this information, when compared with costs, would make possible a detailed evaluation and comparison of the various methods of training, or of transferring knowledge, at present in use. Indicators of the same kind would be a possibility for feasibility studies and in other areas. We think, however, that such a line of inquiry would require studies in greater detail than the line we traced in paragraphs 66 and 67 above.

\(^2\) See, however, paragraph 4 of document \textit{COORDINATION/R.1034/Add.2} of 25 April 1974.
Fitting cost measurement systems into comprehensive management systems

70. The various considerations discussed in this report 1/ suggest that the prerequisites for the establishment of integrated management systems are beginning to be met. Cost measurement systems are complementary to a number of other systems and will not function properly unless they are fitted into a set whose essential components it will be well to keep in mind. Among them we may mention:

Medium-term plans;

Medium-term personnel recruitment plans;

Programme budgets;

Detailed work plans;

Workload studies and systems for monitoring the implementation of the detailed plans;

Systems of costing to project level or by outputs;

Benefit measurement systems; and

Evaluation procedures.

This list, which is not exhaustive, demonstrates that some attention ought now to be paid to the problems of integrating this set of mechanisms. All we can do here is express the hope that the CCAQ Task Force, perhaps augmented by the persons responsible for designing and managing the various systems in the agencies, will examine the conditions in which these mechanisms could be integrated. At the stage of thinking, and even of application, that has now been reached in the various organizations it might even be desirable to begin a separate study on this aspect of the problems at the inter-agency level as soon as possible.

1/ Supplementing those put forward in previous reports on programme budgets (JIU/REP/69/7), personnel management systems (JIU/REP/71/1), cost accounting (JIU/REP/72/10) and methods of planning (JIU/REP/74/1).
Chapter V

CONCLUSIONS, SUMMARY AND LIST OF RECOMMENDATIONS

Need for a new collective effort. New instructions for the CCAQ Task Force

71. In response to the question put by the Governing Council of UNDP concerning the future of the cost measurement system, this report could do no more than indicate some directions in which a solution might be sought. The application of the solutions themselves – if the member States consider it desirable that they should be studied – can be achieved only by a collective effort, and it seems highly desirable that the body asked to make that effort should be the CCAQ Task Force, which has proved its effectiveness. Hence one of the most important recommendations of this report will be concerned with the continuation of the activities of this Task Force, reinforced if necessary by a number of specialists in specific problems: statisticians, to deal with problems of sampling; the authors of studies on workloads, to give such research a more general application; evaluation specialists, for studies of benefits; and directors of management bureaux, for the general structure of management systems. If this suggestion is adopted, it seems particularly desirable that the role of the Task Force should be defined as precisely as possible by the Governing Council of UNDP and the governing bodies of the agencies. The recommendations made at the end of the report embody some suggestions concerning the possible definition of this role.

Summary of the report

72. Before making the recommendations we shall very briefly summarize the contents of this report.

   (1) On the question of the reimbursement of overhead costs, the author of the report feels able to state the following (chapter II):

   The figures arrived at by the cost measurement experiment carried out by the agencies in 1973 represent valid orders of magnitude;

   The design of the existing systems did not equip them to explain the differences observed between the main agencies;

   The choice of methods of reimbursing overhead costs is a political decision in so far as it determines the amount of the reimbursements;

   No preference can be expressed on the basis of technical considerations for any one of the various formulae proposed by CCAQ;

   On the other hand it seems desirable to show clearly in future, for each agency, what proportion of overhead costs is borne by UNDP and what remains payable out of the regular budgets.

   (2) As to the continuation of the cost measurement systems, the author of the report considers (chapter III) that:
The construction of these measuring instruments is an outstanding feat and it would be a pity not to continue an experiment which has required such efforts and which has developed such valuable tools of management;

The very existence of these systems and their initial results create a new and significant situation inasmuch as they show that it is now possible to attempt a real reduction in overhead costs.

In fact, it now seems possible to find at least part of the answer to important and hitherto ill-solved problems, including in particular:

- The formulation of policies conducive to economies;
- Systematic monitoring of implementation;
- The evaluation of results.

(3) It will be possible to solve these problems, or at least to begin solving them, at the price of reorienting the existing systems (chapter IV), firstly towards costing to project level or by project type (in the case of support for operational activities) or more generally by output (in the case of the activities of substantive divisions financed out of regular budgets), and secondly towards a number of supplementary studies on implementation, effectiveness and benefits.

Such a reorientation is rendered feasible by:

- The existence of the instruments which made it possible to construct the present systems;
- The information which should be forthcoming from the general application of the workload analyses already being undertaken in a number of agencies, particularly with regard to differences between organizations in administrative structure, the effect of the characteristics of the various projects on the workload they impose, and the diversity of types and rhythms of work;
- Systematic use of sampling technique;
- Modification of the method of calculating the "direct costs" of projects;
- The advances in calculation of benefits which should be achieved through, in particular, the adoption of precise typologies of projects and the examination of correlations between the principal characteristics adopted and the successes or failures recorded; efforts might also be made to establish "effectiveness indicators", and statistical methods of costing repetitive tasks might yield useful information;
- The study of ways of fitting cost measurement systems more effectively into comprehensive management systems.
List of recommendations

73. Recommendation No. I

When the Governing Council of UNDP has adopted a formula for the reimbursement of overhead costs, the results of the cost measurement systems should enable the executive heads of the various organizations to tell their governing bodies exactly what proportion of project overhead costs remains to be met out of their regular budgets, and a formula should be developed in the future to make these estimates of expenditure stand out clearly in the regular budgets of these organizations (cf. paras. 15 and 16 above).

74. Recommendation No. II

The cost measurement systems in the various organizations and UNDP should be continued beyond 1 January 1975 and reoriented towards the costing of "outputs" and, in the case of operational activities, of "projects" (cf. para. 7; chapter III, paras. 17-33; and para. 39).

75. Recommendation No. III

The CCAQ Task Force should continue its work as quickly as possible; it should be reinforced as necessary by specialists in specific problems (specialists in sampling, evaluation, workload studies and management systems); it should be given the task of submitting to the governing bodies of the organizations concerned, 1/ from 1976 onwards, and to the Governing Council of UNDP for its January 1976 session, a comprehensive study and certain quantified results. The comprehensive study should deal with the questions raised in recommendations Nos. II, IV, V, VI, VII, VIII and IX of this report and the quantified results should be those referred to in recommendation No. X (cf. para. 71).

76. Recommendation No. IV

The organizations should make it a general practice to carry out preliminary studies on workloads of the type already undertaken by FAO, UNESCO and the United Nations (Office of Technical Co-operation, Department of Economic and Social Affairs). These studies should bring out the differences in the distribution of support activities within the various organizations resulting from differences in administrative structure, the types of work done by the various officials taking part in these activities, the characteristics of rhythms of work, and lastly the effect which the main characteristics of the projects have on workloads (cf. paras. 44-52).

77. Recommendation No. V

The officials responsible for completing the time reports and the periods for which they are required to do so should be selected in accordance with sampling methods determined with the assistance of specialists in such procedures (cf. paras. 53-58).

1/ In the case of the United Nations, to the General Assembly through the Advisory Committee on Administrative and Budgetary Questions.
78. **Recommendation No. VI**

Procedures should be worked out and applied as quickly as possible whereby the directors of substantive divisions and representatives of the time reporters may be brought directly, within each organization, into the process of designing cost-benefit systems. Their collaboration should be sought, in particular, in the design of "detailed work programmes", methods of monitoring the implementation of those programmes, and the relationship between these mechanisms and the cost-benefit systems (cf. paras. 30-32).

79. **Recommendation No. VII**

The time report forms should be revised and diversified according to "types of work" so as to elicit a maximum of usable information without unduly burdening the staff who have to complete them.

80. **Recommendation No. VIII**

Studies should be undertaken with a view to devising benefit measurement systems. They should cover in particular:

- The establishment of typologies of projects: in other words, the identification and classification of projects in a consistent manner in the various agencies in accordance with a list of characteristics to be determined;

- Preliminary research on the measurement of benefits for certain categories of projects or outputs by means of "effectiveness indicators";

- The establishment of statistical systems for costing certain repetitive tasks (cf. paras. 62-69 and annex VI).

81. **Recommendation No. IX**

A comprehensive study should be made on the incorporation of cost-benefit systems in the set of component mechanisms which make up an integrated management system (cf. para. 70).

82. **Recommendation No. X**

Quantified results should be supplied to the governing bodies of the organizations concerned 1/ and to the Governing Council of UNDP in 1976 concerning:

1/ In the case of the United Nations, to the General Assembly through the Advisory Committee on Administrative and Budgetary Questions.
Statistics, obtained through workload studies, on differences in the overhead costs of projects according to their various characteristics; on the average costs of the various support activities defined according to a classification of the kind used by UNESCO or the United Nations Office of Technical Co-operation in the present studies; and on types and rhythms of work;

An initial programme for verifying the above-mentioned figures by means of an experiment in costing to project level conducted over a period of three months in the course of 1975 (cf. para. 71).
ANNEXES
ANNEX I

BACKGROUND TO THE PREPARATION OF THIS REPORT

The Inspector responsible for preparing this report has followed the adoption of cost accounting in the organizations of the United Nations family from its inception through each successive stage. He had previously prepared a report on the overhead costs of extra-budgetary programmes and on methods of measuring performance and costs (JIU/REP/69/2), a note on cost accounting (JIU/NOTE/71/2) and a report on the same subject (JIU/REP/72/10).

The work on this report started in July 1974 with an examination of the existing documents and a study of the request made by the Governing Council of UNDP. Requests for additional information were sent to all the organizations concerned at the end of July. Most of the replies and the documents needed were received in the course of September. At the end of September the Inspector examined the problems concerning the United Nations and UNDP on the spot in New York. The study of questions concerning WHO and the ILO was begun at Geneva in October and quick visits were paid to UNESCO in Paris, FAO at Rome and UNIDO at Vienna. The end of October and the whole of November were spent in drafting the report and checking on certain problems concerning the United Nations and UNDP in New York.
ANNEX II

PRINCIPAL RESULTS OBTAINED FROM THE EXPERIMENT IN COST MEASUREMENT IN THE VARIOUS AGENCIES

CCAQ COST MEASUREMENT SYSTEM

UNDP PROJECT COSTS AND AGENCY SUPPORT COSTS

January-December 1973

<table>
<thead>
<tr>
<th>DIRECT COSTS OF PROJECTS</th>
<th>All Agencies $000</th>
<th>PAO $000</th>
<th>ILO $000</th>
<th>UNIDO $000</th>
<th>United Nations $000</th>
<th>NEW YORK $000</th>
<th>WHO $000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Project Personnel</td>
<td>121,157</td>
<td>53,575</td>
<td>21,719</td>
<td>11,899</td>
<td>25,605</td>
<td>63,9</td>
<td>9,359</td>
</tr>
<tr>
<td>Sub-contracts</td>
<td>16,693</td>
<td>9,3</td>
<td>457</td>
<td>1,290</td>
<td>4,816</td>
<td>12,0</td>
<td>2,577</td>
</tr>
<tr>
<td>Training</td>
<td>13,245</td>
<td>7,4</td>
<td>1,940</td>
<td>1,335</td>
<td>3,783</td>
<td>9,4</td>
<td>1,517</td>
</tr>
<tr>
<td>Equipment</td>
<td>21,643</td>
<td>12,1</td>
<td>2,821</td>
<td>1,347</td>
<td>4,436</td>
<td>11,1</td>
<td>1,533</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>6,730</td>
<td>3,7</td>
<td>719</td>
<td>236</td>
<td>1,449</td>
<td>3,6</td>
<td>575</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>179,468</strong></td>
<td><strong>100%</strong></td>
<td><strong>27,656</strong></td>
<td><strong>16,113</strong></td>
<td><strong>40,911</strong></td>
<td><strong>100%</strong></td>
<td><strong>14,401</strong></td>
</tr>
</tbody>
</table>

SUPPORT COSTS BY FUNCTION

(a) Programme Planning
3,561 2.0 1,083 1.3 730 2.6 662 4.1 622 1.6 464 2.2

(b) Project Formulation
3,114 1.7 1,217 1.5 447 1.6 501 3.1 617 1.6 372 2.4

(c) Project Implementation:

(i) Technical Back-stopping
13,558 7.5 3,649 4.5 2,544 9.2 1,077 6.6 4,512 11.2 1,776 11.3

(ii) Non-Technical Back-stopping
20,190 11.6 3,398 11.6 4,283 15.6 2,131 17.0 3,002 7.6 1,296 9.0

(d) Post-project Evaluation and Follow-up
861 0.5 294 0.4 206 0.7 61 0.4 207 0.5 93 0.6

**TOTAL**
41,694 23.3 15,641 19.3 8,210 29.7 5,032 31.2 9,040 22.5 3,961 27.4

RECAPITULATION, BY COST GROUP

<table>
<thead>
<tr>
<th>Office and Meetings</th>
<th>Accretion</th>
<th>Accumulation</th>
<th>Office Services</th>
<th>Data Processing</th>
<th>Budget, Finance and Administrative Services</th>
<th>Personnel Administration</th>
<th>Procurement and Sub-contracting Services</th>
<th>Reports, Publications, and Documentation</th>
<th>Meeting Services</th>
<th>General Legal Services</th>
<th>Public Information</th>
<th>Library</th>
<th>Field Offices</th>
<th>Technical Units</th>
<th><strong>TOTAL</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1,565</td>
<td>-0.9</td>
<td>2,295</td>
<td>-1.3</td>
<td>5,405</td>
<td>5,034</td>
<td>2,672</td>
<td>721</td>
<td>1</td>
<td>255</td>
<td>0.1</td>
<td>504</td>
<td>2,069</td>
<td>20,886</td>
<td>41,691</td>
</tr>
</tbody>
</table>

**TOTAL**
41,691 23.3 15,641 19.3 8,210 29.7 5,032 31.2 9,040 22.5 3,961 27.4
ANNEX III

DESCRIPTION OF EXPERIMENTS UNDERTAKEN IN THE VARIOUS ORGANIZATIONS

1. The findings of the survey undertaken in the various organizations may be summarized as follows:

As a result of the Task Force's endeavours to promote standardization, particularly in the calculation of overhead costs, the experiments conducted have features in common, but they exhibit great differences in methods;

In essentials these differences relate to:

(a) The design of the "time reports" and, accordingly, the types of analyses sought;

(b) The systems for collecting, checking and centralizing these reports and the information they contain;

(c) Methods of calculating, presenting and using the results, firstly for activities in support of operational projects and secondly for other activities, i.e., in particular, those of substantive divisions at the organizations' headquarters.

2. Time reports

An examination of the various types of time reports reveals fairly substantial differences in design and methods. The attached table shows the main characteristics of these basic documents.
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>United Nations</th>
<th>UNDP</th>
<th>UNIDO</th>
<th>WHO</th>
<th>ILO</th>
<th>FAO</th>
<th>UNESCO</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of types of reports</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>3 for substantive units. Several for administrative units.</td>
<td>1</td>
<td>1 for substantive units. 1 for administrative units.</td>
<td></td>
</tr>
<tr>
<td>Periodicity of reports</td>
<td>Monthly. On a daily basis.</td>
<td>Weekly. On a daily basis.</td>
<td>Weekly. Daily analysis possible. Starting in 1974, only one week per month.</td>
<td>Weekly. On a daily basis.</td>
<td>(a) For Headquarters (substantive division), weekly. On a daily basis. (b) For regional units, per month, globally, in percentages. (c) For other units, 4 weeks a year.</td>
<td>Weekly. Daily analysis possible.</td>
<td></td>
</tr>
<tr>
<td>Description of operational activities (technical support)</td>
<td>The Task Force's 5 categories indicated in clear, not coded. With an indication of the source of funds and allocation to a &quot;specific activity&quot; under the budget.</td>
<td>Information supplied by project, coded, with number and nature of project (by country, region, sub-region, etc.), plus 3 of the Task Force's 5 categories plus 4 others and information relating to source of funds.</td>
<td>The Task Force's 5 categories, coded (A,B,C1,C2,D), with an indication of the source of funds and allocation to a &quot;specific activity&quot; under the budget.</td>
<td>The Task Force's 5 categories, coded (SF,ST,SF,SN,SE), plus 1 for general support (GO), with an indication of the source of funds and of the office for which the work is done. An indication of the project concerned can sometimes be found in the &quot;activities&quot; column.</td>
<td>For the Headquarters (substantive units) sheet, the Task Force's 5 categories with an indication of the source of funds (in clear, not coded).</td>
<td>By project. Details not yet settled.</td>
<td></td>
</tr>
<tr>
<td>Description of activities under regular programmes</td>
<td>By &quot;specific activities&quot; as defined in the budget (coded) plus classification by function in 9 categories (research, preparation of report, data collection, etc.) - not coded.</td>
<td>Separation by source of funds for other than operational activities.</td>
<td>By &quot;specific activities&quot; as defined in the budget (76 in all), coded, plus classification by function (5 categories: technical assistance, meetings, promotion, research, etc.) - not coded.</td>
<td>Separation of activities by assignments (special assignments: World Health Assembly, Executive Board, Regional Committees, Director-General, etc.).</td>
<td>For Headquarters (substantive units) separation into 6 categories of functions (research, information, meetings, etc.) - not coded.</td>
<td>By programme component as defined in the budget or by sub-programme component with an indication in clear plus one coding at two levels (main code, sub-code).</td>
<td>Probably by units of the programme budget adopted. Details not yet settled.</td>
</tr>
</tbody>
</table>
This table prompts the following comments:

3. The main resemblance between the various model forms is due to the fact that the CCAQ Task Force selected a method of analysing essential project support activities in order to provide a uniform basis for the presentation and calculation of the costs to be borne by the UNDP Governing Council. With the exception of UNESCO, which has not yet set up its cost measurement system, and the UNDP secretariat itself, which seems to have wanted to select a closer type of analysis, all the organizations have adopted the five categories of functions established by the Task Force (cf. para. 4 above) for these support activities. They appear either in a coded form or in clear for the five Organizations which made the joint experiment.

4. It should be noted, however, that for these support activities UNDP and UNESCO decided to adopt a closer analysis by project, whereas the others merely give information by source of funds, with references either to "specific activities" or to components or units of programme budgets where applicable. The systems of coding adopted in three organizations are reasonably comparable; in the United Nations and the ILO the information is not coded.

5. The majority of organizations adopted the same method of time recording. Hours of work are recorded on a daily basis, and the reports are submitted weekly in five organizations (UNDP, UNIDO, WHO, the ILO and FAO) and monthly in the United Nations alone. UNESCO proposes to adopt a much more flexible system of recording in percentages on monthly sheets (with no daily reference).

6. Most of the organizations have introduced only one model form of report - each one a different model - which can be adapted to all the types of work studied. Three agencies have seen fit to use more than one model:

   UNIDO has devised a special form for officials of the procurement unit (TEPCO);

   UNESCO has devised different forms for analysing the working time of technical units and of administrative units;

   At the ILO the process of diversification has gone much further: three separate forms - for Headquarters, regional units and branch offices - have been prepared for substantive units alone, and seven or eight different forms for administrative units.

7. Lastly, the methods of analysing activities financed under regular programmes vary quite widely. Here the budgetary structure proves to be a decisive factor in that, in all the organizations except perhaps WHO, the basic components of the programme, as presented in the budget - specific activities, programme or sub-programme components and programme units - serve to identify activities. On the other hand, the breakdown by functions or types of work has not been harmonized for this purpose by the CCAQ Task Force, and consequently a wide variety of choices have been made: nine categories for the United Nations,
five for UNIDO, six for the ILO, separation by "assignments" for WHO, etc. The merits of the various methods used can be assessed only by comparing the results which they have produced, or which they might have produced if they had been used systematically and comprehensively.

First, however, the methods of centralizing these data must be examined.

Methods of collecting, checking and centralizing data

8. As before, the tabular form has been used in order to provide a quick conspectus of the various methods of collecting, checking and centralizing data.
## COMPARISON OF METHODS OF COLLECTING, CHECKING AND CENTRALIZING DATA

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>United Nations</th>
<th>UNDP (1974 only)</th>
<th>UNIDO</th>
<th>WHO</th>
<th>ILO</th>
<th>FAO</th>
<th>UNESCO</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Number and type of reporters</strong></td>
<td>All Professional staff in the Department of Economic and Social Affairs with the exception of the Offices of the Under-Secretary-General and his Deputy and the Departmental Administration and Finance Office. Approximately 400 Professional staff.</td>
<td>The area officers of the UNDP regional bureaux (at Headquarters). 90 Professional staff plus one G-5 and one D-1.</td>
<td>106 Professional staff in all out of a total complement of 267 in this division plus 65 Professional staff in the Technical Co-operation Division and the procurement unit out of a total complement of 122.</td>
<td>At Geneva Headquarters, 281 persons in the substantive divisions (out of a total complement of 601), 206 persons out of a total complement of 595 in five regions (excluding the Americas).</td>
<td>281 Professional staff out of a total complement of 486 in the substantive divisions at Headquarters plus 114 Professional and 87 General Service staff in the regional and local offices out of a total complement of 1,422.</td>
<td>422 Professional and 178 General Service staff; i.e. 670 persons out of a total complement of 1,422 for these divisions.</td>
<td>Expected number; approximately 600 persons.</td>
</tr>
<tr>
<td><strong>Guidance and checking for Professional staff</strong></td>
<td>No central supervision. No guidance or checking.</td>
<td>One official specially responsible for discussing individual cases with the Professional staff concerned (particularly with regard to coding).</td>
<td>The project manager of the cost measurement system has talks with all the staff concerned.</td>
<td>Preliminary briefing sessions at Headquarters and in the regions. Assistance and guidance provided, computerised check on validity of coding.</td>
<td>Preliminary briefing sessions at Headquarters and in the regions. A co-ordinator in each department maintains liaison with reporters.</td>
<td>Several inter-departmental working meetings held to introduce the system. Supervision of staff by unit chiefs and by audit.</td>
<td>Not yet provided for.</td>
</tr>
<tr>
<td><strong>Documents circulated</strong></td>
<td>One memorandum and one instruction (9 March 1973).</td>
<td>One instruction and one addendum (no reference number or date). A training programme.</td>
<td>One instruction (guide plus coding) (February 1973) plus various memoranda.</td>
<td>One manual and instructions on the preparation of time reports (with details of code).</td>
<td>&quot;Guidelines for completion and submission of weekly estimates of hours worked by programme&quot;.</td>
<td>Various circulars on the management of the programme, the method of completing reports, the code, procedure, etc.</td>
<td>Instructions in preparation. Proceedings of the preparatory meetings in progress.</td>
</tr>
<tr>
<td><strong>How information is centralized</strong></td>
<td>Manual centralization monthly in each substantive division by the administrative officers of the division. Monthly sheets, by division, sent to a Professional officer of the Departmental Administration and Finance Office, who prepares a half-yearly summary (for overhead costs only) and transmits it to the Accounts Division.</td>
<td>Individual time reports transcribed on punched cards. Centralisation by computer. Cost $3,000 - $4,000 for 400 cards and 17 entries on each card, i.e. approx. 7,000 data per month.</td>
<td>Time reports transcribed individually on to coded sheets summarising the situation by the week. These documents are transcribed on to punched cards and centralised by computer.</td>
<td>Centralisation by computer. Exceptionally, certain operations are performed manually.</td>
<td>Centralisation by computer, except of information from the field.</td>
<td>Manual centralization of 600 monthly sheets envisaged.</td>
<td>Manual centralization of 600 monthly sheets envisaged.</td>
</tr>
</tbody>
</table>
## COMPARISON OF METHODS OF COLLECTING, CHECKING AND CENTRALIZING DATA (continued)

<table>
<thead>
<tr>
<th>Characteristics</th>
<th>United Nations</th>
<th>UNDP (1974 only)</th>
<th>UNIDO</th>
<th>WHO</th>
<th>ILO</th>
<th>FAO</th>
<th>UNESCO</th>
</tr>
</thead>
</table>
| **Unit responsible for design, checking and analyses** | (a) Departmental Administration and Finance Office, Department of Economic and Social Affairs.  
(b) A Professional staff member in the Accounts Division.  
(c) The Budget Division participates in design. No one has been appointed to centralize the operation as a whole. | Division of Management Information Services, Bureau of Administration and Finance. Four persons on a part-time basis. | One specialized project manager assisted by one General Service staff member. | One specialized project manager (assisted by one General Service staff member) in the Division of Budget and Finance. | One specialized project manager, Chief of the Management Services Branch. | The specialized project manager is the chief of the Accounts Branch; he is responsible for execution. Design is the responsibility of the Interdepartmental Working Party on Programme Management, of which the chiefs of the Financial Services Division, the Office of Programme and Budget, and the Organization and Methods Branch are members. | Responsibility conferred on the Office of Management and Data Processing. |
| **Reactions of Professional Staff**                  | Some Professional staff have refused to complete the sheets. There has been no discussion of this problem. | Difficulties encountered in continuing the experiment on such burdensome terms. No possibility of extending time sheets to Resident Representatives (the sheets are unsuitable). | Since the report has been required only one week a month, it has been more difficult to maintain discipline. | Irritiveness of the task of completing the reports has been mentioned in many comments. On the other hand, many expressions of interest in results by division. | Many favourable reactions in so far as the system is conceived as a management tool, despite the obvious burden imposed by the system on the reporters. | Many favourable reactions despite the usual difficulties, as a result of the exchanges of information with the divisions concerned. | System not yet in operation. |
The following observations may be made on this table:

9. The number and type of time reporters vary quite considerably from organization to organization. What matters here is not the number of staff members selected as reporters or even the proportion of reporters to total staff, but the method adopted for selecting them. In most cases, FAO and the ILO being the exceptions, only Professional staff were selected, whereas many General Service staff members perform functions which are not just ancillary to those of Professional staff. Even more important, the functions performed by the staff selected are not the same in all the organizations, particularly where project support activities are concerned. For the future, consideration should be given to the adoption of a method whereby, irrespective of the structure of the organization, the same types of activities could be analysed by the time reports (cf. paras. 60 and 61 of the report).

10. Except in the United Nations, proper provision was, on the whole, made for assistance to the reporting staff and accuracy was properly checked.

11. In four of the six organizations making the experiment, centralization was performed by computer on the basis of the reports themselves transcribed on to punched cards. In the future it should be possible to make computerized centralization the general practice.

12. Except in the United Nations, the responsibility for running the system was, on the whole, concentrated in the hands of a project manager. Design obviously entails co-operation between several different units.

13. Generally speaking, the time reporters found the experiment trying. The only organizations that were able to maintain interest in the system were those which supplied detailed results to every division or unit taking part in the operation: namely FAO, the ILO, WHO and UNIDO. UNDP began its experiment too late to operate in that way, and its analysis by project proved particularly difficult for the staff members concerned. The United Nations held no discussions - an omission which led to some downright and understandable refusals; even so, the experiment met with fairly general acceptance, albeit amid indifference to the discipline imposed. There is no doubt that close association of unit chiefs and staff with the design and operation of the system is the only way to guarantee correct results and to make a worth-while contribution to improved management (cf. paras. 30 to 32 of the report).

Methods of calculating and presenting results

14. Activities in support of operational projects. A distinction will be made between activities in support of operational projects and other activities. In the case of support activities, the results obtained with the standardized methods established by the Task Force are given and commented upon in the report (paras. 4, 5 and 10-14), and the main figures are reproduced in annex II. It should be added that, at the time of writing this report, the UNDP secretariat is receiving the first results of an analysis of the information collected in its experiment on cost measurement by project. The analyses have not, however,
been completed. Those so far received relate to two months' centralized results only. They reveal differences in the relative weight of the various support functions, firstly between regional bureaux and secondly between categories of projects classified by region and by economic or social sector. When all the results have been analysed, it would be very useful if the UNDP secretariat would prepare a document setting out the main lessons to be drawn from them.

15. Other activities. Several agencies have made serious attempts to use cost measurement systems as a management tool, and interesting information has been obtained. Four agencies - the ILO, FAO, UNIDO and WHO - have attempted to interest the substantive divisions in the results concerning them. Two agencies - the ILO and FAO - have also tried to make general use of the overall results.

16. At FAO the overall results are used in an original way, the information obtained by the cost measurement system being integrated into the Organization's general accounts. This gives a breakdown, by programme, of overall costs into the various cost components or sub-components, both for substantive programmes for which time sheets have been completed and for other programmes for which distribution keys have been used. The advantages of this general presentation deserve further study. There is no doubt, however, that it provides each division with an exact picture of the composition of its costs. The ILO, for its part, has attempted a comprehensive analysis of the results, covering all aspects of the Organisation (total cost of technical units, technical co-operation projects, project support, comparison with other agencies, non-technical programmes, technical programmes, etc.). There appear to be some lessons to be learnt from this analysis; obviously, however, more would be learnt if the same type of work had been done in the other agencies.

17. More generally the ILO, FAO, WHO and UNIDO have often communicated the results of analysis of the cost measurement system at quarterly intervals to all divisions, especially those completing time reports. The communications have sometimes met with no response, but in quite a large number of cases they have led to an analysis of internal costs and sometimes to comparative studies between units performing the same type of work. This method, whereby the divisions themselves use the results of the system, undoubtedly represents the best way of obtaining a real management tool. However, the types of analysis by inputs possible with the existing systems are obviously far less useful than analyses of cost by outputs. The comments received from the various divisions in most of the agencies make this quite clear. This problem is directly related to that of budgetary structure.

18. It has already been mentioned that the United Nations (New York Headquarters) has not used the centralized results concerning activities other than project support activities. It should be mentioned, however, that a report on the introduction of the system at the New York Headquarters was prepared by the Accounts Division in July 1974. It consists essentially of a review of the results by "cost component", with explanations of the distribution keys used.
ANNEX IV

NOTE ON THE CONCEPT OF "OUTPUTS"

1. The notion of "outputs" deserves to be clarified. The diagram which follows may convey a better idea of what is involved. The first column shows the type of work done by the staff either at headquarters or in the field (inputs); the second column gives examples of the outputs resulting from this work; and the third column, examples of the types of objectives it is hoped to attain by using these outputs.
<table>
<thead>
<tr>
<th>Inputs</th>
<th>Outputs</th>
<th>General objectives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hours of work corresponding to specific types of work</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**OPERATIONAL ACTIVITIES**
- **Project support** (Professional staff at headquarters, regional units and Resident Representatives):
  - Recruitment of experts, procurement of equipment, award of fellowships, administrative work of programming and formulation, etc.
- **Project implementation**:
  - Work of experts, training, direct participation, drafting of reports, etc.

**SUBSTANTIVE ACTIVITIES**
- **Research**: data collection and processing
- **Drafting of documents or reports**
- **Collection and dissemination of information**
- **General administration**, etc.

**PROJECTS IMPLEMENTED**
- **General studies**
- **Feasibility studies**
- **Institution building**
- **Technical advice**
- **Training, etc.**

**OBJECTIVES**
- Development assistance to member countries
- Cost may be calculated per unit by adding total overhead costs of each project to the cost of implementing the project itself.
- Quantification possible in most cases if objectives have been clearly defined.

**OUTPUTS**
- **Studies and documents**
- **Reports**
- **Publications**
- **Meetings held** (of various kinds)
- **Standards laid down, conventions signed**
- **Administrative documents** (budget, plan, etc.)

**OBJECTIVES**
- Contribution to international co-operation
- Establishing of principles and common frames of reference
- Dissemination of ideas or standards, etc.
- Quantification possible under the same conditions as for technical assistance.

[Level of cost measurement system]

[Level of work plans, programme budgets by country and reports of Directors-General or Secretaries-General on the work of the Organizations]

[Level of resolutions, of "medium-term intermediate-stage objectives" set in medium-term plans, and of reports on the work of the Organizations]
2. In the preparatory phase of the work - that of planning and budgeting - the above table should be read from right to left (i.e. from medium-term plan to budget and from budget to detailed work plans). In the implementation phase, however, the table may be read from left to right, i.e. from work done to objective attained. In either direction, passage through the central column - that concerning the outputs which are the immediate result of the work expected of or done by the staff used by the organizations - is obviously a very important stage. Precise identification of these outputs is particularly useful for the proper functioning of the machinery as a whole in that the choice of outputs shapes the organization's policy in a specific field, the efforts of the entire staff must be concentrated on producing them, and study of the impact of each of them is the means of appraising the efficacy of the policy adopted. These three aspects need an explanation.

3. While the objectives to be attained are determined by political decisions (charters, constitutions, resolutions of governing bodies, etc.), the means of attaining them - which means the sets of outputs - are usually chosen by the secretariats. In aiming at, or working towards, a specific objective, however, it is nearly always possible to choose between two or more possible solutions which represent lists of different outputs. For example, in order to disseminate an idea or a standard recommended by a resolution, a choice may be made from among publications, meetings, publicity campaigns, films, radio or television broadcasts, training courses, negotiations with a view to concluding conventions, etc. Efforts may be concentrated on one of these media or on a combination of several. In every case, the outputs to be set before the staff as the immediate objectives of their work will be determined by this initial choice. It is therefore of great importance to be able to identify those outputs with which the objective may be attained most cheaply and most effectively, and it would be of great value to have some technical method of solving this problem.

4. Once the "work plans" - which in reality are merely the list of outputs selected for production with a view to attaining an objective - have been prepared, the problem is to ensure that they are properly carried out: i.e., in particular, to keep to the time-table laid down; hence detailed work plans listing these outputs and specifying the time-table for producing them (cf. paras. 26 and 30) are the prerequisite of any system for monitoring implementation.

5. Lastly, the calculation of benefits is conceivable only on the basis of well-identified outputs (cf. para. 62 of the report).
## ANNEX V

**LIST OF DOCUMENTS CONCERNING COST MEASUREMENT SYSTEMS**

<table>
<thead>
<tr>
<th>Year</th>
<th>Document</th>
<th>Date</th>
<th>Submitted by</th>
<th>Content</th>
</tr>
</thead>
<tbody>
<tr>
<td>1969</td>
<td>JIU/REP/69/2</td>
<td>January 1969</td>
<td>JIU</td>
<td>Overhead costs and cost accounting</td>
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<tr>
<td>1971</td>
<td>DP/L.176</td>
<td>26 April 1971</td>
<td>UNDP</td>
<td>Overhead costs</td>
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<tr>
<td></td>
<td>E/5043/Rev.1</td>
<td>June 1971</td>
<td>UNDP</td>
<td>Overhead costs</td>
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<tr>
<td></td>
<td>No reference</td>
<td>July 1971</td>
<td>WHO</td>
<td>Special study on reimbursement of overhead costs</td>
</tr>
<tr>
<td></td>
<td>JIU/NOTE/71/2</td>
<td>17 September 1971</td>
<td>JIU</td>
<td>Cost accounting</td>
</tr>
<tr>
<td></td>
<td>E/5081</td>
<td>5 November 1971</td>
<td>ACC</td>
<td>Overhead costs</td>
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<tr>
<td></td>
<td>DP/L.212</td>
<td>29 December 1971</td>
<td>UNDP</td>
<td>Overhead costs</td>
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<tr>
<td></td>
<td>DP/L.212/Add.1</td>
<td>29 December 1971</td>
<td>UNDP</td>
<td>ACABQ report on overhead costs</td>
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<tr>
<td>1972</td>
<td>E/5092</td>
<td>February 1972</td>
<td>UNDP</td>
<td>Overhead costs</td>
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<tr>
<td></td>
<td>COORD/R.930</td>
<td>11 March 1972</td>
<td>ACC</td>
<td>Overhead costs and cost accounting</td>
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<tr>
<td></td>
<td>DP/L.225</td>
<td>3 April 1972</td>
<td>UNDP</td>
<td>Overhead costs</td>
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<td></td>
<td>E/5185/Rev.1</td>
<td>June 1972</td>
<td>UNDP</td>
<td>Overhead costs</td>
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<td>DP/L.225/Add.1</td>
<td>5 June 1972</td>
<td>UNDP</td>
<td>CCAQ report</td>
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<tr>
<td></td>
<td>DP/L.251</td>
<td>29 November 1972</td>
<td>UNDP</td>
<td>CCAQ report on the implementation of the cost measurement system</td>
</tr>
<tr>
<td>Year</td>
<td>Document</td>
<td>Date</td>
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<td>Content</td>
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<td>1972</td>
<td>DP/L.251/Add.1</td>
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<td>UNDP</td>
<td>Submission of JIU report (JIU/REP/72/10)</td>
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<td>Resolution 2975 (XXVII)</td>
<td>December 1972</td>
<td>UNDP General Assembly</td>
<td>Measures to strengthen the executing agencies of UNDP</td>
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<td>1973</td>
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<td>10 January 1973</td>
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<td>16 February 1973</td>
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<td>Report of the Budgetary and Finance Committee to the UNDP Governing Council on overhead costs</td>
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<td>CL.60/3</td>
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<td>FAO</td>
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<td>GB/90/10/31</td>
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<td>ILO</td>
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<td>92 Ex/8</td>
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<td>Director-General's provisional comments on the JIU report</td>
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<td>Work measurement and costing of conference services</td>
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<td>COORD/SR.61/2</td>
<td>9 May 1974</td>
<td>ACC</td>
<td>Second meeting of the sixty-first session. Policy questions concerning overhead costs</td>
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<td>DP/L.295/Add.2</td>
<td>18 June 1974</td>
<td>UNDP</td>
<td>Report of the Budgetary and Finance Committee on overhead costs</td>
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<td>1 November 1974</td>
<td>UNDP</td>
<td>FAO report on cost measurement on a project basis</td>
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"In the various systems that have been proposed, it is envisaged that the working time of General Service staff will be distributed to programme sectors in proportion to that of the professional staff members for whom they work (cf. appendix X to the second report of the CCAQ Task Force and page 7 of annex IV to the UNESCO proposal). The activities of General Service staff in other sectors, including general administrative services, will be distributed according to distribution keys which, as we have seen, are in some cases based on costings by heads of units. Such methods are perfectly acceptable for determining programme costs or programme support costs. However, they could be easily and usefully supplemented by other kinds of measurement and calculation in the case of certain repetitive tasks; this would facilitate the determination of 'standard costs' - costs of typing, printing, reproduction, translation of one page of a given type of document, cost of producing a recruiting document, a payslip, a purchase order or a travel authorization, costs of one hour of interpretation, and so forth.

"For these repetitive tasks, statistical methods of measuring working time in the case of most General Service staff members are the most efficient. In some cases, but more rarely, they may involve professional staff when the repetitive tasks - for instance, translation or interpretation - constitute a strictly mental activity. A comprehensive cost accounting system cannot ignore either this kind of information on standard basic costs or the simple statistical methods by which it may be obtained. It therefore seems to me extremely desirable that the organizations should forthwith consider initiating studies of how supplementary methods of this kind could be introduced in the future and that they should lay down a time-table for applying them. It seems to me that the advantages of having this additional information (allowing detailed comparison between agencies and providing an 'X-ray picture' of all services) would be out of all proportion to the cost of obtaining it, which should be quite small."