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EVALUATION OF THE BOT-ZAM ROAD  
PAVING PROJECT (AID 633-0072)

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Contract No. AID-80-15

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## SUMMARY

The Bot-Zam Road Paving Project (633-0072) provided AID financing for the engineering and construction supervision of the paving of the Bot-Zam Road (300 km from Nata to Kazungula). The original all-weather gravel road was constructed with the assistance of the proceeds from AID loans 690-001 and 690-001A. An AID Grant Agreement with the Government of Botswana (GOB) provided \$1,500,000 for the engineering services for the road paving project. A host country contract for these services was signed in December, 1977 with the New York engineering firm Tippetts-Abbett-McCarthy-Stratton (TAMS). The European Economic Community (EEC) agreed to finance the paving contract from the European Development Fund (EDF) and, in 1977, allocated 10,000,000 European Units of Account (EUA) equal to about \$12,000,000 at that time. The project is now two and one half years behind schedule; the engineering costs to the projected end of the project have risen from \$1,497,571 to an estimated \$2,360,000; the road paving cost has risen from the June, 1977 cost estimate of \$13,000,000 to a low bid price of \$23,048,177. There is at present available from the AID Grant Agreement and from unexpended funds of Loans 690-001 and 690-001A, only \$1,894,000 for the engineering contract. There is as yet no commitment from the EEC to provide additional funds for the road paving cost overrun. The GOB has, therefore, decided to divide the project into two parts: Project A (180 km beginning at Nata) and Project A+B (the entire 300 km). It proposes to contract by December 4, 1980 for Project A at a cost of approximately \$17,000,000 with the proviso that it may notify the Contractor by July 9, 1981 to proceed with the full 300 km if additional funds become available.

This report was prepared in fulfillment of the normal requirements for the periodic evaluation of on-going AID projects. However, because of the delay in project implementation and the large cost overruns USAID/Botswana (USAID/B) decided to conduct a more extensive review of the project background and the causes for the delay and cost increase.

Foreward

In the Project Evaluation Contract No. AID-80-15 of September 18, 1980, USAID/B contracted with Samuel Lubin to conduct an evaluation of the Bot-Zam Road Paving Project for the period from project authorization through September 30, 1980. In effect the evaluation report covers the period up to October 31, 1980.

Specific responsibilities of the consultant were:

1. To review project documents and discuss the project with AID officials in Gaborone (USAID/B) and Nairobi (RESO/EA), EDF officials in Brussels and Maseru, the TAMS Regional Representative in Nairobi, and Government of Botswana (GOB) officials in Botswana.
2. To assess the reasons for project delays and cost overruns with a view toward avoiding such problems in future AID/multi-donor road construction projects.
3. To evaluate the performance of USAID, REDSO, TAMS, and the GOB Roads Department in implementing the Grant Agreement and Contract.
4. Recommend any Contract or Grant Agreement amendments indicated by the Consultant's findings that would improve the Phase C project implementation.
5. Prepare a draft evaluation in a form readily transferable into a Project Evaluation Summary (PES) within approximately five weeks of initiation of contract services.
6. Prepare and submit to USAID/B a final evaluation report within one week of receipt of all comments by USAID, GOB, EDF, and TAMS officials.

Work on the project evaluation began on October 30, 1980 on my arrival in Gaborone. It was ascertained that travel to Maseru was no longer necessary since the EEC office there was no longer responsible for Botswana and an EEC engineer was now resident in Gaborone. A visit to Gaborone by Mr. Mario Asin, the TAMS Regional Representative in Nairobi and documentation at USAID/B made it unnecessary to travel to Nairobi for discussions with TAMS and REDSO/EA.

On October 31, 1980 I met with Mr. Edward Irgens, Chief Roads Engineer, Ministry of Works and Communications and Mr. Anders Bonde, Principal Roads Engineer/Development, in company with Mr. John Pielemeier, Assistant Director of USAID/B. The purpose of the visit was primarily to get acquainted with the GOB officials responsible for the project and to obtain as much information as possible from Mr. Irgens who was leaving that day for an extended period and would not be available to me during the project evaluation. On November 5 and 7, 1980 I met with Mr. Buse, the EEC Resident Engineer in Gaborone who has responsibility for the project. Major decisions, however, still have to be referred to Brussels for approval. Mr. Buse stated that he expected an EEC Delegate to be stationed in Gaborone some time next year. I informed

Mr. Buse that I did not consider it necessary to travel to EEC headquarters in Brussels for discussions since the information required for the draft report was readily available from USAID/B, the GOB Roads Department and from his own files. I would, however, be glad to do so if Brussels thought it useful for me to come there for discussions on project matters. Mr. Buse so informed Brussels by telex. At the request of EEC/Brussels I met, on December 12, 1980 with Mr. A. Berrens and Mr. Jessen in Brussels for a discussion of the project. On November 7, 1980 I met again with Mr. Bonde of the Roads Department and obtained information on the GOB plans for proceeding with the project. On November 10 and 11 I met, in Gaborone, with Mr. Mario Asin, Regional Manager of the TAMS office in Nairobi.

The period between October 30, 1980 and November 17, 1980 was spent reviewing the USAID/B files relating to the project. Drafting of the report began on November 18 and was completed on December 1, 1980 when it was presented to USAID/B for review and distribution.

Copies of the draft report were distributed to REDSO/EA, the GOB Roads Department, EEC/Gaborone, EEC/Brussels and TAMS. Their comments were requested by January 31, 1981 to allow for preparation of the final report. Comments were received before that date from TAMS and REDSO/EA and on February 10, 1981 the EEC comments dated January 26, 1981 were also received.

All the above comments were taken into consideration in preparation of this final report. The full text of the comments is reprinted in Appendix A together with my notes on them. No comments were received from the GOB Roads Department.

Conclusions

1. The AID decision to finance the engineering contract with a U.S. engineering firm for design and supervision of construction of this project was unfortunate. The road paving contract was to be entirely financed by the EEC and only contractors from ACP or EEC countries would be eligible to bid for the work. There were none of the technical, financial, or management advantages which could accrue to the host country from AID financing evident in this project. Any other considerations which may have dictated the decision are outside the scope of this report.
2. The grant of \$1,500,000 was already short by between \$500,000 to \$1,000,000 at the time it was authorized. Although it was based on the TAMS estimate of \$1,350,000 in 1977 it will be seen from this report that the shortfall could have been anticipated.
3. The agencies involved in the project: GOB, EEC, and AID, failed to note a number of unrealistic time schedules during the design phase, which the Engineer inserted in his contract. These scheduled times were, in practice, impossible to meet thereby resulting in delays and added costs. All three parties approved the contract without requiring proper changes in these periods.
4. At certain stages in the engineering design phase the EEC, along with the GOB and AID were responsible for reviewing and approving the Engineer's work or requiring revisions. In nearly every instance the EEC transmitted their comments or approval after unexplainably long delays. Series of comments and changes in instructions were received by the Engineer from the EEC, sometimes even after the final, approved version of a document was completed. This was one major cause of delay and afforded the Engineer justification for claims to additional compensation.
5. A major misunderstanding between AID and the EEC surfaced late in the design phase on the question of who was responsible for financing items in the Construction Contract to be provided by the Contractor for support of the Supervising Engineer. Until this was resolved (though not to the satisfaction of AID or the GOB) the Engineer could not prepare the Tender Dossier in final form. The dispute caused a serious delay and forced the GOB to finance these items from its own resources at a cost of \$1,470,000 for Project A+B or \$2,110,000 if only Project A was built.

### Reccommendations

The following recommendations are made to avoid or at least to reduce the occurrence of problems, in co-financed or multi-donor road construction projects, similar to those encountered in the Bot-Zam Road Paving Project:

1. Greater care should be exercised by AID in the selection of co-financed or multi-donor projects. There should be some firm basis for AID's involvement. Aside from considerations outside the scope of this report, AID's involvement should be limited to instances where one or more of the following apply:
  - a) the U.S. can provide expertise not readily available from the other donors;
  - b) U.S. financing is for a sufficiently large portion of the project cost to permit it to influence the direction and progress of the project;
  - c) the U.S. is financing a discrete part of the project construction, e.g. the construction of the major section of a road, the supply of specific construction materials or equipment which are of better quality, more efficient, better suited to the project, or meet the specifications at a lower cost;
  - d) there is some definite technical, cost, or managerial advantage to the host country from U.S. participation.

In the project evaluated herein none of the above appear to apply.

2. Where more than one donor is involved a definite and detailed understanding should be reached among the donors on the specific elements each will finance and any limiting conditions which will apply. The understanding should be committed to writing and approved by all the parties involved in the project.
3. In the negotiation of host country contracts, even when grant financed, the host country should take a more active role in the negotiating process. AID should limit itself to an advisory capacity except when AID regulations or U.S. law is involved. It should, of course, be willing to assist the host country when asked to do so.
4. Considerable foresight should be exercised to anticipate cost escalations resulting from inflation, unanticipated work, or changed conditions. These should be allowed for in the cost estimate to a greater extent than has been the practice in the past. The need to amend loan or grant agreements to provide additional funds would be decreased and the embarrassment of requiring the host country either to scale down the project or assume a greater financial burden than anticipated could be eliminated.
5. AID and host country contracts should be more carefully reviewed before approval to discover built-in pitfalls or unrealistic conditions leading to slippage in time schedules or to increased costs.

6. AID should adopt a more forceful approach in cases where the host country or a donor is dilatory in completing an action relating to the AID-financed portion of the project or where the host country or donor attempt to add unjustified conditions affecting the AID-financed portion or leading to higher costs.
7. The TAMS contract should be amended to remove the requirement placed on the GOB to receive comments from the donors on the Engineer's actions, to collate these comments with their own, and resolve conflicts among the three agencies before issuing instructions to TAMS.
8. The problem of Amendment No. 4 to the TAMS contract which AID has not approved should be resolved quickly. If AID does not plan to finance the overrun on the contract costs the Amendment should be rewritten to provide for GOB financing of the overrun. The GOB has already indicated its willingness to do so for Project A but hope to be able to obtain future AID funds to finance the additional engineering services for Project A+B.
9. USAID/B is authorized to amend Loan Agreements 001 and 001A to provide for the use of about \$394,000 of unexpended funds for the TAMS contract. This should be done as soon as possible to prevent further delays in covering outstanding TAMS invoices.

## EVALUATION OF THE BOT-ZAM ROAD PAVING PROJECT (AID 633-0072)

### I. The Project

AID Project 633-0072, Bot-Zam Road Paving, provided, under Grant Agreement 690-0072, executed September 28, 1977, for AID financing of the engineering design and construction supervision services to upgrade the Nata-Kazungula road in Botswana by paving the road with a bituminous surface. The maximum amount of AID financing under the agreement was \$1,500,000 to cover foreign exchange costs and approved local costs in Botswana. Original responsibility for the project rested with the AID regional office in Nairobi (REDSO/EA). In February, 1979 responsibility for the project was transferred to USAID/B and the project renumbered 633-0072.

### II. Historical Review

#### 1. Construction of the All-Weather Bot-Zam Road

Early in 1968 both the Zambia and Botswana Governments approached the U.S. Government for assistance in the construction of an all weather road from Nata, 140 miles northwest of Francistown, on the Francistown-Maun road, to the Kazungula Ferry, joining Botswana and Zambia, across the Chobe River. The Middle Africa Transport Study (MATS) identified this road as worthy of further study and AID made a grant to finance a feasibility study which was completed in August, 1970. In November, 1970 AID authorized a grant of \$850,000 to the GOB to finance the engineering design of the project which would consist of: a 184 mile (294 km) road from Nata to the Kazungula Ferry; a Chobe River Bypass 40 miles (64 km) long to connect Ngoma, site of a bridge on the Chobe River leading to the Caprivi Strip of South West Africa, with the ferry; and a three mile (4.8 km) access road connecting the village of Pandamatenga with the main road.

The engineering contract was awarded to Tippetts-Abbett-McCarthy-Stratton (TAMS) in June, 1971. On the basis of a preliminary cost estimate by TAMS early in 1972, AID authorized, on April 28, 1972, a loan (690-001) of \$12,600,000 to cover the cost of construction and the engineering supervision of the all-weather gravel road. The GOB was to contribute the equivalent of \$200,000 in local costs and the Government of Zambia (GOZ) the equivalent of \$326,000 to improve the ferry connection. Included in the loan was an item of \$130,000 for the procurement of road maintenance equipment.

The evaluation of construction bids showed a shortfall in financing and in June, 1973, AID agreed to a loan amendment (690-001A) adding \$4,000,000 to the loan. The construction contract was awarded to Grove International Corporation by the GOB in the same month, with TAMS providing the engineering supervision. The road was opened to traffic in January, 1977.

## 2. The Bot-Zam Road Paving Project

Already on May 17, 1974, the GOB approached AID with a request to consider paving the road on the basis that projected traffic would exceed that predicted in the TAMS original feasibility study and on the expected long term savings in maintaining the paved road. When the Zambia-Rhodesia border closed in 1976 the importance of the Bot-Zam road took on a new significance as the main north-south supply route from Southern Africa to Zambia. At the request of the GOB, AID contracted with TAMS, in October, 1976, to carry out a feasibility study of the proposed project. The study, completed in May, 1977, predicted that if the improved road was opened in 1980 the initial traffic would be about 55 vehicles per day, increasing by an average of 9% annually to 283 vehicles in 20 years. With these traffic figures TAMS concluded that paving would be economically feasible. Actual traffic counts during the first six weeks following the opening of the gravel road in January, 1977 showed a volume of up to 200 vehicles per day, equalling TAMS's prediction for 1994. Some of this traffic may have been due to the novelty of the road and was not sustained later. Two AID officers traversed the road in both directions on February 13 and 14, 1979, two years after it was opened to traffic and counted 32 heavy vehicles (16 in each direction) during daylight hours. The GOB Ministry of Works (MOW) stated that most heavy traffic travelled at night and the correct figure was about 50 trucks each 24 hours. No indication was given of light vehicle traffic. Based on the TAMS study and an undertaking by the European Economic Community (EEC) dated April 1, 1977 to allocate 10,000,000 EUA from the 4th European Development Fund (EDF) for paving the road, AID authorized a \$1,500,000 grant to the GOB (692-0072) for the project in September, 1977. The EEC Grant Agreement (2415/PR) was signed with Botswana and Zambia on October 4, 1979. The GOB entered into a contract with TAMS on December 15, 1977 for the design of the paving project and the engineering supervision of the construction phase.

The feasibility study had investigated four alternatives for the road paving design. The GOB, EEC, and AID agreed on the most economical design meeting the required safety standards and predicted traffic. The road was to have a paved width of 6.0 meters, shoulders of 0.7 meters, and a cross slope of three percent. The existing gravel surface course, treated with lime for a width of 6.3 meters, would form the paved road base course.

The paving cost was estimated in AID's June, 1977 Project Paper at \$9,285,000 foreign exchange costs plus local costs of Pula (P.) 2,315,000 (equivalent to \$2,801,150 at the then current exchange rate of P.1.00=\$1.21). The total paving cost was, therefore, estimated at \$12,086,150 to be covered by the EEC contribution of EUA 10,000,000, equal, approximately to \$12,000,000 at that time.

The original implementation plan presented in the Project Paper, assuming the TAMS contract to be signed by September 10, 1977 was:

EEC Grant Authorization	January 21, 1978
Prequalification of Contractors	March 1, 1978
Final Design Completed	March 1, 1978
Tender Dossier Available	March 15, 1978
Bid Opening	May 24, 1978
Engineer's Recommendation of Contractor	June 10, 1978
Bid Award	July 10, 1978
Contract Signing	July 24, 1978
Contractor on Site	August 24, 1978
Construction Completed (24 months)	August 24, 1980
End of Maintenance Period	August 24, 1981

As will be seen from this report, the proposed schedule never had a chance of being implemented.

### 3. The TAMS Engineering Design and Construction Supervision Contract

The contract, signed in December, 1977 provided for work to be carried out by TAMS in three phases:

- Phase A - Preconstruction Services
- Phase B - Tender Award
- Phase C - Supervision of Construction

The time schedule envisaged in the contract for performing these services was:

Phase A - To begin within 30 days of the Notice to Proceed, concurrent with the opening of a Letter of Commitment (L/Com) by AID for the sum of \$206,390 to cover the lump sum payments of \$185,956 and P.16,880 for Phase A services. Phase A was to be completed in 8 months.

Phase B - It was expected that there would be some delay between Phase A and the start of Phase B. The contract provided, therefore, that TAMS would begin work on Phase B within 30 days of receiving the Notice to Proceed concurrent with AID's opening of a L/Com for \$43,446 to cover a fixed fee of \$3,950 and budgeted costs of \$36,786 and P.2,240. Phase B was to be completed in 5 months.

Phase C - TAMS was to mobilize within 30 days of receipt of the Notice to Proceed concurrent with the issuance by AID of a L/Com for \$1,249,153 to cover a fixed fee of \$113,560 and budgeted costs of \$987,136 and P.122,692. Phase C would cover the entire construction period plus the one year maintenance period.

On the basis of the above schedule for Phases A and B it was hoped that actual construction could begin by the middle of 1979. The reality proved to be considerably different from the expectation.

#### 4. Performance of the TAMS Contract

The GOB issued the Notice to Proceed with Phase A on December 14, 1977. AID, however, did not open the L/Com until January 31, 1978 and TAMS received notification of the opening on February 2, 1978. TAMS notified the GOB it was prepared to begin work on February 13, 1978. The performance of Phase A is summarized in the following table:

<u>Task</u>	<u>Scheduled Time</u>	<u>Actual Completion Date</u>
<u>Task I</u>		
a) Collect and review available field information and perform field reconnaissance	2/15-2/28/78	As scheduled
b) Perform additional soils and materials exploration and sampling	3/1-3/31/78	As scheduled
c) Review and analyze existing borehole water data	3/15-3/31/78	As scheduled
d) Obtain addition construction unit cost data	4/1-4/15/78	As scheduled
e) Obtain other pertinent data	3/1-4/15/78	As scheduled
<u>Task II</u>		
a) Revise the vertical alignment of selected segments of road	4/15-5/15/78	As scheduled
b) Perform additional soils, materials, and water (salt content) testing	4/1-5/31/78	As scheduled
c) Develop construction unit costs	5/1-5/31/78	As scheduled
d) Study GOB standard contract documents and EDF's conditions of contract	3/15-4/30/78	As scheduled
<u>Task III</u>		
a) Prepare drafts of Prequalification Questionnaire and of Advertisement for Prequalification	3/1-3/15/78	2/3/78
b) Advertise for Prequalification by EDF (see Task IVa)	4/30/78	Not executed
c) Prepare final design plans and quantity estimates	5/1-7/15/78	As scheduled <u>1/</u>
d) Prepare drafts of General Conditions of Contract (G/C) and of Conditions of Particular Application	5/15-7/15/78	9/8/78
e) Prepare draft of Technical Specifications	6/1-7/15/78	7/12/78 <u>2/</u>
f) Prepare draft of Tender Documents and Schedule of Quantities	6/15-7/15/78	10/5/78 <u>3/</u>

- 1/ Quantity estimates were revised three times during this period as a result of revision in specifications and division of project in two sections.
- 2/ Minus Section 1400 (Engineer's Support, submitted 9/8/78)
- 3/ Except Schedule of Quantities submitted later because GOB and EEC comments on Technical Specifications not received by required date of 10/5/78

<u>Task</u>	<u>Scheduled Time</u>	<u>Actual Completion Date</u>
<u>Task IV</u>		
a) Review by GOB, EEC, and AID of Prequalification Questionnaire (see Task IIIa)	3/15-3/31/78	Not executed
b) Issue Prequalification Questionnaire	5/15-5/31/78	Not executed
c) Prequalify Contractors	7/1-7/31/78	5/16/79
d) Review by GOB, EEC, AID of drafts of Conditions of Contract, Specifications, and Preliminary Cost Estimates (see Task IIIf)	7/15-8/31/78	5/14/79
e) Prepare Engineer's Estimate of Construction Costs	8/15-9/15/78	5/14/79
<u>Task V</u>		
Finalize Tender Dossier and Engineer's Estimate	9/1-10/15/78	5/14/79 1/

1/ A revised Cost Estimate was made on 6/27/79 to take into account the changed Pula/EUA conversion rate and an increase of Project A from 170 km to 180 km.

#### Phase B - Tender Award

On November 7, 1979 TAMS informed the GOB that the work under Phase B would now take six and one half months instead of the originally scheduled five months. The additional time was needed to make further amendments to the Tender Documents and to evaluate tenders for two variations of the construction contract. Time for the return of bids had also been extended from one month to two months. Because of the additional time and work TAMS asked for an increase in their fixed fee for Phase B from \$3,950 to \$7,525 and in the budgeted amounts from \$35,786 and P.2,240 to \$68, 236 and P.5,753.

AID replied that the entire grant of \$1,500,000 was already committed, based on the original budget. Any further funds would have to come from balances remaining from the original AID loans 690-001 and 001A for the road construction. This would entail a lengthy process of amending the Loan Agreement. To avoid a delay in starting work on Phase B it was suggested that TAMS continue on the basis of the existing budget and fixed fee and negotiate a contract price increase when Phase B was completed.

Later negotiations between AID and TAMS reduced TAMS requested increase to a fixed fee of \$6,373 and budgeted costs of \$59,659 and P.3,235. Amendment No. 3 to the TAMS contract was executed February 12, 1980 incorporating the new amounts. AID was requested to issue a L/Com for \$70,108 to cover these costs. The L/Com was opened on July 9, 1980. TAMS had already begun Phase B work on February 12, 1980 with the GOB "bridge financing" the payments due. Performance of Phase B is shown in the following table:

<u>Task</u>	<u>Scheduled Time</u>	<u>Actual Completion Date</u>
a1) Amend the Tender Dossier in accordance with GOB letter of 10/15/79		2/15/80
a2) Issue Dossier to Prequalified Contractors		2/28/80
a3) Carry out an organized Site Visit	2/15-5/15/80	4/17/80
a4) Prepare addenda and minutes of Site Visit		5/13/80
b) Tender Period	3/1-6/1/80	6/4/80 <sup>1/</sup>
c) Tender evaluation	6/15-7/30/80	7/28/80
d) Comments on Tender Evaluation by GOB, EEC, AID	8/1 -8/15/80	9 /12/80
e) Finalize Tender Evaluation Report and prepare Tender Documents for signature	8/15-8/31/80	12/4/80

<sup>1/</sup> Bid opening date.

#### 5. Deviations from Scheduled Performance of the TAMS Contract

An examination of the above performance tabulations shows the following deviations from scheduled completion dates for the tasks in Phases A and B:

<u>Task</u>	<u>Advance</u>	<u>Delay</u>
<u>Phase A</u>		
<u>Task III</u> (a) <sup>1/</sup>	25 days	10 mos. and 13 days
(b)		53 days
(d)		
(e)	3 days <sup>2/</sup>	
(f)		2 mos. and 5 days <sup>3/</sup>
<u>Task IV</u> (a) <sup>1/</sup>		Not completed
(b)		Not completed
(c)		9 mos. and 16 days
(d) <sup>1/</sup>		8 mos. and 14 days
(e)		8 mos.
<u>Task V</u>		7 mos.
<u>Phase B</u>		
Tasks (a1) to (a4)	2 days	
Task (c)	3 days	
Task (d) <sup>1/</sup>		27 days
Task (e)		3 mos.

To summarize:

- TAMS completed on time or ahead of schedule all of Phase A Tasks I, II, III a, c, and e; Phase B Tasks (a) and (c).

<sup>1/</sup> GOB, EEC, AID task  
<sup>2/</sup> Except Section 1400, delayed 53 days  
<sup>3/</sup> Except Schedule of Quantities

- TAMS delayed completing Phase A Tasks III d, IV c, IV e, and Phase B, Task (e). It had not executed by October 31, 1980, Phase A, Task IV b.
- The GOB and EEC delayed their completion of Phase A, Task III b, Task IV d, and Phase B Task (d). They failed to complete, by October 31, 1980 work on Phase A Task IV a and Phase B Task (d).

The causes for the above delays and their effect on implementation of the project will be discussed in Section IV of the report.

### III. Funding Problems

#### 1. TAMS Contract

The original TAMS contract provided for fixed fees and budgeted costs in U.S. dollars and Pula amounting to:

Phase A	\$ 206,390
Phase B	43,446
Phase C	1,249,153
	<hr/>
Total	\$1,498,989

This amount was to be financed by the AID grant of \$1,500,000.

On August 6, 1979 TAMS filed a claim for \$57,830.76 and P.894.87 for extra expenses caused by delays in Phase A beyond the Contractor's control and for extra work required by the GOB. AID and the GOB negotiated a settlement with TAMS in the amount of \$45,000 for this claim, the settlement being approved by AID on September 6, 1979, bringing the total budget for the TAMS contract to:

Phase A	\$ 251,390 (including claim)
Phase B	70,108 (Amendment No.3)
Phase C	1,249,153
	<hr/>
Total	\$1,570,651

Although this exceeded the amount of the grant by \$70,651 AID planned to amend Loan Agreements 690-C01 and 001A to permit the use of an unexpended balance of \$394,000 for the TAMS contract. The total funds available for the project would, therefore, be \$1,894,000.

On May 5, 1980 TAMS presented a new budget for Phase C services based on the assumption that the construction and maintenance supervision periods would now extend from November 1, 1980 to October, 1983. The new budget called for an increase in the fixed fee for Phase C from \$113,560 to \$203,282 and in budgeted costs from \$987,136 and P.122,692 to \$1,804,504 and P.181,200, bringing the total contract price to:

Phase A	\$ 251,390
Phase B	70,108
Phase C	2,236,098 (\$1,804,504 + P181,200 @ P1.00 = \$1.26)
	<hr/>
Total	\$2,557.596

In addition a claim for another \$10,000 had been filed and informally approved for additional Phase B work. The excess over available AID funds, including balances from the Loan Agreements came to \$673,596. Following a GOB request to reduce the Phase C budget by eliminating certain items it deemed to be non-essential, TAMS revised their Phase C cost estimate to \$1,836,000 plus P.152,000 or a total in U.S. funds for Phase C of \$2,027,520 and thereby reducing the excess over available AID funds to \$465,018.

Meanwhile, as a result of a shortage of EEC funds for the paving contract, the GOB decided to divide the paving project into three alternatives: Project A(1) covering the paving on only 130 km; Project A to pave 180 km and Project A+B to pave the entire 300 km. (See Section III.2 below for details). Bids were to be solicited and tenders received for alternatives A and A+B. Project A(1) was to be considered only if funds for the other two alternatives were not available. At a meeting held on July 30, 1980 in which the GOB, AID, and TAMS participated, TAMS was asked to make a revised proposal for its services based on the two alternatives, Project A and Project A+B. It was also agreed, at this meeting, that consideration should be given to amending the TAMS contract to provide funds only for Project A, initially, and to look forward to future financing by AID for Project A+B if that was selected.

TAMS presented their new cost estimate in the form of a proposed Amendment No. 4 to their contract on August 5, 1980. The new contract cost, including previously accepted claims and Amendment No. 4 now stood at:

	<u>Project A</u>	<u>Project A+B</u>
Phase A	\$ 251,390	\$ 251,390
Phase B	80,108	80,108
Phase C	1,713,000	2,028,731
Totals	<u>\$2,044,498</u>	<u>\$2,360,229</u>

The excesses over available AID funds were, therefore, \$150,498 for Project A and \$466,229 for Project A+B. Amendment No.4 was not approved by AID as of October 31, 1980. The GOB has now agreed to finance the \$150,498 shortfall for Project A from its own resources and to request that AID provide the additional \$315,731 for Project A+B from future funds. The approval of Amendment No. 4 remains unresolved at this time, although it has been signed by the GOB on December 4, 1980.<sup>1/</sup>

In summary, the completion of the TAMS contract has now been extended one and one half years beyond its original schedule and the cost raised from \$1,498,989 to \$2,360,229, an increase of 57%.

## 2. Construction Contract

In 1977 the GOZ and GOB approached the EEC to be granted EDF funds for paving the Nata-Kazungula (Bot-Zam) road. The Lome Convention

<sup>1/</sup>Note Amendment No. 4 was approved by AID on Dec. 19, 1980

allocated 10 million EFA (about \$12,000,000) for the project from the 4th EDF. However, by November, 1977, it was already clear that this sum would be short by about \$5,000,000 of covering the estimated cost of construction based on a contract being signed in late 1978 or early 1979. On December 29, 1977 the GOB notified AID that it had set aside P.1,000,000 in local currency toward the cost of the road, reducing the estimated shortfall to about \$4,000,000. It expected that additional EDF funds would cover this but undertook to do so from its own resources if EDF turned it down.

Based on the time estimate for the engineering design phase and the preparation of tender documents it was expected, in January, 1978, that construction could begin by September, 1979, and be completed in 30 months, by March 1982 and the maintenance period would end in March, 1983. The delays described in Sections II and IV of this report further frustrated this plan. In February, 1978, TAMS presented a new cost estimate of \$18,000,000 including cost escalation to mid-1979. This estimate was already outdated since the contract was now not expected to be signed before September, 1979. A later TAMS estimate in August, 1978 came to \$16,800,000 assuming a construction start by August, 1979, escalation assumed to the mid-point of September, 1981, and no restrictions being placed on the source and origin of procurements. All these assumptions proved to be inaccurate. By December, 1978, the estimated construction start had slipped to November, 1979. On March 8, 1979, not having received any assurance from the EEC that it would finance the shortfall, GOB requested TAMS to divide the project into two parts: Project A for paving the first 180 km from Nata and Project B for the remaining 120 km to Kazungula. The new estimates submitted in May, 1979, along with the final Tender Dossier gave the following cost estimates for Project A and Project A+B:

	<u>Local Currency</u>	<u>FX</u>	<u>Total</u>
Project A	P.3,809,661	g.7,896,312	P.10,335,539
Project A+B	P.5,943,430	g.12,672,184	P.16,416,309

At an exchange rate of P.1.00=\$1.21 the above translated into construction costs in U.S. dollars of:

Project A	\$12,506,002
Project A+B	\$19,863,733

At these prices the EDF funds would have been enough to cover only Project A. However, the above estimate was still based on unrestricted tendering for source and origin requirements - a condition unacceptable to the EEC. Accordingly, on March 24, 1980 TAMS presented a new cost estimate based on restricting source and origin to ACP and EEC countries and on the assumption that construction could start in January, 1981. The estimate was:

Project A	P.16,274,287 = \$20,505,602
Project A+B	P.26,078,278 = \$32,858,630

The U.S. dollar equivalents were now based on an exchange rate of

P.1.00 = \$1.26. Using an EUA exchange rate of EUA 1.00 = \$1.30, the EDF financing shortfall now came to \$7,500,000 for Project A and \$20,000,000 for Project A+B.

The actual bid received from the selected Contractor, COGEFAR <sup>1/</sup> of Italy, was:

Project A	P.13,443,972 = \$16,939,405
Project A+B	P.18,292,204 = \$23,048,177

These bids proved to be 17% lower than the TAMS estimate for Project A and 30% lower than for Project A+B. They were, however, based on obtaining chippings from commercial sources in Zimbabwe. More certain, though more expensive were sources either along the route or commercial sources in Botswana. To be on the safe side the GOB and EEC decided that tenders based on the latter alternatives would be considered in the contract cost evaluation. It was also decided that the Contract should be awarded for Project A with the proviso that not later than July 9, 1981, the GOB could notify the Contractor to proceed with Project A+B at which time the lower unit prices for the larger project would prevail. If, in either case, chippings were purchased in Zimbabwe the lower unit price for these would be used.

After the bids were received a general wage increase was decreed by the GOB which will boost the contract price by approximately 10%. Taking this into account the current project construction cost becomes:

	<u>Project A</u>	<u>Project A+B</u>
Contract Price	P.13,859,272	P.18,770,311
Contingencies and Escalation (15%)	2,078,891	2,815,547
Labor rate increase (10%)	1,385,927	1,877,031
	<hr/>	<hr/>
Totals	P.17,324,090	p.23,462,889
Available from EDF at EUA 1.00 = P.1085	10,850,000	10,850,000
	<hr/>	<hr/>
Shortfall at P.1.00 = \$1.30	P. 6,474,090 \$ 8,416,317	P.12,612,889 \$ 16,396,755

<sup>1/</sup> The two lowest bids received were from COGEFAR and Kier Construction Co. Kier was lowest for Project A while COGEFAR was lowest for Project A+B. The Tender Dossier provided that the A+B unit prices would prevail if Notice to Proceed on Project A+B was given before July 9, 1981. The GOB Ministry of Finance, on the expectation that EDF funds would be available by that date, decided that Tender evaluations were to be based on Project A+B, thereby awarding the contract to COGEFAR.

It should be noted that the estimated total contract price including contingencies and wage increases is now only slightly higher than the TAMS estimate of March 24, 1980.

Meanwhile, during the preparation of the Tender Documents by TAMS a dispute arose with the EEC over the engineering support cost included in the Construction Contract and to be supplied by the Construction Contractor. In accordance with the practice familiar to U.S. engineering firms in international contracts TAMS included the cost of Contractor's support facilities for the Supervising Engineer in the contract. AID and IBRD financed contracts follow this procedure and the items in this category are financed as part of the Construction Contract. To AID and the GOB there was no question that these items (14.1 - 14.7, Accommodations and Support for Supervisory Staff, in the Schedule of Quantities) would come under EDF financing. From documentation in USAID/B files it appears that the EEC representatives in Maseru did not disagree with this view. However, in June, 1979, after reviewing the Final Tender Dossier, the EEC Commission in Brussels notified the GOB that the items were not eligible for financing from EDF funds. In the Commission's opinion they should be part of the engineering services contract and, therefore, financed by AID. Despite attempts in several meetings with EEC representatives by AID and the GOB to obtain a reversal, the Commission remained firm in its decision. The GOB, therefore, agreed to finance the items out of its own resources. The cost in the COGEFAR bid came to P.2,385,359 for Project A and P.1,875,626 for Project A+B.

In analyzing the COGEFAR bids TAMS found the unit rates tendered for Engineer's Support to be excessive. On being questioned, COGEFAR admitted that part of its mobilization costs under item 13.1 (Preliminary Item) had been shifted to these items so as not to exceed the allowable 10% for item 13.1. COGEFAR estimated the excess to be 32% of items 14.1 - 14.7 and proposed that this 32% be shifted to item 13.1. Such a shift would be advantageous to the GOB since the amount so shifted would become eligible for EDF financing and also reduce the cash flow requirements. The EEC agreed to this proposal and, accordingly, items 14.1 - 14.7 were reduced by P.762,297 for Project A and P.748,178 for Project A+B and these amounts added to item 13.1 (Preliminary Item). <sup>1/</sup>

On October 30, 1980, the GOB Roads Department sent a memorandum to Mr. Buse, the EEC engineer resident in Gaborone setting forth the current funding situation and the basis on which it intended to present the proposal to the Tender Board. It planned, on approval by the Tender Board to sign the contract with COGEFAR before the expiration of the tender validity date of December 4, 1980. The funding plan, as presented

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<sup>1/</sup> It should be noted that if this were an AID financed contract this way of handling an unbalanced bid would have been in violation of AID contract regulations.

in the memorandum was as follows:

	<u>Project A</u> (180 km)	<u>Project A+B</u> (300 km)
EDF available	P.10,850,000	P.10,850,000
EDF additional request	---	11,500,000
GOB to commit for engineering support items in contract	1,172,000	1,170,000
GOB to commit for construction	5,363,000	----
GOB funding for engineering services in excess of USAID funds	115,000	380,000
	<hr/>	<hr/>
Total Project Cost	P.17,500,000	P.23,900,000
(At P.1.00 = \$1.30)	\$ 22,750,000	\$ 31,070,000)

The GOB would have to notify the Contractor by July 9, 1981 to proceed with Project A+B for the reduced unit prices in the Tender to be effective. The GOB hopes that a firm commitment for additional funds can be received from the EEC before that date. The question of the additional funds is dependent on the cooperation of the GOZ at the Maputo Conference, since the additional amount would come from regional funds.

The GOB does not expect there to be an actual call on the P.5,363,000 which it is committing to Project A before the new EDF financing becomes available. If, therefore, it can receive a commitment from EEC before July 9, 1981 it can proceed on that date with Project A+B. It expects only to have to "bridge finance" the P.380,000 (\$494,000) for TAMS Project A+B services and to recoup this amount from future AID funds. If, therefore, an additional P11,500,000 will be forthcoming from EEC and \$494,000 from AID the shortfall to be covered by the GOB would be:

Total for Project A+B	P.23,900,000
Total EDF Grants	<u>22,350,000</u>
	1,550,000
Additional AID funds	<u>380,000</u>
Total shortfall	P. 1,170,000
	= \$ 1,608,750 at the November 11, 1980 exchange rate of P.1.00 = \$1.375

The Tender Board approved the contract during the week of November 10, 1980. The GOB signed the contract on December 4, 1980. The paving project is, therefore, due to get under way in January, 1981 after a delay of two and one half years from the originally anticipated date in the June, 1977, AID Project Paper and one and one half years from the scheduled date projected in the TAMS contract of December, 1977. The cost overrun will be P.12,670,000 (\$16,471,000) bringing the construction cost to 253% of the June, 1977 estimate.

#### IV. Causes of Project Delays

A careful review of the USAID/B files and discussions with Mr. Bonde of the GOB Roads Department, Mr. Buse, the EEC engineer in Gaborone, and Mr. Mario Asin of TAMS indicated that a significant element in the delay in project implementation came from difficulties in communication. Geographically separated offices with inferior channels of communication among them, each of whom had either some decision making authority or responsibility for review and comment made communication difficult and time consuming. The GOB and USAID/B in Gaborone, the EEC office in Maseru, the OSARAC office in Mbabane, REDSO/EA and TAMS in Nairobi, EEC headquarters in Brussels, and AID in Washington, all had, at one time or another, some role in implementing the project.

Even if there had been no misunderstandings, no differences of opinion or conflicts over the rules governing contracts, funding, or other requirements of the two donors and the host country, this would have been enough to cause delays in a tightly scheduled project. Unfortunately there were such conflicts and the long delay and cost increases were inevitable. The following chronicle of events is taken, mainly, from a document prepared by TAMS and supplemented by information from USAID/B files and discussions in Gaborone with staff members of the agencies involved in the project.

The delays discussed in this section are only those which followed the signature of the TAMS contract in December, 1977. Overall project delays from the schedule projected in the June, 1977 AID Project Paper will be discussed in Section V of the report.

##### 1. Start of Phase A Work (Preconstruction Services)

On December 14, 1977 the GOB sent TAMS the Notice to Proceed with Phase A of the contract within 30 days, i.e. by January 12, 1978. AID, however, did not issue the required L/Com for the initial payment of \$206,390 until February 2, 1978 and REDSO/EA notified TAMS on February 6, 1978.<sup>1/</sup> Start of work on Phase A was, therefore, delayed to February 13, 1978.

##### 2. Advertisement for Prequalification of Contractors

The draft of the Advertisement and the draft Prequalification Questionnaire had already been submitted to the GOB by TAMS for comment or approval by GOB, EEC, and AID on February 3, 1978, although they

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<sup>1/</sup> There is some confusion regarding the two dates referring to the L/Com. Other documents give these as January 31, 1978 and February 2, 1978. According to the contract terms TAMS could have delayed start of work to March 2, 1978, one month after opening of the L/Com.

were not due until March 15, 1978. Comments by the three agencies were to be received by TAMS from the GOB by March 31, 1978. IEDSO/EA replied on February 23, 1978 and a copy of a letter from EEC/Maseru was forwarded to TAMS on April 13, 1978. On December 12, 1978 TAMS received a draft of a Notice of Invitation for Prequalification prepared by GOB and EEC/Maseru and was asked for comments. GOB also informed TAMS that EEC/Brussels expected to publish the advertisement in January, 1979. TAMS replied with a list of several problems which could arise if the proposed text was used. On March 8, 1979 they were informed by the GOB that TAMS would no longer be required to prequalify European contractors, but only local ones, and they therefore were discharged of the responsibility for the advertisement and subsequent Prequalification Questionnaire. The EEC published their December 12, 1978 text on March 13, 1979 -- a delay of nearly one year from the scheduled April 30, 1978 date.

### 3. Preparation of the Draft of General Conditions of Contract

The GOB Standard Conditions of Contract differed radically from the EDF General Conditions of Contract (GC). TAMS was, therefore, required in Task II (d) of Phase A to prepare a comparison of the two. The task was to be done between March 15 and April 30, 1978. A text of the EDF's GC was supplied to TAMS in February, 1978 and TAMS began work on the comparison on March 1, 1978. One week later they were notified that the text supplied was outdated and a new text was provided. This differed sufficiently from the first text to make the first week's work wasted and gave TAMS the excuse for a claim for additional work. Despite this the work was completed on schedule and the report submitted to the three parties on May 1, 1978.

The parties were obligated to reply by May 15 with their instructions on preparation of a draft GC which TAMS had to prepare between May 15 and July 15, 1978. IEDSO/EA replied on June 16, 1978 that it had no substantive comments. Nothing was heard from the GOB or EEC until the arrival of an EDF/Brussels Mission on July 24, 1978 which met unsuccessfully with the GOB and TAMS and departed without resolving the conflicting texts. To make matters worse, only one day before the Mission's arrival TAMS was handed a new, third version, of the EDF'S GC different from the first two and the Mission disregarded the comparison report submitted by TAMS.

On August 11, 1978 the GOB finally forwarded to TAMS instructions for drafting the GC. The draft was submitted to the parties on September 8, 1978, two months after the scheduled date of July 15, 1978. The draft did not include the Conditions of Particular Application since no instructions had yet been received from the GOB of EEC's special requirements.

### 4. Preparation of Technical Specifications

This was submitted on July 12, 1978, three days before the scheduled date of July 15, 1978, except for Section 1400 dealing with the supply

by the Contractor of Engineer's support facilities, which were then the subject of an EEC, AID, GOB, dispute. Section 1400 was completed on September 8, 1978 -- a delay of 53 days from the scheduled date.

#### 5. Preparation of Drafts of Tender Documents and Schedule of Quantities

This task was to be accomplished between June 15 and July 15, 1978 but could not be started until three months later, on September 15, 1978, after instructions were received for preparing what was to be the final version of the CC and Conditions of Particular Application of the Contract. The draft Tender Documents minus the Schedule of Quantities was further delayed because comments or approval of the draft Technical Specifications had not been received. On December 12, 1978 the Roads Department wrote TAMS to say they had not received the draft Tender Documents. TAMS then sent a second copy. This was not the only time that documents addressed, as required in the contract, to the Chief Road Engineer, Ministry of Works and Communications, had gone astray and failed to arrive at their destination. Final comments on the draft Tender Documents were received only on March 8, 1979, more than six months beyond the scheduled date of August 31, 1978.

#### 6. Preparation of the Final Tender Dossier

##### a) Volume I - Tender Documents and Schedule of Quantities

Following receipt of the review of the draft text, on March 8, 1979 the document was completed and submitted on May 14, 1979.

##### b) Volume II, Part 1 - General Conditions of Contract

The draft document, delayed to September 8, 1978 by the dilatory actions of the EEC and the three successive versions of the EDF General Conditions, was again reviewed and a new set of instructions issued to TAMS on December 12, 1978. What was believed by that time to be the final document was resubmitted by TAMS on January 12, 1979 only to be followed on March 8, 1979 by a new set of comments. The final version was completed on May 14, 1979.

##### c) Volume II, Part 2 - Conditions of Particular Application

As noted in Section IV.3, this document was delayed because TAMS received no instructions from EEC for its preparation. Instructions were finally received on March 8, 1979 and the document was completed on May 14, 1979.

##### d) Volume II, Part 3 - Technical Specifications

Comments on the draft specifications were received on December 12, 1978. On January 15, 1979 and February 16, 1979 the final versions of all sections of the document were submitted. But on March 29, 1979 a new set of comments was received and the document was revised and delivered in final form on May 14, 1979.

e) Volume III - Contract Drawings

The draft drawings were only minor revisions of the as-built drawings of the original AID financed road construction contract and were ready in July, 1978. Because the changes were insignificant they were not submitted for comment at that time to avoid the expense of reproduction in draft and again for the Tender Dossier. Also, since the project had, meantime, been divided into Project A and A+B, the GOB agreed that submission of the final drawings should be delayed until final contracting decisions were made. EEC/Brussels, however, insisted on receiving a copy of the draft. TAMS delivered a set of drawings to REDSO/EA on November 20, 1978 for forwarding to Brussels. On February 15, 1979 several revised drawings were delivered to the GOB to comply with changes in the Technical Specifications. Comments on the drawings from the GOB arrived on February 22, 1979 and on March 8, 1979 TAMS was instructed to produce final drawings for Projects A and A+B. These were submitted on May 14, 1979.

f) Volume IV - Computer Printout

The draft was submitted September 14, 1978. As no comments were expected or received it was completed in final form on May 14, 1979.

g) Volume V - Information to Tenderers

The draft document was sent out on October 24, 1978 but nearly two months later, on December 12, 1978, the GOB advised TAMS they had not received it. although EEC/Maseru had a copy. A second set was delivered on January 24, 1979 by which time the first set had been located in another office of the Ministry of Works and Communications. The final version was completed on May 14, 1979.

h) Engineer's Estimate of Construction Costs

This was to be done between August 15, 1978 and September 15, 1978, but could not be started until final instructions were received for the Technical Specifications on March 29, 1979. The Engineer's Estimate was submitted in final form on May 14, 1979.

7. Phase B - Tender Award

With the last of the documents submitted, the GOB had, on May 14, 1979, a complete Tender Dossier, ready to be issued to prequalified contractors -- a delay of seven months from the target date of October, 1978.

On June 27, 1979 a corrected EUA/Pula exchange rate of  $EUA\ 1.00 = P.1.10$  came into force, requiring a new Engineer's Estimate as Project A was increased from 170 km to 180 km.

On June 13, 1979 EEC/Brussels, after reviewing the complete Tender Dossier, wrote to EEC/Maseru requesting further changes in Volumes I,

II, and V. Among other things, the EEC objected to the inclusion of Engineer's support facilities in the Construction Contract and insisted that this was an item that should be financed by AID as part of the Engineering Services Contract.

EEC/Maseru relayed these comments to the GOB on June 28, 1979, adding that they anticipated the Brussels position on engineering support services would create difficulties for the GOB. They asked the GOB to reply on the question of AID financing and to give their views on the cost of the support services which EEC/Brussels found to be excessive.

In a letter dated July 20, 1979, the GOB transmitted copies of the above Brussels and Maseru letters to TAMS with a 13 page list of new changes which EEC made in the Tender Dossier. TAMS replied on August 16, 1979 commenting on some of the proposed changes which they viewed as undesirable and noting that most of the others had already been made in the last revision of May 14, 1979. On September 6, 1979 the GOB notified TAMS that they considered the August 16, 1979 letter as the final action of Phase A and that no further work was to be done until the start of Phase B. TAMS was, however, instructed to withhold printing of 35 sets of the Tender Dossier (a Phase A activity) pending further instructions. At the same time another set of comments from the EEC on "non-technical aspects of the Tender Documents" was forwarded to TAMS for information only. If these comments would result in further revision of the Tender Dossier the GOB would communicate them to TAMS prior to printing.

On October 4, 1979 the EEC signed the Grant Agreement (2415/PR) for the paving of the Bot-Zam Road with the Governments of Botswana and Zambia. On November 7, 1979 TAMS prepared a new implementation schedule for the project based on a projected start of Phase B (Tender Award) on December 1, 1979:

1. Tender Documents issued to prequalified contractors	Dec. 15-31, 1979
2. Site Visit	Feb. 1-15, 1980
3. Prepare minutes of site visit and addenda to Tender Documents	Feb. 15-29, 1980
4. Receive Tenders	Apr. 1, 1980
5. Evaluate Tenders	Apr. 10-May 10, 1980
6. Prepare draft Evaluation Report	May 1-15, 1980
7. Review by GOB, EDF, AID	May 15-31, 1980
8. Finalize Evaluation Report	June 1-15, 1980
9. Prepare Tender Documents for signature	June 1-15, 1980
10. Letter of Intent from GOB to Contractor	June 15, 1980
11. Contract signing and Order to Proceed	June 30, 1980
12. Contractor mobilization	July 1-Aug. 31, 1980

Even this thrice revised implementation schedule proved unattainable. The argument with the EEC over funding the Engineer's support services as part of the Construction Contract continued and on December 20, 1979 USAID/B requested AID/d to solicit the help of the U.S. Mission to the EEC to intervene at the highest necessary levels to obtain a reversal of the EEC position. This was now the sole remaining problem delaying the tendering process. Discussions in Brussels between the EEC and the U.S. Mission in January and the Director, USAID/B on March 18, 1980 failed to produce any positive results. A compromise was proposed by the Director, USAID/B under which EDF funds would be used to support this item for Project A (180 km) only and allow time for AID to make funds available for the remaining 120 km in a proposed Transport Sector II grant. The proposal was not accepted and on March 25, 1980 EEC/ Brussels sent a Note Verbale to the U.S. Mission reiterating the position that their Grant Agreement did not cover the disputed items. The GOB Ministry of Finance notified USAID/B that it had received a communication from the EEC considering the matter closed.

The issue was finally resolved (see Section III.2) by an agreement between the GOB and the EEC to transfer 32% of the cost of the support services to Item 13.1 (Preliminary Item), which would be eligible for EDF financing, leaving the balance of 68% of the support services to be financed by the GOB. The 32% figure was arrived at by accepting the selected contractor's (COGEFAR) estimate of his overloading of Items 14.1-14.7 to cover that portion of his mobilization costs which he could not include in Preliminary Item 13.1 since that was limited by the Tender Dossier to 10% of the bid price.

With this matter disposed of, the site visit scheduled for February 1-15, 1980 was now moved to April 16 and 17, 1980, a further delay of two months. The draft Minutes of the Site Visit and Contract Amendments were submitted on April 28, 1980. After comments were received from EEC/Maseru a Supplement to the Minutes was prepared and mailed to all prequalified contractors on May 13, 1980.

The Tender Dossier, having been mailed to the prequalified contractors between February 15 and 28, 1980, the last date for receipt of Tenders was set for June 4, 1980, two months later than the last scheduled date. The period of validity for Tenders was set at 120 days for Project A, i.e. to October 4, 1980 and 700 days for Projects A+B. TAMS objected to the GOB and EEC requirement of 700 days validity for Project A+B, contending that it would result in higher bids. It was then agreed to reduce the validity period to 400 days, making the Project A+B Tender valid to July 9, 1981. Following the opening of the Tenders on June 4, 1980 TAMS submitted the final Tender Evaluation Report in July, 1980.

The division of the paving project into Tenders for Project A (180 km) and Project A+B (300 km) required the contractors to bid on six alternatives for each of the two projects, depending on the sources

of lime and chippings. It is almost certain that this complication discouraged some of the prequalified contractors from bidding and, therefore, reduced the competition. Whether or not this may have resulted in a higher priced contract is, of course, unascertainable. The two low bidders were Kier Construction Co. and COGEFAR. The former was the low bidder for Project A and the latter for Project A+B. The GOB decided on September 8, 1980 that the evaluation should be based on Project A+B and this was approved by the EEC on September 26, 1980, making COGEFAR the low bidder. An earlier request of the GOB to Tenderers to extend the Tender validity date for Project A from October 4, 1980 to December 4, 1980 was accepted by COGEFAR. The validity date for Project A+B remained at July 9, 1981.

As of October 31, 1980 the problems of funding the overruns of the paving contract and the additional costs of TAM's contract were not resolved. The GOB Ministry of Works, viewing this road as having the highest priority, has indicated that it is willing to cover any costs of Project A not financed by a donor, from its own resources, hoping that donor funds would become available later to reimburse it and provide for the completion of Project A+B.

The Contract with COGEFAR was signed on December 4, 1980 and Notice to Proceed given on the same day. The Contractor will be required to commence work within 45 days, i.e. by January 18, 1981 and complete the construction of Project A in 24 months, i.e. by January 18, 1983 and of Project A+B within 30 months, i.e. by July 18, 1983. The maintenance periods in either case are one year from the completion date, putting the termination of the project and TAMS services on July 18, 1984, three years later than anticipated in the June, 1977 AID Project Paper, one and one half years later than planned when the TAMS Engineering Services Contract was signed, and five months later than the third revision of the implementation schedule of November, 1979.

#### V. Analysis of Project Delays

A reading of the preceding Section IV leads to the inescapable conclusion that one of the major sources of the delay in implementing the Bot-Zam Road Paving Project was the dilatory and confused tactics of the EEC offices responsible for the review and approval of actions of the design engineer. Responsibility for the EEC review of design and contract documents was divided among EEC/Maseru and, apparently, more than one group in Brussels. Final authority lay with Brussels which, it appears, overruled Maseru in several instances, after the GOB and TAMS assumed agreement was reached. Under these conditions it was virtually impossible for the Engineer to meet any schedule.

On the other hand the GOB, AID, and TAMS were not entirely blameless. In reviewing the draft engineering contract they failed to recognize the difficulties which would result from the failure to more clearly define the responsibility and authority of each partner in the project and, most of all, to anticipate the result of imposing unrealistic and unattainable time schedules.

The GOB can be blamed least of all, having little or no prior experience of the administrative difficulties inherent in a co-financed or multi-donor project. AID may be excused for not anticipating the confused and confusing EEC actions, not having had prior experience with road construction projects in which the EEC was the sole co-donor. TAMS was the initiator of certain time and administrative restrictions in the contract and is certainly responsible, in the first instance, for the resulting delays. <sup>1/</sup>

The details leading to these general observations and an apportionment of responsibility for the delays will emerge in the following section which evaluates the performance in project implementation of AID, TAMS, the EEC, and the GOB Roads Department. In making this evaluation I have taken into account only engineering and management considerations. There may have been other reasons which dictated actions or decisions by the several parties involved. Speculation on, or consideration of such other reasons is outside the scope of this report. In reviewing the actions of the parties involved, they are taken to be actions of agencies, departments, or offices and not of individuals. No judgment is intended of any individual involved in any action or decision.

## VI. Performance Evaluation

### I. AID

The Contact under which this report is prepared calls for an evaluation of the performance of REDSO/EA and USAID/B. Since the responsibility for the project passed from REDSO/EA to USAID/B in February, 1979 and REDSO/EA staff were involved for some additional time as reviewers and advisors to assist USAID/B, I prefer not to differentiate between the two. Furthermore, the AOO in Botswana had a role in the early project stages and AID/Washington was involved in the original project evaluation and in the decision to finance the project on the basis of the Project Paper of June, 1977. This section, therefore, considers AOO/B, USAID/B, REDSO/EA and AID/W as one entity under the collective title AID, although some of these offices may have had only limited responsibility and different degrees of influence on decisions.

AID was from the outset, ill-advised to choose to finance the engineering design and supervision of a road paving project whose construction was to be financed by the EEC and carried out by a European contractor. Previous experience in the Africa Bureau with multi-donor road construction projects had nearly always been attended by complications and delays. Where a European engineer designed the project and prepared contract documents it was practically impossible for a U.S. contractor to enter a successful bid or at times even to meet the tender requirements. American engineers designing a project where AID financed part of the construction of a multi-donor project many times experienced difficulty in producing a Tender Dossier meeting

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<sup>1/</sup> In its comments on the draft of this report TAMS claims, however, that its October 3, 1977 proposal allowed more time for the review and approval actions by EEC, GOB, and REDSO/EA, but REDSO/EA insisted on the shorter periods without consulting EEC or GOB. Unfortunately, nothing was found in the available records to support this claim.

the differing and sometimes conflicting requirements of AID, the host country, and the other donors.

In this project AID was not financing any part of the construction, U.S. contractors were excluded under EEC rules, and TAMS had prior experience of the difficulty of reconciling EEC contract regulations with GOB conditions based on FIDIC Conditions of Contract. The cost of engineering was estimated to be only 10% of the total project cost. It would, therefore, have been logical to suggest to the GOB that it seek additional EEC funds for the services of a qualified European engineering firm experienced in dealing with the EEC. However, having made the decision we must now see how AID handled the project implementation.

In the May, 1977 TAMS Feasibility Study an estimate of the cost of engineering services was made at \$1,102,000 plus P.89,600 (= \$107,520) for a total of \$1,207,720. This estimate included no reserve for contingencies or any inflation factor for salary or other cost increases during the life of the project. A contingency factor of 10% was included in the overall project cost. Applying this factor to the estimated engineering cost we arrive at an estimate of \$1,328,500. On that basis the \$1,500,000 grant authorized in September, 1977 would appear to have been adequate. Unfortunately, the estimate was based on the following assumptions:

- a) that the engineering contract would be signed by July, 1977
- b) that the design of the project would take only three months (July - October, 1977)
- c) that inflation over the project life was included in the estimated cost.

By the time the Project Paper was presented in June, 1977 these assumptions were no longer valid. The engineering contract was now scheduled for signature in September, 1977 and the project design was expected to take seven months instead of three. The four month delay, and the more than doubling of the engineering design effort would have added at least 15% to the original estimate bringing it to approximately \$1,530,000. Despite this, before the Project Paper was presented AID negotiated a reduction in TAMS's proposed contract cost to \$1,211,000 and provided in the grant for a 14% inflation factor and a 10% contingency to bring the total of funds required to \$1,500,000.

Since AID financed engineering contracts are not let on a price bid basis it has often been AID practice to negotiate with the selected engineering contractor to reduce the proposed contract price. The basis for this practice is the assumption that although cost plus contracts are not permissible, the fixed fee quoted by the engineer is usually based on a percentage of the estimated budget cost and

that, in turn, was based on a percentage of the total project cost. It is assumed, therefore, that the engineer inflates the estimated budget to justify a higher fixed fee. In this project AID may have had greater reason for this assumption because TAMS was selected at the specific request of the GOB without opening the contract to competitive proposals. It is, however, an unfortunate fact that in nearly every case where such downward negotiations were successful before the contract was signed, the end result was that later claims brought the final project engineering cost up to or beyond the original engineer's proposal.

Furthermore, knowing that at each step from the start of design work to the signing of a construction contract TAMS would require approval from AID, the GOB, and EEC, a warning signal should have sounded when the design time was set at seven months in the Project Paper. The delays inherent in the requirement for approvals by three separate agencies should have been foreseen.

Finally, when the TAMS contract was approved for signature in December, 1977 at a total budgeted cost and fixed fees for the three work phases of \$1,497,571 (at an exchange rate for local costs of P.1.00=\$1.21) another warning signal should have sounded. By this time three more months had elapsed from the anticipated contract signing date and the design effort, including Phases A and B, was to take 18 months instead of seven. With a six fold increase in engineering effort over TAMS's original estimate of May, 1977 and a delay of nearly five months from the anticipated signature date, TAMS's original cost estimate should have been increased about 100% from the original \$1,210,000 to about \$2,420,000. Or, figuring the cost another way, if we apply the 14% inflation factor and 10% contingency of the June, 1977 Project Paper to the lower negotiated price in the paper, the added time and increased engineering effort would have required an anticipated increase of about 60% from \$1,207,720 to about \$1,940,000, making the \$1,500,000 of the grant inadequate by an amount of from \$500,000 to \$1,000,000 depending on the base figure used.

At this point it would have been wise for AID to begin the process for an amendment to increase the grant amount. The action would have been justified by the delay between the original cost estimate in the Feasibility Study and the actual contract signing as well as the very large increase in engineering design time. A review of the USAID/B project files uncovers the active role of AID in the negotiations leading from the original draft Feasibility Study of December, 1976 to the start of work by TAMS on Phase A on February 12, 1978. The extent of possible cost increases should, therefore, have been understood by this time. Correspondence among AID/d, AOO/B, REDSO/EA, TAMS, and the GOB on negotiation of the Terms of Reference for the TAMS contract began early in 1977 and continued to August, 1977; then, to September, 1977 to execute the Grant Agreement with the GOB; then to December 24, 1977 for REDSO/EA to request the issuance of the first L/Com; then to January 31, 1978 when the L/Com was issued; and finally, to March, 1978 when final arrangements were completed for the procedures beginning with TAMS's invoices to GOB technical approval, to forwarding to the AID Controller in Mbabane for payment. It would appear, therefore, that a contract price close to TAMS's present estimate of \$2,350,229 could have been anticipated some time in 1978.

An examination of the TAMS contract reveals certain elements in it which should have been spotted in the AID review process and not approved without revision. The following are some examples:

- a) Following TAMS preparation of the Advertisement for Prequalification and the Prequalification Questionnaire only a two week period, from 3/15-3/31/78 was allowed for the review and approval by AID, GOB, and EEC. It should have been obvious that this time was inadequate under the best of circumstances. As soon as comments and objections were relayed to TAMS, even disregarding the delays in communication, there would be no possibility of meeting this schedule. In fact, it was a year later that the advertisement was published.
- b) Following TAMS submission of the draft General Conditions of Contract and Conditions of Special Application, a period of one and one half months was allowed for review and issuance of instructions to TAMS to prepare the final version. Considering the complexity of resolving the difference between the GOB Standard Contract, based on British contract practice and the EEC's G/C, based on Continental contract practice, the time allocated was too short. Of course, it was impossible to anticipate the delay of nine months from August 31, 1978 to May 14, 1979 caused by actions of the EEC, but a more reasonable time than 45 days should have been allowed.
- c) Clauses III (1) and III (2) of the TAMS contract provide that all comments and instructions from AID and EEC must be transmitted to the GOB, and any conflicts reconciled before being passed to TAMS along with the GOB comments. Such a rigid arrangement should have been rejected as it was bound to cause delays by passing the burden for correspondence to reconcile conflicts among three separate agencies on to GOB. A more flexible arrangement would have required TAMS to receive comment direct and to utilize its technical skills to resolve the conflicts. Final instructions would, of course, still have to come only from the GOB.
- d) Following completion of the Engineer's draft Tender Evaluation Report the three agencies were allowed the unrealistic time of two weeks from August 1 to 15, 1980. The actual time taken was to September 12, 1980 which was a reasonable interval.

## 2. TAMS

In every instance where the responsibility for action under the terms of the engineering contract lay solely with TAMS, they performed well and on schedule. They are, however, not innocent of being a factor in the delays and cost increases. It is highly improbable that they were not aware at the time their contract was being negotiated that they would be unable to complete the design work in the allotted time <sup>1/</sup>

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<sup>1/</sup> However, see note 1/ on Page 20.

and that there were already cost increases over their original estimate as a result of inflation and higher salaries, which would be further aggravated by the increase in design effort.

From my discussion with TAMS I gained the impression that they were so anxious to sign a contract that they accepted the unrealistic budget and time schedule. They hoped, I was told, to stay within these limits by including two devices in the contract:

- a) making the GOB responsible for collecting comments from AID and EEC, resolving any conflicts between these two and the GOB's own views and relaying a mutually agreed on set of comments and instructions to TAMS; and
- b) reducing the review and approval times to the short periods noted in the preceding section.

Whether these devices proceeded from a naive belief by TAMS or were a stratagem to get the contract signed and hope for increases through future claims, is irrelevant. In either case it is proof of a degree of irresponsibility on the part of the Engineer. These hidden traps should have been discovered by the GOB and AID before the contract was approved. The contract should have placed the burden of receiving comments and resolving any conflicts on TAMS. Where these could not be resolved easily or quickly by correspondence, allowance should have been made for meetings among the parties.

The failure by TAMS to have a resident office in Gaborone was also a delaying factor because of the cumbersome channels of communication. From my talk with the parties involved I understand that the establishment of a project office in Gaborone was favored by the GOB but opposed by both AID and TAMS as a cost saving measure.

Regarding their acquiescence to a reduced contract price, TAMS reacted much the same as many other consulting firms who, in their eagerness to obtain work, when under pressure from AID, agree to reduce their contract price.

### 3. GOB Roads Department

Considering the small size of the Roads Department technical and administrative staff, it performed as well as could be expected. The Department, as best it could, relayed documents from TAMS to the donors, obtained replies and comments, resolved conflicts, and instructed TAMS. The imposition of this task on the Department was ill-advised, as has already been noted.

One criticism to be levelled at the Road Department was its failure to adopt a more vigorous role in negotiations with TAMS on the original contract and its later amendments. The Department took the position that it was AID's responsibility as the financing agency to provide the required engineering services and to ensure that the grant was sufficient to cover them. It could also have been more forceful in pressing the EEC for quicker replies and at least voiced its criticism

of the repeated revisions asked for by the EEC in the several final versions of the contract documents. Although the GOB protested the EEC decision not to finance the engineering support services included in the construction contract there is no evidence in the record that it made any official representation to Brussels in support of the USAID/B position, as requested.

The handling of the unbalanced bids for the construction contract and the unorthodox negotiations with COGEFAR are only mentioned in this report in passing, as these were accepted and approved by EEC. In an AID financed contract this would not have been acceptable. In fact, the tender provisions which included twelve alternative bids would not have been allowed in an AID financed contract since it would lead to confusion and uncertainty in determining the low bidder.

One cause of delay by the GOB could easily have been avoided -- the mishandling of incoming correspondence from TAMS. On three occasions recorded in the USAID/B files documents sent by TAMS were delayed or not delivered to the Roads Department after they reached the Ministry of Works, although they were correctly addressed.

A TAMS office in Gaborone might have avoided these mishaps and a system which required the receipt of documents to be acknowledged could have alerted TAMS to any delayed delivery or loss of correspondence.

#### 4. EEC

The AID Project Evaluation Contract under which this report was prepared does not require an evaluation of EEC's performance in project implementation. It would, however, be impossible to account for the long delays in the engineering design phase and, especially, in the preparation of the construction contract tender documents without describing the contributing factors introduced by the EEC. In the following the term EEC will refer interchangeably to the Brussels, Maseru, and Gaborone offices.

A review of the EEC performance will reveal the extent of EEC accountability for lengthening the 18 month task of TAMS in Phases A and B of the contract to nearly three years and for the extra work leading to justified claims by TAMS for additional compensation.

- a) TAMS began their comparison of the GOB and EEC General Conditions of Contract under Task II (b) of Phase A on March 1, 1978 using the EEC text supplied by the COE in February, 1978. After one week of effort they were notified by the GOB that this text was outdated and a new version was provided, nullifying one week of the Engineer's work. The Engineer's Comparative Review Report was submitted to the GOB, AID, and EEC on May 1, 1978 and comments were due to be received by May 15, 1978. TAMS stressed the importance of an early agreement on the conflicting areas to enable them

to begin drafting the GC for the Tender Dossier which was scheduled for completion by July 15, 1978. On June 25, 1978 the COB informed TAMS of the impending arrival during the week of July 24, 1978 of an EDF delegation to discuss the TAMS Comparative Review Report. One day before the delegation met with the COB and TAMS a new, third version of the EEC's GC was presented and in three days of discussion the Comparative Report was ignored. After three days no conclusions were reached on instructions to TAMS on the GC provision. Finally, on August 11, 1978 the COB telexed and confirmed by letter precise instructions to TAMS for preparing the GC as part of the Tender Dossier. Before the new draft could be completed another set of comments and instructions was received by TAMS on December 12, 1978 and the work begun on August 11, 1978 had to be redone. The new draft, expected to be the final document, was ready on January 12, 1979. But again, on March 8, 1979 a third set of comments arrived from EEC. The final draft, together with the Tender Dossier was completed on May 14, 1979, ten months after the scheduled date.

- b) The draft Technical Specifications were completed under Task III (f) on July 12, 1978. The final document, after review and comments was due on October 15, 1978 together with other sections of the Tender Dossier. No comments were received until March 8, 1979, five months after the final Tender Dossier should have been available.
- c) Similar delays were experienced with the review and approval of Quantity Estimates, Conditions of Particular Application, and Information to Tenderers, all of which depended on finalization of the documents in a) and b) above. Some of the delay in completing the Quantity Estimates and Information to Tenderers resulted, however, from the COB decision to divide the paving contract into two projects: Project A (180 km) and Project A+B (300 km) due to the shortfall in EEC financing.
- d) The case of the Prequalification Questionnaire and Advertisement for Prequalification is an example of utter confusion. TAMS prepared the documents in February, 1978. After hearing nothing from the EEC for many months they received, on December 12, 1978 a copy of a Notice of Invitation for Prequalification prepared by the COB and EEC and were asked for their comments. The COB letter also expressed the hope that Brussels would publish the Notice in January, 1979. TAMS sent its comments on January 18, 1979 expressing reservations on certain things in the Notice. On March 18, 1979 they were informed that they would not be responsible for qualifying European Contractors and no further work on this task was required of them. The Notice was published by EEC on March 13, 1979, ten months behind schedule and TAMS's work on this task during a one year period was wasted.

- e) Based on the normal procedure followed by AID and IBFD in international contracts, the Terms of Reference for the TAMS contract required them to include in the construction contract the items to be supplied by the Contractor as support for the Supervising Engineer and to be financed as part of the construction contract. These items include housing, a laboratory and specific equipment, vehicles and vehicle support. The draft Technical Specifications including these items was submitted for review by TAMS on July 12, 1978 and during all the reviews over nearly one year no demurral was heard from the EEC. On June 13, 1979 after the final version of the Tender Dossier was completed the EEC Directorate for Projects in Brussels notified EEC/Maseru that these items were not eligible for financing by EDF. They did not object to their inclusion in the contract but were of the opinion that AID was obligated to finance them as part of the engineering services contract. There is evidence that EEC/Maseru was embarrassed when they relayed this information to the GOB on June 28, 1979. Despite strenuous efforts by AID to convince the EEC of their error, including a reminder that EEC had reviewed and approved the Terms of Reference of the TAMS contract, including the provision that these items be included in the Construction Contract, EEC refused to budge. <sup>1/</sup> The final approval of the Tender Dossier was held up by this dispute and by other delays and was completed by TAMS on May 14, 1980 after a delay of nearly two years.

The belated action of the EEC not only delayed the project and increased the engineering costs; it also presented the GOB with the need to supply additional financing of \$2,109,000 for the Project A or \$1,465,682 for Project A+B to pay for these items. A request to AID was rejected, leaving the GOB with no alternative but to finance the items from its own resources.

## VII. Conclusions

An examination of USAID/B files, beginning with the inception of the project in 1976 when TAMS was requested to prepare a feasibility study, to October 31, 1980 and interviews with staff of the GOB Roads Department, with the EEC Resident Engineer in Gaborone, and with TAMS's Nairobi Office Manager, lead to the following conclusions:

1. AID's decision to finance the engineering services contract for a project whose construction would be totally financed by the EEC and be open to bids only from contractors from ACP and EEC countries, was unfortunate.
2. The TAMS contract was under-financed at the outset, even excluding

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<sup>1/</sup> In a letter from the EEC Directorate for Projects dated January 26, 1981, commenting on the draft of this report, it was stated that the EEC was never involved in negotiations on the TAMS contract.

unforeseen slippages in the schedule resulting from the circumstances described in the report.

3. AID, EEC, and the GOB in their review and approval of the TAMS contract allowed unrealistically short periods for the procedure of reviewing TAMS's work. TAMS may have acted naively or less innocently by building in these short times which would lead to later claims for extra compensation. In either case the donors and GOB bear the responsibility for not noting these clauses and in not rejecting them. The Implementation Plan in the AID Project Paper was also unrealistic in its scheduling.
4. The GOB Roads Department was incorrectly burdened with the task of collecting comments from the donors, reconciling differences and issuing instructions to TAMS. Except for the issuance of final instructions, the rest of this work should, properly, have been made the responsibility of TAMS.
5. The cumbersome review and approval process of EEC, its repeated replacement by new versions of its own guiding documents, its many series of comments on the same task of the Engineer, and the number of times it requested changes in the Tender Dossier were major causes in the project delay and cost escalation.
6. The misunderstanding over EEC financing of the Engineer's support services could not have been anticipated either by AID or the GOB. It is surprising that the EEC was not aware of AID and IBRD practice in this respect. Evidence points to the fact that the EEC decision not to finance these items came late in the project schedule for reasons which do not appear in the documentation and that the decision came as a surprise and caused embarrassment to EEC/Maseru.

#### VIII. Recommendations

The following recommendations are made with the intent to avoid, in future some of the problems encountered in the Bot-Zam Road Paving Project in co-financed or multi-donor road construction projects.

1. Greater care should be exercised by AID in the selection of projects it will co-finance with one or more donors. Aside from considerations outside the scope of this evaluation report, AID co-financing should be limited to one or more of the instances where:
  - a) the U.S. can provide expertise not readily available from the other donors;
  - b) the U.S. financing is a large enough portion of the project cost to allow AID to influence the direction and progress of the project;

- c) the U.S. is financing a discrete part of the project construction contract, e.g. the construction of a major section of a road, the supply of specific construction materials or equipment which are of better quality, more efficient, better suited to the project, or able to meet the technical specifications at a lower cost; or,
- d) where there is some technical, cost, or management advantage to the host country from U.S. participation.

In the present instance none of the above seem to apply.

2. Where more than one donor is involved a detailed understanding should be reached, before financing approval, among the donors, on the elements each will finance. The understanding should be committed to writing and approved by all the parties involved in the project. Any limiting conditions should be clearly spelled out.
3. During the negotiation of host country contracts, even when grant financed, the host country should take a more active role in the negotiating process. AID should limit itself to an advisory capacity except when AID regulation or U.S. law is involved. AID should, of course, be willing to assist the host country when asked to do so.
4. Considerable foresight should be exercised to anticipate cost escalations resulting from inflation, unanticipated work, or changed conditions. These should be allowed for in the contingency item of the project cost estimate to a greater degree than in the present project. By so doing it should be possible to reduce the number of amendments in loan and grant agreements and to avoid the embarrassment of forcing the host country either to scale down the project or to assume a greater financial burden than it had expected to do.
5. Greater care should be exercised in the review and approval of AID and host country contracts to spot built-in pitfalls or unrealistic conditions which could lead to slippage in time schedules and to increased costs.
6. AID should adopt a forceful approach when the host country or a donor is dilatory in completing an action relating to the AID-financed portion of the project or where the host country or donor attempt to add unjustified conditions affecting the AID-financed portion, or leading to higher costs.
7. The TAMS contract should be amended, if possible, to remove the requirement in Clauses III (1) and III (2) which provide that the GOB collect and collate with their own, all comments from AID and the EEC and resolve any conflicts before forwarding them to TAMS with instructions for action. No other recommendations are made for amendment of the Grant Agreement or the Engineer's

Contract to improve Phase C project implementation. Both these documents are adequate for this task. However, the question of AID approval of Amendment No. 4 to the TAMS contract remains unresolved. If the sole problem concerns financing of the cost overrun and AID does not plan to provide the additional funds, Amendment No. 4 should be renegotiated to provide that the COB will bear these additional costs. The COB has already indicated its willingness to do so, although it hopes to obtain future AID financing for the engineering costs of Project A+B when the expanded contract comes into force on July 9, 1981.

8. The pending Amendment to Loan Agreements 001 and 001A should be authorized to allow the use of approximately \$394,000 of unexpended funds for payment of invoices of the TAMS contract. USAID/B has the authority to do so.

APPENDIX

The comments on the draft report of December 1, 1980 reproduced in the following pages were received from:

- 1) TAMS, dated January 5, 1981
- 2) REDSO/EA, dated January, 9, 1981
- 3) Commission of the European Communities, Directorate for Projects, VIII/C/3, dated January 26, 1981.

My notes on the comments follow each of the above.

# TAMS

TIPPETTS - ABBETT - McCARTHY - STRATTON

ENGINEERS AND ARCHITECTS

EAST AFRICA REGIONAL OFFICE

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Dear Mr. Lubin:

NATA-KAZUNGULA ROAD PROJECT  
TAMS COMMENTS ON AID'S PROJECT  
EVALUATION REPORT (DRAFT)

We have read with interest your draft evaluation report on the subject project, and, as requested, we provide below our comments.

Page 6 - First Paragraph

TAMS requested an additional 15 days time extension to incorporate the latest amendments to the Contract Documents requested by EDF, and to evaluate tenders for Projects A and A&B instead of for the entire project only.

The additional month was a requirement of EDF who insisted on increasing the Contractor's Tender preparation period allowed between the Organized Site Visit date and the Tender Opening date from 1 to 2 months.

The increase in the Consultant's fee and estimated budget was primarily due to the inflationary effect experienced as a result of the delay of several months in starting Phase B work and to a very minor extent due to the above described additional work.

TAMS estimate of time inputs and corresponding fee and estimated budget for Phase B work at the time Amendment No. 3 was signed proved to be insufficient for the following reasons:

- a) At the Site Visit EDF/Brussels decided to require six alternative tenders for Project A and six alternative tenders for Projects A&B. This meant that TAMS had to evaluate 12 alternate tenders per Contractor instead of two.
- b) The negotiations that the GOB requested TAMS to undertake with Cogefar for constructing a reduced project (Project A(1)) were difficult and time consuming.

Mr. Samuel Lubin

January 5, 1981

The above two factors prompted TAMS to inform the GOB on September 12, 1980 that the budget estimate and fee established in Amendment No. 3 would not be sufficient and to request that additional funds be made available.

Page 6 - Fourth Paragraph

- b) Tender Period - The Bid Opening Date was June 4, 1980.
- c) Tender Evaluation - The tender evaluation was completed on July 26, 1980. The final version of the Tender Evaluation Report was submitted on July 28, 1980, or one month ahead of schedule. There was no need to prepare a draft Tender Evaluation Report for comments since throughout the tender evaluation period TAMS managed to obtain comments from EEC, Maseru and the GOB.
- d) Comments on Tender Evaluation by GOB, EEC and AID - The GOB approved the Tender Evaluation Report on September 12, 1980. At the same time the GOB requested TAMS to negotiate with Cogefar Construzioni Generali the construction of a reduced project (Project A(1)).
- e) Finalize Tender Evaluation Report and Prepare Tender Documents for Signature - The report was submitted to the GOB, EEC and AID/Botswana on July 28, 1980. On November 12, 1980, the GOB verbally authorized TAMS to finalize negotiations with Cogefar and prepare the Tender Document (Construction Contract) for signature on the basis of Cogefar's original Tender. This document was ready for the signature of the parties on December 4, 1980, and the Construction Contract was executed on the same date.

Page 9 - Second Paragraph

Bids for Project A(1), A and A&B were never intended to be solicited. Project A(1) work, to be paid using unit rates tendered by Cogefar for Project A, was only a means of starting construction of the Project with the available EDF financing.

Page 9 - Fourth Paragraph

Amendment No. 4 was signed by the GOB on December 4, 1980.

Page 9 - Sixth Paragraph

The cost of Phase C work has increased due to inflation and also because the period of supervision has been extended by EDF by six months. TAMS original Contract anticipated a construction period of 24 months - not 30 months - for the entire project (300 km). The period of supervision services has therefore been increased by 25 percent.

Mr. Samuel Lubin

January 5, 1981

## Page 12 - Third Paragraph

Kier's tender rates for Pay Items 14.1 to 14.7 were acceptable. TAMS did not request Kier to clarify its rates for these Pay Items.

## Page 14 - Last Paragraph and Foot Note

REDSO/EA notified TAMS verbally on February 6, 1978 that the Letter of Commitment for Phase A work had been issued on February 2, 1978. The Letter of Commitment (undated) arrived in TAMS New York Office on February 3, 1978. According to the Terms of its Contract, TAMS was not required to start work on Phase A until March 2, 1978. However, it chose to start on February 13 or 15 days ahead of schedule.

## Page 19 - Fourth Paragraph

The 700 days was not a misprint, but was requested by the GOB and EEC. TAMS complied but objected in writing indicating that such a long period would result in considerably higher bids for Projects A&B. The GOB and EEC agreed, and TAMS was instructed to revert to 400 days.

## Page 19 - Fifth Paragraph

The requirement to bid for six different alternatives for Projects A and A&B had nothing to do with the dividing of the Project into two parts. This requirement from EEC/Brussels was transmitted to TAMS immediately after the Organized Site Visit was completed and a few minutes before the Site Meeting was to take place in Gaborone.

## Page 20 - Fourth Paragraph

During the period of practically three months involved in negotiating the Engineering Contract, TAMS continuously appraised REDSO/EA and the GOB of the difficulties envisaged in reaching agreement on the contents of the Contract Documents with EEC. It is true, however, that neither the GOB nor REDSO nor TAMS ever anticipated that EEC would prove to be so difficult.

TAMS' Proposal dated October 3, 1977 allowed considerably more time for review and approval of its work by EEC, the GOB and REDSO. However, REDSO seemed not to understand nor to give due consideration to TAMS' proposals and explanations and strongly suggested that TAMS and the GOB accomplish Phase A work in the shortest possible time.

The short review periods of TAMS' work were "strongly suggested" by REDSO in spite of TAMS' misgivings and without consulting EEC or the GOB. TAMS repeatedly explained that such short periods were not adequate. REDSO's repeated answers were that "this was a problem between the GOB and TAMS and that their problem

Mr. Samuel Lubin

January 5, 1981

was to get an engineering contract signed within the available funds".

Page 21 - Fourth Paragraph

TAMS' repeated explanations to REDSO and the GOB during the negotiations of the Engineering Agreement that it would be very difficult to reconcile the GOB's standard Contract Documents with the EDF's General Conditions of Contract were not given due consideration.

TAMS has been providing services to the GOB's Ministry of Works longer than any other Consultant presently in Botswana. The GOB's standard Contract Documents were, as a matter of fact, developed on the basis of TAMS' previous work on other projects and specifically on TAMS' work for the Gaborone-Molepolole Road Project.

At the time TAMS' contract was being negotiated, another smaller contract to be financed fully by EDF was also being negotiated by the GOB with a well known European consulting firm. The stipulation of reviewing the EDF's and GOB's General Conditions of Contract were inserted in both engineering contracts.

The European firm gave up on this task and the GOB accordingly reduced the overall fee of this firm and used TAMS' work to fight EDF on both contracts. The problem, therefore, is not that TAMS had no prior experience on EDF contracting procedures but that the GOB was not prepared (and rightly so) to change the administrative procedures and the organizational structure of the Roads Department - which are based on FIDIC Conditions of Contract - to cater for a few EDF financed projects.

Page 24 - Fifth Paragraph

The requirement of making the GOB responsible for collecting comments from EDF and AID and resolving any conflicts before relaying to TAMS a mutually agreed set of comments is considered normal procedure. It is practically impossible, very time consuming and very costly for the Consultant to accomplish this work without the necessary authority. In fact during the course of our work, the GOB in practically every instance merely forwarded EDF's comments to TAMS and TAMS had to resolve them.

Page 25 - Second Paragraph

The GOB's claim that it could have employed TAMS on other work during any slack periods to prevent added costs to the Contract is difficult to accept. The Roads Department has no authority to assign work to any Consultant it wishes to. It must first obtain approval from the Central Tender Board which is always aiming at spreading work more or less equally among all Consultants registered in Botswana.

**TAMS**

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Mr. Samuel Lubin

January 5, 1981

In general, we are most impressed with the objective and impartial approach of your draft report, and are hopeful that a careful study of its conclusions and recommendations by the parties concerned will avoid similar situation from occurring in the future.

Very truly yours,  
TIPPETTS-ABBETT-McCARTHY-STRATTON



Mario Asin

MA/fj

cc: Mr. Pielemeier  
Assistant Director  
USAID/Botswana  
P.O. Box 90  
Gaborone  
BOTSWANA

- I. Notes on the TAMS Comments of January 5, 1981. (References are to pages of the TAMS letter).
1. Page 33 - "Tender Period." - A note has been added on Page 6 of the final report indentifying June 4, 1980 as the Bid Opening Date.
2. Page 33 - Tender Evaluation. - The dates and activities shown in the table in Page 6 of both the draft and final report were taken from the TAMS document justifying its claim for additional compensation. The document included a period for comments to be received on the Tender Evaluation draft and gave September 12, 1980 as the date the comments were actually received.
3. Page 33 - "Bids for Project A(1), A, and A+B" - The statement on Page 8 of the final report has been corrected to state that bids were solicited only for Projects A and A+B.
4. Page 33 - "Amendment No. 4" - Page 8 of the final report now states that the Amendment was signed by the GOB on December 4, 1980 although it was not yet approved by AID.
5. Page 34 - "Kier's tender rates" - Correction has been made on Page 11, paragraph 3 of the final report.
6. Page 34 - Start of Phase A Work - The footnote on Page 13 of the final report has been amended to show that TAMS was not required to start work until March 2, 1978.
7. Page 34 - "700 days validity" for Project A+B - The statement has been corrected in Page 18, paragraph 4 of the final report.
8. Page 34 - Time periods allowed for review of TAMS actions - A footnote on Page 20 of the final report mentions the disclaimer in the TAMS letter. This does not, however, agree with the statement made to me by Mr. Asin.
9. Page 35 - TAMS prior experience of EEC contract rules - Paragraph 2 in Page 21 of the final report has been changed to reflect TAMS's letter.
10. Page 35 - Collection and reconciliation of comments - The second and third sentences of the comment are contradictory. The fact that TAMS actually did this work is evidence that it was neither impossible nor time consuming and costly.
11. Establishment of a TAMS office in Gaborone - The reference to additional work from the COB has been deleted as irrelevant.

UNITED STATES OF AMERICA  
AGENCY FOR INTERNATIONAL DEVELOPMENT  
EAST AFRICA REGIONAL ECONOMIC DEVELOPMENT SERVICES OFFICE

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DEPARTMENT OF STATE  
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INTERNATIONAL POSTAL ADDRESS  
POST OFFICE BOX 30261  
NAIROBI, KENYA

January 9, 1981

Mr. Lubin  
c/o S. Ansell  
18 Holiday Road  
Wayland Mass. 01778

Dear Mr. Lubin:

Botzam Road Paving Project 633-0072 Evaluation  
Report

Enclosed are REDSO comments on your evaluation report dated December 1, 1980.

The comments are generally self explanatory and based on your draft report. However if clarification is needed on any point please contact Engineering Dept. REDSO/EA.

Sincerely,

Denis Light  
Engineer, REDSO/EA

cc: John Pielemeier, Assistant Director, AID Botswana.

Comments on Evaluation Report of BOTZAM Road Paving  
Project 633-0072 Prepared by Mr. Samuel Lubin

1. Page iii Conclusion 1, line 5

This is especially so if the U.S. engineering firm is not totally familiar with EEC procedures, method of operation and conditions of contract.

2. Page IV Conclusions 5. Check costs for Projects A&B and also for A. They appear to be interchanged.

3. Page IV and 29 Recommendations

The main recommendation is that AID should practically never fund engineering design, preparation for construction to be funded by another donor especially if the US firm has never done work for the other Donor.

4. Page IV and 29 Recommendations 1. Add

e) there appears to be advantages in working with contractor qualification as envelope one of two envelope bid and for contract conditions to be FIDIC.

5. Page IV and 29 Recommendations 2. Line 3

After finances add "This should also apply to country of origin and procurement regulations.

6. Page V and 30.7. There is no comment on how TAMS should proceed during the construction period where GOB is employer See comment 18.

7. Page 9 Last line of 1 should read "an increase of 57 percent" or "157 percent of the original cost".

8. Page 12 2nd paragraph Last line. Should read "Project A&B and P 1,875, 626 for Project A."

9. Page 12. End of page and note 1. Add "Item 13.1 should have been set at more than 10 percent".

10. Page 15.2 Last line but 1 should read "December 12, 1978".

11. Page 15.2. What happened to TAMS prequalification of local contractors?
12. Page 15.3. Last paragraph, Check dates or delay time. Something is wrong.  
Check with 6(b) page 16.
13. Page 18. 2nd paragraph. Last line. Add "This was in spite of it being normal donor procedure, basic supervisory support items and EEC not having made previous comment.
14. Page 21. VI. 1. 2nd paragraph line 9  
Does "tender requirements" refer to country of origin or other more general requirements? Third paragraph seems to refer more to country of origin.
15. Page 21 VI.1. 3rd paragraph line 5 "Change to" appeared logical for AID and/or EEC to suggest"
16. Page 22 paragraph 1. Add "(c) that inflation over the project life was included in the total cost."  
Last part of paragraph 1 should be rechecked.
17. Page 22 paragraph 2. Last sentence. The last sentence can give the wrong impression in that while successful downward negotiations give the engineer firm more incentive for claims, unsuccessful negotiations give impression that the engineering firm has not inflated his price and a non negotiated contract may give the engineer the impression that additional claims may be easily approved, by the Agency.
18. Page 24 (c) This is a difficult situation where if TAMS receives the comments directly it also gives an open ended possibility for TAMS to indirectly approve its own claims for extra work while minimizing incentive to resolve issues.

19. Page 24 TAMS 1st paragraph. An experienced and old established firm like TAMS is unlikely not to have included inflation and higher salaries in their costs even though not directly shown. It is more likely that they estimated to mid point of project and worked figures accordingly.
20. Page 24 TAMS 2nd paragraph. Line 2 "Unrealistic" is a matter of opinion and of range. It would be better to say "partly unrealistic budget and time schedule."
21. Page 24 TAMS (a) This is not entirely irrational. See comment 18 above.
22. Page 25 line 3 See comment 18
23. Page 26 paragraph 2. Change to "A TAMS office or representative in Gaborone"
24. Page 27 Last Line Is it known whether non support of engineering supervision was normal policy of EEC in the field or at Brussels or whether. this became a new EEC Brussels policy at that time?
25. Page 23 conclusions 3. Add "In addition the Implementation Plan in the Project Paper had unrealistic time frame.
26. Page 28 and IV Conclusions 4. See comment 18. There is no obvious solution. All have problems.
27. Page 29.6. See comment 24.

II. Notes on REDSO/EA Comments dated January 9, 1981. (References are to item numbers in the RESO/EA list)

2. The lower tender price for the Engineer's Support items for Project A+B is correct. The contractor was able to absorb a larger part of his mobilization cost in the 300 km project and, therefore, quoted lower unit prices for these items in the larger project.
3. Implicit in Recommendation 1.
4. Recommendation 1(d) is general and includes all advantages to the host country.
5. The more general statement: "Any limiting conditions should be clearly spelled out", has been added to Recommendation 2, in Page 29 of the final report.
6. The GOB and TAMS relationship and responsibilities in Phase C are clearly defined in the contract. Recommendation 7 relates only to comments from the donors. Instructions to TAMS can only be issued by GOB.
7. Corrected in the final report.
8. See note on Comment No. 2 above.
9. In an AID contract mobilization is an advance payment which is deducted in installments from each partial payment. It is not a pay item.
10. Corrected as noted.
11. No local contractors were qualified.
12. Date corrected to September 8, 1978 and delay time corrected accordingly.
13. Although AID and the GOB hold this view, the EEC continues to maintain that their policy is different. See their letter of January 26, 1981 in this Appendix.
14. The reference is general, to differences between Continental and U.S. contracting practices.
16. Changed as suggested.
17. No such impression is implied. The statement refers to actual experience in many Africa Bureau road engineering contracts.
18. The time limits imposed on TAMS would prevent it from delaying the resolution of conflicts. In fact, the TAMS letter of January 5, 1981 (page 35 in this Appendix, next to last paragraph) states:

"In fact during the course of our work, the GOB in practically every instance merely forwarded EDF's comments to TAMS and TAMS had to resolve them."

19. The statement in the report and in your comment are both conjectures
23. There was a TAMS representative in Gaborone but he had no active part in the project.
24. EEC/Brussels claims it to be their normal policy. We have no evidence either way.
25. Addition made as suggested.

COMMISSION  
OF THE EUROPEAN COMMUNITIES

Brussels 26. 1. 1981

Directorate-General for Development

Directorate for Projects

VIII/C/3

001684

Mr S Lubin  
c/o Ansell  
18 Holiday Rd.  
Wayland  
Massachusetts 01778  
U S A

Dear Mr Lubin

During your visit to Brussels on 12th December 1980, we discussed the Nata-Kazungula Road project in Botswana, for which you are drawing up an evaluation report for USAID.

As you are aware, EDF procedures substantially differ in many ways from those, which you are familiar with from your service with USAID. Having meanwhile read the draft evaluation report, which you handed over to me during our meeting, I therefore also appreciate that your evaluation of the different project phases is different from mine. I am therefore pleased to have had the opportunity to explain to you my points of view, particularly as regards such matters as:-

- . Engineer's support facilities
- . Tender evaluation
- . Roles of the Administration and of the Consultant respectively

In addition to the matters already discussed with you on that occasion, I would like to draw your attention to the following two important facts, which apparently have not been fully taken into consideration when your report was drawn up:-

- . The Commission of the EEC never participated in any negotiations concerning the contract which was concluded with TAMS under USAID financing. Neither was the Commission consulted when the time schedule for this contract was drawn up, although it, at different stages, directly concerned actions and decisions to be taken by the EEC

-2-

- . The EEC contribution of 10 million ECU to the project was only allocated in October 1979, and not in 1977 as mentioned in your report. This grant agreement, (2415/PR of the 4th October 1979) signed with Botswana and Zambia only concerns the road works.

For your information, I enclose a copy of the Commission's "Note Verbale" no 6819 of the 25th March 1980, which gives in more detail the EEC's position. I am aware that you have already seen this note amongst the numerous other documents and correspondence, on the basis of which your draft was established, but I trust that you will understand when rereading the note, that this reply to the U.S. Mission in Brussels can in no way be considered as a "flat refusal".

Yours sincerely,



For the Director  
A. BERRENS  
Head of Division

25. III. 1980

COMMISSION  
OF THE EUROPEAN COMMUNITIESBrussels

Directorate-General for Development

-

Directorate for Projects

-

Roads, Bridges and Airports

**006819**NOTE VERBALE

The Commission of the European Communities presents its compliments to the Mission of the United States of America and has the honour to acknowledge receipt of the U.S. Mission's Note Verbale of the 4th February 1980, which has been examined with great interest and comprehension by the Commission's services.

The Commission wishes to advise the U.S. Mission of its following points of view as regards the matters treated in the above-mentioned Note Verbale :

1. Taking into account the difficult political situation, which existed in Southern Africa in the 1970's, the Commission examined favourably the request which was jointly presented to it, in 1977, by the Zambian and the Botswana Governments with a view to obtaining an EDF contribution to the bituminisation of the road from Nata to Kazungula. By directly connecting Botswana and Zambia this road constitutes an important alternative road link for these two landlocked ACP countries.

Consequently it was, in accordance with the rules stipulated in the Lomé Convention, mutually agreed between the ACP- and the EEC states that 10 m EUA should be earmarked for this project, out of the funds reserved for regional co-operation within the 4th EDF.

2. As the road had initially been modernised and improved to all-weather gravel standard on USAID financing, it was with pleasure that the Commission also learned of USAID's approval of the financing of the feasibility and the final design studies as well as of the supervision of the works.

3. Following the visit to Brussels in October 1977 of the USAID-mission, which was led by the Assistant Administrator for Africa, Mrs Goler T. Butcher, several USAID officials consequently visited the Commission in Brussels, in order to discuss in more detail, the modalities for a closer USAID/EDF collaboration on specific projects, which had been identified as being of mutual interest for the two aid agencies. On these occasions useful exchanges of points of view concerning the Nata-Kazungula project also took place.
4. After the final design studies had been undertaken during early 1978, by the American Consultant T.A.M.S., on USAID-financing, it very soon became evident that the 10 m EUA (refer to point 1 above) would not prove sufficient to cover the total cost of the works for the bituminisation of the road over its entire length of 300 km. A possible USAID/EDF co-financing of the works was therefore discussed on several occasions in 1978 between officials from these two aid agencies.

Following a meeting in Brussels on March 14, 1978 with Mr. J.P. Guedet, USAID, the Commission confirmed, in its letter n° 5995 of March 29, 1978 to USAID, Washington, its interest in extending the USAID/EDF co-financing in such a way that USAID, in addition to its financing of the supervisor would also finance a part of the works or supplies, for which supplementary funds would be needed. However, no official reply was given by USAID, but through contacts with USAID-officials later in 1978, the Commission learned that no extra funds could be made available for this project by USAID.

5. During an EDF-mission to Botswana in February 1979, led by the Deputy Director General, Mr. Foley, it was agreed that instruction of the EDF-financed project component could commence without awaiting the drawing up of a financing scheme for the bituminisation of the entire length of the Nata-Kazungula road. It was agreed with the project authorities that the EDF-financing of 10 m EUA should cover the construction works for the

The financing was subsequently approved on the 5th July 1979 by the deciding body of the Commission, and the Financing Agreement was jointly signed by the Republics of Botswana and Zambia and by the EEC, on the 4th October 1979.

6. A copy of the draft tender documents, prepared by T.A.M.S. had been received by the Commission during the beginning of June 1979. Following the examination of these documents the Commission informed the project Authorities, before the end of June 1979, via the EEC Delegation in Maseru, that the costs of the "Accommodation and Services for Supervisory Staff" could not be financed by the EDF. These costs were estimated at approximately 975 000 Pula, or approximately 875 000 EUA.

As mentioned under point 5 here above, the Financing Agreement was signed approximately 3 1/2 months later. This agreement clearly stipulates that the EDF-financing covers the works only, and that the supervision costs are therefore not included. The two Governments had no observations to make on this solution.

7. By the end of October 1979, it was brought to the Commission's attention, however, that neither USAID nor Botswana had reserved the funds necessary for the provision of "Accommodation and Services" for the supervising American consultant T.A.M.S.

The matter was examined thoroughly by the Commission's services, but taking into account that the Financing Agreement had already been signed, it was considered to be impossible to change the scope of the EDF-financed project component at this late stage.

The Commission also considers it as a better defined and more logical solution if only one donor, in collaboration with the beneficiary countries, finances the supervision costs. Less complications are likely to arise during the execution of the project, if the financing modalities are well defined from the beginning.

Nevertheless, the Commission has no objections to the launching of the tendering and to the inclusion of the above-mentioned items in the tender documents, provided that they are financed from other resources than these of the EDF.

8. The Commission is not in possession of any documents indicating that the EDF has entered into commitments relating to the financing of accommodation and services for the consultant T.A.M.S.

During the USAID/EDF meetings in 1977 and 1978 (see points 3 and 4 here above) different kinds of co-financings were discussed and considered, but - to the Commission's knowledge - no formal commitments were ever reached. Neither has the Commission ever been informed of any such commitments being undertaken by the EEC Delegation in Maseru.

9. Considering that any delay in the project's implementation incurs additional costs, it is hoped that an appropriate solution to this problem will be found within the near future. In this respect the Commission has recently been pleased to learn that the Botswana Government is at present considering financing these items out of its own resources.

The Commission regrets very much that these misunderstandings have occurred, but hopes that the above information will clarify the Commission's points of view.

Looking forward to continuing working in co-operation with the USAID, the Commission of the European Communities avails itself of this opportunity to convey to the United States Mission the renewed assurances of its highest consideration.

III. Notes on letter from EEC Directorate of Projects, dated January 26, 1981. (References are to pages of the letter).

1. Page 1, last paragraph - A footnote has been added to page 27 of the final report making reference to your statement.
2. Page 2, first paragraph - Paragraph 3, Page 17 of the final report now states that Grant Agreement 2415/PR was signed on October 4, 1979. The reference in the report to 1977 is to a commitment made by the Commission to conclude a Grant Agreement. Without such a commitment AID could not have agreed to make the Grant for the Engineering Services Contract.
3. Note Verbale of March 25, 1980. - The final report (Page 18, paragraph 1) has been corrected to conform to the Note Verbale. It was the GOB Ministry of Finance which informed USAID/B that the Commission considered the matter closed.