(State Highways Management Project - Sao Paulo)

between

INTERNATIONAL BANK FOR RECONSTRUCTION
AND DEVELOPMENT

and

STATE OF SAO PAULO

Dated December 11, 1987

LOAN NUMBER 2830-BR

LOAN AGREEMENT

AGREEMENT, dated December 11, 1987, between INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank) and STATE OF SAO PAULO (the Borrower).

WHEREAS (A) Federative Republic of Brazil (the Guarantor) and the Borrower, a political sub-division of the Guarantor, having been satisfied as to the feasibility and priority of the Project described in Schedule 2 to this Agreement, have requested the Bank to assist in the financing of the Project;

(B) by an agreement (the Guarantee Agreement) of even date herewith between the Guarantor and the Bank, the Guarantor has agreed to guarantee the obligations of the Borrower in respect of the Loan and to undertake such other obligations as set forth in the Guarantee Agreement; and

WHEREAS the Bank has agreed, on the basis, inter alia, of the foregoing, to extend the Loan to the Borrower upon the terms and conditions set forth in this Agreement;

NOW THEREFORE the parties hereto hereby agree as follows:

ARTICLE I

General Conditions; Definitions

Section 1.01. The "General Conditions Applicable to Loan and Guarantee Agreements" of the Bank, dated January 1, 1985, with the last sentence of Section 3.02 deleted (the General Conditions) constitute an integral part of this Agreement.

Section 1.02. Unless the context otherwise requires, the several terms defined in the General Conditions have the respective meanings therein set forth and the following additional terms have the following meanings:

- (a) "Special Account" means any of the accounts referred to in paragraphs (a) or (b) of Section 2.02 of this Agreement; and
- (b) "DER-SP" means Departamento de Estradas de Rodagem do Estado de Sao Paulo, an autarquia of the Borrower's Secretariat of Transport designated by the Borrower to act on its behalf as the agency charged with the execution of all parts of the Project other than Parts D.1 and D.2 thereof;
- (c) "Highway Rehabilitation Sub-project" means a specific highway project to be carried out under Part A.2 of the Project, consisting mainly of one or more of the following works in respect of a given road segment for which an Approved Engineering Sub-project, as the term is defined in paragraph (f) below, has been carried out: pavement overlay, strengthening and rehabilitation, bituminous surface treatment and improvement of roadside drainage;
- (d) "Approved Highway Rehabilitation Sub-project" means a Highway Rehabilitation Sub-project which has been approved by the Bank for financing under the Loan;
- (e) "Engineering Sub-project" means a specific Sub-project consisting of detailed engineering of a Highway Rehabilitation Sub-project;
- (f) "Approved Engineering Sub-project" means an Engineering Sub-project which has been approved by the Bank;
- (g) "Central Bank" means Banco Central do Brazil, the Guarantor's Central Bank;
- (h) "Account Bank" means Central Bank in respect of CESA and the bank referred to in Section 2.02 (c) of this Agreement in respect of FESA;
- (i) "Project Revolving Account" means the account to be maintained by DER-SP pursuant to the provisions of Section 3.05 of this Agreement;
- (j) Training Steering Committee means the committee established by DER-SP by means of the Portaria No. SUP/DER 036 dated September 24, 1986 published in the Borrower's Diario Oficial on October 1, 1986, for the purpose of providing policy guidelines for DER-SP's training program, including Part (C) of the Project;
- (k) "Pavement management Steering Committee" means the committee established by DER-SP by means of the Portaria No. SUP/DER 046 dated November 13, 1986, published in the Borrower's Diario Oficial on November 18, 1986, for the purpose of providing policy guidelines for the development, and continuous operation thereafter, of the system described in Part D.3 (d) of the Project;
- (1) "Equipment Management Steering Committee" means the committee established by DER-SP by means of the Portaria No. Diario Oficial on November 18, 1986, for the purpose of providing policy guidelines for the development, and continuous operation thereafter, of the system described in Part D.3 (e) of the Project;
- (m) "Decree" means the Borrower's Decree No. 26, 673, published dated January 28, 1987 in the Borrower's Diario Oficial on January 29, 1987 authorizing the reorganization of DER-SP's administration;
- (n) "Management Study" means a two-phased study whose Phase I was begun by the Borrower in August 1986 with the objective of preparing immediate follow-up measures to the Decree, and whose Phase II is included under Part D.3 (c) of the Project;
 - (o) "Cruzado" means the currency unit of the Guarantor;
- (p) "CESA" means the cruzado expenditures special account to be opened pursuant to Section 2.02 (b) of this Agreement; and

(q) "FESA" means the foreign exchange expenditures special account to be opened pursuant to Section 2.02 (c) of this Agreement.

ARTICLE II

The Loan

- Section 2.01. The Bank agrees to lend to the Borrower, on the terms and conditions set forth or referred to in the Loan Agreement, an amount in various currencies equivalent to one hundred seventy four million dollars (\$174,000,000).
- Section 2.02. (a) The amount of the Loan may be withdrawn from the Loan Account in accordance with the provisions of Schedule 1 to this Agreement for expenditures made (or, if the Bank shall so agree, to be made) in respect of the reasonable cost of goods and services required for the Project described in Schedule 2 to this Agreement and to be financed out of the proceeds of the Loan.
- (b) The Borrower shall, for the purposes of the Project, open and thereafter maintain in the Central Bank an account in dollars on terms and conditions satisfactory to the Bank. Disbursements out of this account (hereinafter called CESA) shall be made exclusively to meet expenditures in cruzados incurred in respect of the reasonable cost of goods and services required to carry out the Project and to be financed by the Bank pursuant to paragraph (a) above.
- (c) The Borrower shall, for the purposes of the Project, open and thereafter maintain in a bank, acceptable to the Bank, an account in dollars on terms and conditions satisfactory to the Bank. Disbursements out of this account (hereinafter called FESA) shall be made exclusively to meet expenditures in currencies other than cruzados incurred in respect of the reasonable cost of goods and services required to carry out the Project and to be financed by the Bank pursuant to paragraph (a) above.
- (d) Deposits into, and payments out of, CESA and FESA shall be made in accordance with the provisions of Schedule 5 to this Agreement. The Borrower shall cause the Account Bank to furnish to the Bank each month certified statements of the CESA and FESA
- Section 2.03. The Closing Date shall be December 31, 1994 or such later date as the Bank shall establish. The Bank shall promptly notify the Borrower and the Guarantor of such later date.
- Section 2.04. The Borrower shall pay to the Bank a commitment charge at the rate of three-fourths of one per cent (3/4 of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.
- Section 2.05. (a) The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time at a rate per annum for each Interest Period equal to one-half of one percent per annum above the Cost of Qualified Borrowings for the last Semester ending prior to the commencement of such Interest Period.
- (b) As soon as practicable after the end of each Semester, the Bank shall notify the Guarantor and the Borrower of the Cost of Qualified Borrowings for such Semester.
 - (c) For purposes of this Section:
- (i) "Interest Period" means the six-month period commencing on each date specified in Section 2.06 of this Agreement, including the Interest Period in which this Agreement is signed.
- (ii) "Cost of Qualified Borrowings" means the cost of the outstanding borrowings of the Bank drawn down after June 30, 1982, expressed as a percentage per annum, as reasonably determined by the Bank.

- Section 2.06. Interest and other charges shall be payable semiannually on March 15 and September 15 in each year.
- Section 2.07. The Borrower shall repay the principal amount of the Loan in accordance with the amortization schedule set forth in Schedule 3 to this Agreement.

Section 2.08. The Superintendent of DER-SP, or the person or persons designated by him, are designated as representatives of the Borrower for the purposes of taking any action required or permitted to be taken under the provisions of Section 2.02 of this Agreement and Article V of the General Conditions in respect of all Parts of the Project other than Parts D.1 and D.2 thereof.

ARTICLE III

Execution of the Project

- Section 3.01. (a) The Borrower declares its commitment to the objectives of the Project as set forth in Schedule 2 to this Agreement, and, to this end, shall carry out the Project through DER-SP, except for Parts D.l and D.2 of the Project that shall be carried out through the Borrower's Secretariat of Transport, all with due diligence and efficiency and in conformity with appropriate engineering, administrative, road management and financial practices, and shall provide, promptly as needed, the funds, facilities, services and other resources required for the Project.
- (b) The Borrower shall: (i) furnish to the Bank, promptly upon their completion, the final report and recommendations deriving from each of the studies included in Part D of the Project; (ii) afford the Bank a reasonable opportunity to comment and exchange views thereon and (iii) put into effect those recommendations mutually agreed by the Borrower and the Bank deriving from such studies.
- Section 3.02. Except as the Bank shall otherwise agree, procurement of the goods, works and consultants' services required for the Project and to be financed out of the proceeds of the Loan shall be governed by the provisions of Schedule 4 to this Agreement.
- Section 3.03. (a) When presenting to the Bank a Highway Rehabilitation Sub-project for approval, the Borrower shall furnish to the Bank an application in a form satisfactory to the Bank containing: (i) a description and analysis of the respective Sub-project including: (1) design standards; (2) final cost estimates; (3) average daily traffic by vehicle type; (4) final implementation schedule; and (5) economic evaluation, including an economic rate of return calculation; and (ii) such other information as the Bank shall reasonably request.
- (b) When presenting to the Bank an Engineering Sub-project for approval, the Borrower shall furnish to the Bank an application in a form satisfactory to the Bank, containing: (i) a description ant analysis of the respective Sub-project including: (1) information concerning the rationale for Sub-project identification and alternatives considered; (2) average daily traffic by vehicle type; (3) recommended design standards; (4) preliminary cost estimates; (5) tentative implementation schedule; (6) preliminary economic evaluation; and (ii) such other information as the Bank shall reasonably request.
- (c) Except as the Bank shall otherwise agree, the Borrower shall present to the Bank, for its approval, only Highway Rehabilitation Sub-projects or Engineering Sub-projects which are in accordance with economic priorities consistent with the optimal maintenance strategies to be determined from time to time in accordance with evaluation methodologies satisfactory to the Bank, including the system to be developed under Part D.3 (d) of the Project, but which shall, in no case, have an economic rate of return of less than 127, such rate of return to be calculated in accordance with a method satisfactory to the Bank.
- (d) Except as the Bank shall otherwise agree, the Borrower undertakes not to change the terms or scope of an Approved Highway Rehabilitation Project or an Approved Engineering Project.

Section 3.04. Without limitation to the provisions of paragraph (a) of Section 9.07 of the General Conditions, starting not later than 90 days after the Effective Date, the Borrower shall furnish to the Bank quarterly progress reports on the execution of the Project, containing all such information as the Bank shall reasonably request.

Section 3.05. Without restriction or limitation upon the provisions of paragraph (a) of Section 3.01 of this Agreement, the Borrower shall cause DER-SP to maintain a Project Revolving Account to be used to make payments for the cost of the goods and services required to carry out the Project. The Borrower shall make available to DER-SP in the Project Revolving Account an amount equivalent to eight million dollars (\$8,000,000) and thereafter all such amounts as shall be required, from time to time, to permit the payments heretofore specified to be made, promptly as needed, in accordance with the Project Expenditures Schedules as such schedules may be modified from time to time by agreement between the Borrower and the Bank, out of the Project Revolving Account, and the Project Revolving Account shall be maintained until all such payments shall have been made. The Borrower shall maintain, or cause to be maintained, records adequate to reflect in accordance with consistently maintained sound accounting practices the operations and financial condition of the Project Revolving Account.

Section 3.06. The Borrower shall take, or cause to be taken, all reasonable action required for the prompt issuance of such import and other permits and licenses as shall be necessary for the acquisition and importation of goods and services required for the carrying out of the Project.

Section 3.07. The Borrower shall furnish to the Bank, through DER-SP, the findings and recommendations of Phase I of the Management Study and shall exchange views, and cause DER-SP to exchange views, with the Bank on such findings and recommendations before beginning the carrying out of Phase II of the Management Study under Part D.3 (c) of the Project.

ARTICLE IV

Financial Covenants

Section 4.01. (a) The Borrower shall maintain, through DER-SP and the Borrower's Secretariat of Transport, separate records and accounts adequate to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the Parts of the Project in which DER-SP and such Secretariat are respectively involved.

(b) The Borrower shall:

- (i) have the records and accounts referred to in paragraph (a) of this Section including those for CESA and FESA and the Project Revolving Account for each fiscal year audited, in accordance with appropriate auditing principles consistently applied, by independent auditors acceptable to the Bank;
- (ii) furnish to the Bank as soon as available, but in any case not later than four months after the end of each such year, the report of such audit by said auditors, of such scope and in such detail as the bank shall have reasonably requested; and
- (c) For all expenditures with respect to which withdrawals from the Loan Account were made on the basis of statements of expenditure, the Borrower shall:
- (i) maintain or cause to be maintained, in accordance with paragraph (a) of this Section, records and accounts reflecting such expenditures;
- (ii) retain, until at least one year after the Bank has received the audit report for the fiscal year in which the last withdrawal from the

Loan Account was made, all records (contracts, orders, invoices, bills, receipts and other documents) evidencing such expenditures;

- (iii) enable the Bank's representatives to examine such records; and
- (iv) ensure that such records and accounts are included in the annual audit referred to in paragraph (b) of this Section and that the report of such audit contains a separate opinion by said auditors as to whether the statements of expenditure submitted during such fiscal year, together with the procedures and internal controls involved in their preparation, can be relied upon to support the related withdrawals.
- Section 4.02. The Borrower shall cause DER-SP: (i) to assess the impact of the measures being introduced within the Borrower's territory for controlling vehicle axle-loading and weight, including the establishment of weigh bridge stations, permanent or mobile, and (ii) in light of such assessment to, exchange views with the Bank on or before December 31, 1988, on further action planned for purpose of such control.
- Section 4.03. (a) The Borrower shall: (i) cause the highways included in its highway network to be adequately maintained and all necessary repairs, strengthening and rehabilitation thereof to be made promptly, all in accordance with sound engineering practice; (ii) cause all DER-SP's road maintenance, workshop and research equipment and facilities to be adequately maintained and all necessary repairs and renewals thereof to be made, all in accordance with appropriate technical and engineering practices; and (iii) provide or cause to be provided, the funds, facilities, services and other resources required for the foregoing.
- (b) Without limiting the generality of paragraph (a) above, the Borrower shall cause DER-SP: (i) to assess the various measures being introduced by DER-SP for improving its routine maintenance operations, such as the development of a comprehensive routine maintenance management system for those maintenance operations executed by force account and of a system for contracting with third parties the execution of some of DER-SP's routine maintenance operations; and (ii) to furnish to the Bank, for comments, by December 31, 1988, a report with the findings of the aforesaid assessment and of DER-SP's intended future policies on routine maintenance;
- (c) Without limiting the generality of paragraphs (a) and (b) above, the Borrower shall cause DER-SP: (i) to review, in accordance with policies and economic criteria satisfactory to the Bank and the Borrower, DER-SP's annual highway management expenditure and funding program, including construction, rehabilitation and maintenance works, and (ii) to furnish to the Bank, not later than in August 15 of each year, the results of such reviews, together with the adjustments. If any, to such annual program. The Borrower shall, at all times, provide all resources required for the execution of each of such annual programs and finance them through the rolling three-year budget programming process of the Borrower.

ARTICLE V

Remedies of the Bank

Section 5.01. Pursuant to Section $6.02\ (k)$ of the General Conditions, the following additional events are specified:

- (a) that the Borrower shall have taken any action for the dissolution or disestablishment of DER-SP or of the Training Steering Committee or of the Pavement Management Steering Committee or of the Equipment Management Steering Committee or for the suspension of their respective operations or activities; and
- (b) that the Decree shall have been abrogated or revoked, or modified in a fashion that shall adversely affect the carrying out of the Project.

Section 5.02. Pursuant to Section 7.01 (h) of the General Conditions, the following additional event is specified, namely, that any of the events specified in Section 5.01 of this Agreement shall occur.

ARTICLE VI

Effective Date; Termination

Section 6.01. The following events are specified as additional conditions to the effectiveness of the Loan Agreement within the meaning of Section 12.01 (c) of the General Conditions:

- (a) that the Loan Agreement has been duly registered by the Borrower's Central Bank;
- (b) that all necessary acts, consents and approvals to be performed or given by the Borrower, by any agency thereof, or otherwise to be performed or given in order to authorize the carrying out of the Project and to enable the Guarantor and the Borrower to perform their respective obligations pursuant to the Guarantee Agreement and this Agreement, together with all necessary powers and rights in connection therewith, have been performed or given; and
- (c) evidence satisfactory to the Bank has been provided showing that the account specified in Section 3.05 to this Agreement has been opened and that the equivalent of eight million dollars (\$8,000,000) has been made available to DER-SP in such account.

Section 6.02. The following are specified as additional matters, within the meaning of Section 12.02 (c) of the General Conditions, to be included in the opinion or opinions to be furnished to the Bank:

- (a) that the Loan Agreement has been duly registered by the Central Bank; and
- (b) that all action required to be taken by the Senate of the Guarantor or by the Account Banks for the execution and delivery of the Loan Agreement, or for the ratification thereof, have been taken.

Section 6.03. The date of March 15, 1988 is hereby specified for the purposes of Section 12.04 of the General Conditions.

ARTICLE VII

Representative of the Borrower; Addresses

Section 7.01. Except as provided in Section 2.08 of this Agreement, the Secretary of Finance of the Borrower is designated as representative of the Borrower for the purposes of Section 11.03 of the General Conditions.

Section 7.02. The following addresses are specified for the purposes of Section 11.01 of the General Conditions:

For the Bank:

International Bank for
 Reconstruction and Development
1818 H Street, N.W.
Washington, D.C. 20433
United States of America

Cable address:

Telex:

INTBAFRAD Washington, D.C.

440098 (ITT)

For the Borrower:

Secretary of Finance Av. Rangel Pestana, 300 Sao Paulo - SP - Brazil CEP-01100

Telex:

(11) 22863 (11) 23730

IN WITNESS WHEREOF, the parties hereto, acting through their duly authorized representatives, have caused this Agreement to be signed in their respective names in the District of Columbia, United States of America, as of the day and year first above written.

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

By /s/ S. Shahid Husain

Regional Vice President Latin American and the Caribbean

STATE OF SAO PAULO

By /s/ Orestes Quercia

Authorized Representative

SCHEDULE 1

Withdrawal of the Proceeds of the Loan

1. The table below sets forth the Categories of items to be financed out of the proceeds of the Loan, the allocation of the amounts of the Loan to each Category and the percentage of expenditures for items so to be financed in each Category:

	Categ	ory	Amount of the Loan Allocated (Expressed in Dollar equivalent	Expenditures			
(1)	Works	:					
	(a)	Under Part A.2 of the Project	129,580,000))) 42%			
	(b)	Under Part C.1 of the Project	310,000) 42%			
(2)	Equipment:						
	(a)	Under Part B of the Project	2,100,000	100% of foreign (f) expenditures			
	(b)	Under Part C of the Project	210,000	85%			
	(c)	Under Part D.3 (f) of the Pro	. ,	100% of foreign expenditures and 85% of local expenditures			

(3) Consultants' services:

	(a)	Under Part A.1 of the Project	2,580,000		42%
	(b)	Under Part A.2 of the Project	3,950,000		42%
	(c)	Under Part C the Project	542,000)	100% of foreign of expenditures and
	(d)	Under Part D of the Project	3,200,000)))	85% of local expenditures
4)	Training courses under Parts C.2 and C.3 of the protect		3,100,000		85%
(5)	Fellowships in Brazil and abroad and foreign specialists under Part C.4 of the Project		358,000		100% of foreign expenditures and 85% of local expenditures
(6)	Unall	ocated	28,000,000		
		TOTAL	174,000,000		

2. For the purposes of this Schedule:

- (a) the term "foreign expenditures" means expenditures in the currency of any country other than that of the Guarantor for goods or services supplied from the territory of any country other than that of the Guarantor; and
- (b) the term "local expenditures" means expenditures in the currency of the Guarantor or for goods or services supplied from the territory of the Guarantor; and
- 3. Notwithstanding the provisions of paragraph 1 above, no withdrawals shall be made in respect of: (a) payments made for expenditures prior to the date of this Agreement, except that withdrawals, in an aggregate amount not exceeding the equivalent of \$15,000,000, may be made in respect of Categories (1), (2) and (3) on account of payments made for expenditures before that date but after November 1, 1986.

SCHEDULE 2

Description of the Project

The objectives of the protect are to improve significantly the condition of the Borrower's road infrastructure over a four-year period and to improve its highway administration system, thereby ensuring that the Borrower's dominant transport mode, the road system, will function with increased efficiency in terms of transport costs and time savings.

The Project consists of the following parts, subject to such modifications thereof as the Bank and the Borrower may agree upon from time to time to achieve such objectives:

Part A: Highway Rehabilitation

- 1. Execution of Approved Engineering Sub-projects for the maintenance and rehabilitation of the Borrower's highway system.
- 2. Execution of Approved Rehabilitation Sub-projects in the Borrower's highway

system which have a high priority for the economic and social development of the Borrower and, consequently, of the Guarantor.

Part B: Equipment Rehabilitation

Execution of a program of rehabilitation of Imported units of equipment partly to be contracted by DER-SP with privately owned workshops and which shall include the acquisition of imported spare parts and the utilization thereof for purposes of the program.

Part C: Training

- 1. Provision for and utilization of training facilities by DER-SP, including building improvements in DER-SP's principal training center in Campinas and in two regional training centers to be established, furnishings, equipment, such as audio-visual, other training aids, books and manuals.
- 2. Execution of a highway maintenance and rehabilitation training program for about 3,290 members of DER-SP staff, including about 390 professionals, 1800 sub-professionals, 900 mechanics and 1,200 equipment operators.
- 3. Extension of the training program included in 2 above to about 600 sub-professionals, 800 mechanics and 600 equipment operators employed in highway maintenance operations by about 200 municipalities within the Borrower's territory. This program shall be undertaken only after a thorough pilot exercise of analyzing the staff structure and training needs of a sample universe of about 50 municipalities is carried out and shall be based on the results of such exercise.
- 4. Specific courses by selected foreign experts and about 60 man-months of fellowships, mostly abroad, all for DER-SP staff.
- 5. Provision and utilization of technical assistance for all of the above.

Part D: Studies and other technical assistance services

- 1. State transport policy studies, comprising: (a) development and implementation of an analytical framework to assist the Borrower's Secretariat of Transport in fixing adequate levels for the road pricing elements under the Borrower's jurisdiction, in the context of an equitable road cost recovery system; and (b) assessment of the Borrower's role in the regulation of public inter-municipal passenger transport through a review of the effectiveness and efficiency of the existing regulatory system, and elaboration of recommendations of the adjustments thereto required to ensure adequate levels of service at competitive rates.
- 2. Transport planning and operations studies, and other activities, comprising: (a) the preparation and putting into effect of a transport information system for the Borrower, including a methodology for its continuous updating, that will constitute the basis for the formulation, analysis and monitoring of transport program and policies in the short and medium term; (b) the refinement of the 1978 comprehensive transport planning model for the Borrower and the recalibration of its parameters, both with reference to a new data base; (c) a training program for relevant professional staff of the Borrower's Secretariat of Transport and modal agencies in systemic transport planning analysis, policy formulation and economic evaluation techniques; and (d) preparation of the institutional measures required for improving the coordination between the Borrower's Secretariat of Transport and other public and private sector institutions involved in the management of road transport.
- 3. Highway management studies, and other activities, comprising: (a) Assessment of highway subsectoral issues at federal, state and municipal levels taking into account recent decentralization trends and restructuring of highway funding with recommendation for achieving greater cooperation on administrative, financial and technical levels among the agencies responsible for road infrastructure; (b) identification and analysis of the impact of feeder road development on the economy and social structure of the communities, primarily in the Northeastern municipalities of the Borrower; (c) phase II of the Management Study; (d) development of a system that will facilitate the preparation by DER-SP of pluri-annual investment programs for highway rehabilitation, periodic

maintenance and paving of earth or gravel roads, or both, based upon up-to-date road condition surveys and appropriately evaluated economic priorities for project selection; (e) reviewing DER-SP's present equipment administration practices with a view to identifying areas which require immediate strengthening and recommending changes thereto so as to enable DER-SP to develop and put into effect an equipment management system that would provide criteria for equipment repair and replacement, use of privately owned workshops, warehouse administration, spare parts acquisition, and determining the costs associated with each equipment unit; and (f) establishment of a Road Research Unit within DER-SP's Directorate of Engineering, charged with the responsibility of expanding gradually DER-SP's research activities and carrying out independent research with the assistance of universities, research institutions, consultants and experts, and acquisition and utilization of research-related equipment.

* * *

The Project is expected to be completed by June 30, 1994.

SCHEDULE 3

Amortization Schedule

Date Payment Due

Payment of Principal (expressed in dollars)*

On each March 15 and September 15

beginning September 15, 1990 through March 15, 2002

\$7,250,000

Premiums on Prepayment

The following premiums are specified for the purposes of Section $3.04\ (b)$ of the General Conditions:

Time of Prepayment

Premium

The interest rate (expressed as a percentage per annum) applicable to the balance outstanding on the Loan on the day of prepayment multiplied by:

^{*} The figures in this column represent dollar equivalents determined as of the respective dates of withdrawal. See General Conditions, Sections 3.04 and 4.03.

before maturity

More than three years but not more than six years before maturity	0.40
More than six years but not more than eleven years before maturity	0.73
More than eleven years but not more than thirteen years before maturity	0.87
More than thirteen years before maturity	1.00

SCHEDULE 4

Procurement and Consultants' Services

Section I. Procurement of Goods and Works

Part A: International Competitive Bidding

- 1. Except as provided in Part B hereof, goods and works shall be procured under contracts awarded in accordance with procedures consistent with those set forth in Sections I and II of the "Guidelines for Procurement under IBRD Loans and IDA Credits" published by the Bank in May 1985 (the Guidelines).
- 2. To the extent practicable, contracts for civil works under Part A of the Project shall be grouped in bid packages estimated to cost the equivalent of more than \$10,000,000 each.

Part B: Other Procurement Procedures

- 1. Civil works estimated to cost not more than the equivalent of \$10,000,000 may be procured under contracts awarded on the basis of competitive bidding advertised locally, in accordance with procedures satisfactory to the Bank, provided, however, that the contracts so awarded shall not exceed, in the aggregate, the equivalent of \$225,000,000.
- 2. Goods for Parts B, C and D.3 (f) of the Project may be procured under contracts awarded on the basis of comparison of price quotations solicited from a list of at least three suppliers eligible under the Guidelines, in accordance with procedures acceptable to the Bank, provided, however, that in respect of goods for Parts C and D.3 (f) of the Project, and to the extent the contracts thereof do not exceed the equivalent of \$50,000 each, or \$360,000 in the aggregate, said suppliers may be located in the Guarantor's territories.

Part C: Review by the Bank of Procurement Decisions

- 1. Review of invitations to bid and of proposed awards ant final contracts:
- (a) With respect to each contract for civil works and goods estimated to cost the equivalent of \$3,500,000 or more, and \$100,000 or more, respectively, the procedures set forth in paragraphs 2 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of the CESA or FESA, such procedures shall be modified to ensure that the two conformed copies of the contract required to be furnished to the Bank pursuant to said paragraph 2 (d) shall be furnished to the Bank prior to the making of the first payment out of CESA or FESA in respect of such contract.
- (b) With respect to each contract not governed by the preceding paragraph, the procedures set forth in paragraphs 3 and 4 of Appendix 1 to the Guidelines shall apply. Where payments for such contract are to be made out of CESA or FESA, such procedures shall be modified to ensure that the two conformed copies of the contract

together with the other information required to be furnished to the Bank pursuant to said paragraph 3 shall be furnished to the Bank as part of the evidence to be furnished pursuant to paragraph 4 of Schedule 5 to this Agreement.

- (c) The provisions of the preceding subparagraphs (a) and (b) shall not apply to contracts on account of which the Bank has authorized withdrawals from the Loan Account on the basis of statements of expenditure. Such contracts shall be retained in accordance with Section 4.01 (c) (ii) of this Agreement.
- 2. The figure of 15% is hereby specified for purposes of paragraph 4 of Appendix 1 to the Guidelines.

Section II. Employment of Consultants

In order to assist the Borrower in the carrying out of supervision of civil works under Parts A.2 and C of the Project, detailed engineering under Part A.1 of the Project to the extent said detailed engineering is not executed by DER-SP personnel, and Parts C and D of the Project, the Borrower shall employ consultants, and experts in the case of Part C.4 of the Project, whose qualifications, experience and terms and conditions of employment shall be satisfactory to the Bank. Such consultants shall be selected in accordance with principles and procedures satisfactory to the Bank on the basis of the "Guidelines for the Use of Consultants by World Bank Borrowers and by the World Bank as Executing Agency" published by the Bank in August 1981.

SCHEDULE 5

Special Accounts

- 1. For the purposes of this Schedule:
- (a) the term "eligible Categories" means all Categories, other than Category 6, set forth in the table in paragraph 1 of Schedule 1 to this Agreement;
- (b) the term "eligible expenditures" means expenditures in respect of the reasonable cost of goods and services required for the Project and to be financed out of the proceeds of the Loan allocated from time to time to the eligible Categories in accordance with the provisions of Schedule 1 to this Agreement; and
- (c) the term "Authorized Allocation" means an amount equivalent to \$11,000,000 and to \$1,000,000, to be withdrawn from the Loan Account and deposited in the CESA and FESA, respectively, pursuant to paragraph 3 (a) of this Schedule.
- 2. Except as the Bank shall otherwise agree, payments out of CESA or FESA, as the case may be, shall be made exclusively for eligible expenditures in accordance with the provisions of this Schedule. The Account Bank shall authorize withdrawals from the CESA or FESA, or as the case may be, on the basis of the evidence that the Bank shall have reasonably determined and provided that: (i) in the case of CESA, payment of the corresponding eligible expenditures has been made out of the Project Revolving Account; or (ii) funds for such payment are readily available in the Project Revolving Account. For each such withdrawal so authorized, the Account Bank shall debit or cause to be debited CESA or FESA, as the case may be, with the dollar equivalent of the amount of the eligible expenditures in question in cruzados, in the case of CESA, or with the actual dollar amount or the dollar equivalent of the eligible expenditures in currencies other than dollars or cruzados, in the case of FESA. The aforesaid equivalencies shall be determined on the basis of the rate of exchange between the dollar and the cruzado or such other currency in effect at the time each payment for eligible expenditures shall have been made.
- 3. After the Bank has received evidence satisfactory to it that CESA or FESA, as the case may be, has been duly opened, withdrawals of the corresponding Authorized Allocation and subsequent withdrawals to replenish CESA or FESA, as the case may be, may be made as follows:
- (a) On the basis of a request or requests by the Borrower for a deposit or deposits which add up to the aggregate amount of the corresponding Authorized Allocation, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit in CESA or FESA, as the case may be, such amount or amounts as the

Borrower shall have requested.

- (b) The Borrower shall furnish to the Bank requests for replenishment of CESA and FESA, as the case may be, at such intervals as the Bank shall specify. On the basis of such requests, the Bank shall withdraw from the Loan Account and deposit into CESA or FESA, as the case may be, such amounts as shall be required to replenish CESA or FESA, as the case may be, with amounts not exceeding the amount of payments made out of CESA or FESA, as the case may be, for eligible expenditures. All such deposits shall be withdrawn by the Bank from the Loan Account under the respective eligible Categories, and in the respective equivalent amounts, as shall have been justified by the evidence supporting the request for such deposit furnished pursuant to paragraph 4 of this Schedule.
- 4. For each payment made by the Borrower out of CESA or FESA, as the case may be, for which the Borrower requests replenishment pursuant to paragraph 3 (b) of this Schedule, the Borrower shall furnish to the Bank, prior to or at the time of such request, such documents and other evidence as the Bank shall reasonably request, showing that such payment was made for eligible expenditures.
- 5. (a) Notwithstanding the provisions of paragraph 3 of this Schedule, the Bank may deny any request for a further deposit into CESA or FESA when either of the following situations arises:
- (i) the Bank shall have determined that all further withdrawals should be made by the Borrower directly from the Loan Account in accordance with the provisions of Article V of the General Conditions and paragraph (a) of Section 2.02 of this Agreement; or
- (ii) the total unwithdrawn amount of the Loan allocated to the eligible Categories, minus the amount of any outstanding special commitment entered into by the Bank pursuant to Section 5.02 of the General Conditions with respect to the Project, shall be equal to the equivalent of twice the amount of the corresponding Authorized Allocation.
- (b) Thereafter, withdrawal from the Loan Account of the remaining unwithdrawn amount of the Loan allocated to the eligible Categories shall follow such procedures as the Bank shall specify by notice to the Borrower. Such further withdrawals shall be made only after and to the extent that the Bank shall have been satisfied that all such amounts remaining on deposit in CESA or FESA, as the case may be, as of the date of such notice, will be utilized in making payments for eligible expenditures.
- 6. (a) If the Bank shall have determined at any time that any payment out of CESA or FESA: (i) was made for any expenditure or in any amount not eligible pursuant to paragraph 2 of this Schedule, or (ii) was not justified by the evidence furnished pursuant to paragraph 4 of this Schedule, the Borrower shall, promptly upon notice from the Bank, deposit into CESA or FESA, as the case may be, (or, if the Bank shall so request, refund to the Bank) an amount equal to the amount of such payment or the portion thereof not so eligible or justified. No further deposit by the Bank into CESA or FESA shall be made until the Borrower shall have made such deposit or refund.
- (b) If the Bank shall have determined at any time that any amount outstanding in CESA or FESA will not be required to cover further payments for eligible expenditures, the Borrower shall, promptly upon notice from the Bank, refund to the Bank such outstanding amount for crediting to the Loan Account.