

CONFORMED COPY

LOAN NUMBER 4291-BR

Loan Agreement

(Rio de Janeiro Mass Transit Project - PET)

between

INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

and

STATE OF RIO DE JANEIRO

Dated June 1, 1999

LOAN NUMBER 4291-BR

LOAN AGREEMENT

AGREEMENT, dated June 1, 1999, between INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT (the Bank) and STATE OF RIO DE JANEIRO (the Borrower).

WHEREAS (A) the Federative Republic of Brazil (the Guarantor) and the Borrower, 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 certain obligations of the Borrower in respect of the Loan 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 for Single Currency Loans" of the Bank, dated May 30, 1995, with the modification set forth below (the General Conditions) constitute an integral part of this Agreement:

Section 6.03 is modified to read:

"Section 6.03. Cancellation by the Bank. If (a) the right of the Borrower to make withdrawals from the Loan Account shall have been suspended with respect to any amount of the Loan for a continuous period of thirty days, or (b) at any time, the Bank determines, after consultation with the Borrower, that an amount of the Loan will not be required to finance the Project's costs to be financed out of the proceeds of the Loan, or (c) at any time, the Bank determines, with respect to any contract to be financed out of the proceeds of the Loan, that corrupt or fraudulent practices were engaged in by representatives of the Borrower or of a beneficiary of the Loan during the procurement or the execution of such contract, without the Borrower having taken timely and appropriate action satisfactory to the Bank to remedy the situation, and establishes the amount of expenditures in respect of such contract which would otherwise have been eligible for financing out of the proceeds of the Loan, or (d) at any time, the Bank determines that the procurement of any contract to be financed out of the proceeds of the Loan is inconsistent with the procedures set forth or referred to in the Loan Agreement and establishes the amount of expenditures in respect of such contract which would otherwise have been eligible for financing out of the proceeds of the Loan, or (e) after the Closing Date, an amount of the Loan shall remain unwithdrawn from the Loan Account, or (f) the Bank shall have received notice from the Guarantor pursuant to Section 6.07 with respect to an amount of the Loan, the Bank may, by notice to the Borrower and the Guarantor, terminate the right of the Borrower to make withdrawals with respect to such amount. Upon the giving of such notice, such amount of the Loan shall be cancelled."

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

(a) "AMTU-RJ" means Agência Metropolitana de Transporte Urbano do Estado do Rio de Janeiro, the urban transport agency for RJMR (as hereinafter defined), established pursuant to an agreement dated December 19, 1997, sponsored by the Borrower and entered or expected to be entered into among the same and the municipalities which are part of the RJMR (as hereinafter defined);

(b) "ASEP-RJ" means Agência Reguladora de Serviços Públicos Concedidos do Estado do Rio de Janeiro, the Borrower's regulatory agency of the public services under concession, created pursuant to the Borrower's Law No. 2,686 of February 13, 1997;

(c) "Concession Contract" means the contract entered into between the Borrower and the Concessionaire (as hereinafter defined), dated September 17, 1998, governing the concession awarded to such Concessionaire to operate, manage and maintain the FLUMITRENS' System (as hereinafter defined);

(d) "Concessionaire" means the corporation to which the Borrower has awarded the concession to operate, manage and maintain the FLUMITRENS' System pursuant to the terms of the Concession Contract;

(e) "Environmental and Safety Audit Report" means the report dated July 31, 1997, containing the results and related recommendations regarding the environmental and safety audit of the operations of FLUMITRENS' System;

(f) "FLUMITRENS" means Companhia Fluminense de Trens Urbanos, the Borrower's urban train company;

(g) "FLUMITRENS' System" means the railway network comprising: (i) five main broad gauge electrified corridors (Deodoro, Japeri, Santa Cruz, Leopoldina and Belford Roxo); and (ii) three corridors non-electrified, in metric gauge (Vila Inhomirim, Guapimirim and Niterói-Visconde de Itaboraí);

(h) "Guidelines" means the Guidelines for Procurement under IBRD Loans and IDA Credits published by the Bank in January 1995 and revised in January and August 1996;

(i) "PMIG" means Project Management and Implementation Group, the unit established pursuant to a decision of the President of FLUMITRENS dated March 4, 1997;

(j) "Project Monitoring Letter" means the letter dated March 24, 1999 delivered by the Borrower's Secretary of Planning to the Bank, setting forth the indicators and targets to be used in monitoring the progress of the implementation of the Project and in the evaluation of its results;

(k) "RJMR" means Rio de Janeiro Metropolitan Region, an area comprising the following municipalities of the Borrower: (i) Rio de Janeiro; (ii) Belford Roxo; (iii) Duque de Caxias; (iv) Guapimirim; (v) Itaboraí; (vi) Itaguaí; (vii) Japeri; (viii) Mangaratiba; (ix) Maricá; (x) Magé; (xi) Nilópolis; (xii) Niterói; (xiii) Nova Iguaçu; (xiv) Paracambi; (xv) Queimados; (xvi) São Gonçalo; (xvii) São João de Meriti; (xviii) Seropédica; and (xix) Tanguá;

(l) "SECTRAN" means Secretaria de Estado de Transportes do Rio de Janeiro, the Borrower's Secretariat of Transportation;

(m) "Special Account" means the account referred to in Section 2.02 (b) of this Agreement; and

(n) "Subsidiary Agreement" means the agreement referred to in Section 3.01 (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 equal to one hundred and eighty six million Dollars (\$186,000,000).

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 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 may, for the purposes of the Project, open and maintain in dollars a special deposit account in a commercial bank on terms and conditions satisfactory to the Bank, including appropriate protection against set-off, seizure or attachment. Deposits into and payments out of, the Special Account shall be made in accordance with the provisions of Schedule 5 to this Agreement.

Section 2.03. The Closing Date shall be June 30, 2002 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 percent (3/4 of 1%) per annum on the principal amount of the Loan not withdrawn from time to time.

Section 2.05. The Borrower shall pay interest on the principal amount of the Loan withdrawn and outstanding from time to time in accordance with the provisions of Schedule 3 to this Agreement.

Section 2.06. Interest and other charges shall be payable in arrears semiannually on April 15 and October 15 in each year.

Section 2.07. The Borrower shall repay the principal amount of the Loan in accordance with the provisions of Schedule 3 to this Agreement.

Section 2.08. The President of FLUMITRENS and the person or persons designated in writing by such President, 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 (a) of this Agreement and Article V of the General Conditions.

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, with

due diligence and efficiency and in conformity with appropriate administrative, financial, environmental, engineering, transportation and management practices, cause the Project to be carried out by FLUMITRENS.

(b) The Borrower shall provide, or cause to be provided, promptly as needed, the funds, facilities, services and other resources required for the Project.

(c) For the purposes of regulating their respective responsibilities under the Project, the Borrower and FLUMITRENS shall enter into an agreement satisfactory to the Bank (the Subsidiary Agreement).

(d) The Borrower shall exercise its rights and comply with its obligations under the Concession Contract in such a manner as to protect the interests of the Borrower and the Bank and to accomplish the purposes of the Loan, and except as the Bank otherwise agree, the Borrower shall not assign, amend, abrogate, waive or fail to enforce such Contract, or any provision thereof.

Section 3.02. Except as the Bank shall otherwise agree, procurement of the 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. The Borrower shall cause FLUMITRENS to:

(a) maintain, until the completion of the Project, a unit (the PMIG) with responsibilities, structure and functions satisfactory to the Bank and with staff in adequate numbers and with adequate qualifications, for the purposes of assisting FLUMITRENS in the carrying out of its responsibilities under the Project, such assistance to include, inter alia, the following Project-related responsibilities: (i) procurement and disbursements; and (ii) monitoring, evaluation and reporting; the PMIG to be headed at all times by a Project coordinator with qualifications, experience, functions and responsibilities satisfactory to the Bank, who shall report directly to the President of FLUMITRENS;

(b) not later than 120 days after the Effective Date, put into effect a monitoring and information system for the Project, satisfactory to the Bank, which shall include information on the indicators set forth in part A of the annex to the Project Monitoring Letter;

(c) not later than 120 days after the Effective Date, establish and thereafter maintain, until the completion of the Project, with responsibilities, structure and functions satisfactory to the Bank and with staff in adequate numbers and with adequate qualifications, a division in charge of managing the non-concessed assets of FLUMITRENS; and

(d) without limitation upon the provisions of Sections 9.01 (a) and 9.07 of the General Conditions: (i) in the months of May and November of each year during Project implementation, furnish to the Borrower and the Bank reports on the progress in the implementation of the Project during the previous six months, which shall take into consideration the indicators and targets set forth in the annex to the Project Monitoring Letter, and to be of such scope and in such detail as the Bank shall reasonably request; and (ii) in the months of June and December of each year during Project implementation, hold reviews with the Borrower and the Bank on the progress of the Project and the attainment of its objectives (the review to take place in December of the year 2000 to be the mid-term review), such reviews to be based on the reports referred to in subparagraph (i) above and, thereafter, take or cause to be taken all such action which shall have been agreed upon by FLUMITRENS, the Borrower and the Bank during such reviews, as necessary for the efficient execution of the Project or the achievement of its objectives, such action to be taken in the manner and within the timetable agreed upon during such reviews.

Section 3.04. The Borrower shall:

(a) participate in the reviews referred to in Section 3.03 (d) (ii) of this Agreement;

(b) Cause FLUMITRENS or the Concessionaire to carry out the recommendations of the Environmental and Safety Audit Report;

(c) without limitations upon the provisions of Section 3.01 (d) of this Agreement, and if the Concession Contract shall have been assigned, amended, abrogated, waived or failed to be enforced, make available to FLUMITRENS, funds in

amounts sufficient to cover the difference between FLUMITRENS' working costs and operating revenues;

(d) (i) not later than December 31, 2000, furnish to the Bank, for comments, the review referred to in Part A.4 of the Project, and thereafter, take into account the Bank's comments thereon, during the implementation of the Borrower's environmental program; and (ii) not later than December 31, 2000, furnish to the Bank for comments, the study referred to in Part A.5 of the Project, and, promptly thereafter, implement the system which will be proposed by such study in a manner satisfactory to the Bank;

(e) not later than 12 months after the date of this Agreement, furnish to the Bank for comments a financial, institutional and technical plan, satisfactory to the Bank, for the integration of the RJMR bus system with the operations of FLUMITRENS' System, and carry out such plan in respect of the inter-municipal bus system, in accordance with its timetable, in a manner satisfactory to the Bank;

(f) (i) maintain, until the completion of the Project, the AMTU-RJ with responsibilities, structure and functions satisfactory to the Bank, and with staff in adequate numbers and with adequate qualifications; and (ii) furnish to the Bank, for information, the minutes of each of the meetings of the AMTU-RJ, promptly after the occurrence of each such meeting;

(g) maintain, until the completion of the Project, the ASEP-RJ with responsibilities, structure and functions satisfactory to the Bank, and with staff in adequate numbers and with adequate qualifications;

(h) ensure sufficient funds to cover severance payments to FLUMITRENS' employees and those transferred to the Concessionaire who may be dismissed within the period stipulated in the Concession Contract; and

(i) not later than March 31, 2000, furnish to the Bank a study, to be prepared under terms of reference satisfactory to the Bank, to define the institutional role of FLUMITRENS in relation to SECTRAN, AMTU-RJ and ASEP-RJ, and, promptly thereafter, implement the recommendations of such study after taking into account the Bank's comments thereon.

Section 3.05. The Borrower shall comply, or cause to be complied, during Project implementation, with the targets in respect of: (a) Availability of Rolling Stock (train fleet in operation divided by total train fleet); (b) Train Headway (average interval between train at peak hours in minutes); and (c) Operating Subsidy to the FLUMITRENS' System (operating revenues less operating costs without depreciation); as such targets are set forth in part B of the annex to the Project Monitoring Letter.

Section 3.06. For the purposes of Section 9.08 of the General Conditions and without limitation thereto, the Borrower shall:

(a) prepare or cause to be prepared, on the basis of guidelines acceptable to the Bank, and furnish to the Bank not later than six (6) months after the Closing Date or such later date as may be agreed for this purpose between the Borrower and the Bank, a plan for the future operation of the Project; and

(b) afford the Bank a reasonable opportunity to exchange views with the Borrower on said plan.

ARTICLE IV

Financial Covenants

Section 4.01. (a) The Borrower shall maintain or cause to be maintained records and separate accounts to reflect in accordance with sound accounting practices the operations, resources and expenditures in respect of the Project of the departments or agencies of the Borrower responsible for carrying out the Project or any part thereof.

(b) The Borrower shall:

(i) have the records and accounts referred to in paragraph (a) of this Section including those for the Special Accounts 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 six 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

(iii) furnish to the Bank such other information concerning said records and accounts and the audit thereof as the Bank shall from time to time reasonably request.

(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.

ARTICLE V

Remedies of the Bank

Section 5.01. Pursuant to Section 6.02 (1) of the General Conditions, the following additional events are specified:

(a) FLUMITRENS shall have failed to perform any of its obligations under the Subsidiary Agreement.

(b) The Borrower or any other authority having jurisdiction shall have taken any action for the dissolution or disestablishment of FLUMITRENS or for the suspension of its operations before the completion of the Project and no other arrangements, satisfactory to the Bank, shall have been made by the Borrower to ensure the timely completion of the Project and the attainment of its objectives.

Section 5.02. Pursuant to Section 7.01 (h) of the General Conditions, the following additional events are specified:

(a) The event specified in paragraph (b) of Section 5.01 of this Agreement shall occur.

(b) The event specified in paragraph (a) of Section 5.01 of this Agreement shall occur and shall continue for a period of sixty days after notice thereof shall have been given by the Bank to the Borrower.

ARTICLE VI

Effective Date; Termination

Section 6.01. The following event is specified as an additional condition to the effectiveness of the Loan Agreement within the meaning of Section 12.01 (c) of the General Conditions, namely that the Subsidiary Agreement has become effective.

Section 6.02. The following is specified as an additional matter, 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, namely, that the Loan Agreement has been duly registered by the Guarantor's Central Bank.

Section 6.03. The date September 1, 1999 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 Planning 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.

248423 (MCI) or
64145 (MCI)

For the Borrower:

Secretaria de Estado de Planejamento
Rua Pinheiro Machado s/ número Predio
Anexo - Sexto Andar
Rio de Janeiro - RJ 22238-010 Brazil

With copy to:

SEAIN - Secretaria de Assuntos Internacionais
Ministério do Orçamento e Gestão
Esplanada dos Ministérios, Bloco K - 5o. andar
70040-906, Brasília -D.F.
Brazil

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 City of Rio de Janeiro, Brazil as of the day and year first above written.

STATE OF RIO DE JANEIRO

By /s/ Anthony William Garotinho

Authorized Representative

INTERNATIONAL BANK FOR
RECONSTRUCTION AND DEVELOPMENT

By /s/ Gobind T. Nankani

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:

Category	Amount of the Loan Allocated (Expressed in Dollars)	% of Expenditures to be Financed
(1) Works		
(a) Civil works	15,790,000	54%
(b) Works for construction of permanent way	4,070,000	64%
(c) Works for installation of systems	19,790,000	50%
(d) Works for rehabilitation of rolling stock	140,040,000	70%
(2) Consultants' services and training	6,310,000	50%
TOTAL	186,000,000	

2. Notwithstanding the provisions of paragraph 1 above:

(a) no withdrawals shall be made in respect of payments made for expenditures prior to the date of this Agreement, except that withdrawals, in an aggregate amount not exceeding the amount of \$18,600,000, may be made on account of payments made for expenditures incurred within the twelve months prior to the dated of this Agreement.

(b) no withdrawals shall be made in respect of: (i) payments already made or planned to be made for expenditures financed under the Bank loan for the Rio de Janeiro State Reform-Privatization Project; or (ii) any other payments already made or planned to be made for expenditures financed or guaranteed by the Guarantor or any of the Guarantor's financial agencies.

3. The Bank may require withdrawals from the Loan Account to be made on the basis of statements of expenditures for expenditures under contracts for: (i) works costing less than \$5,000,000 equivalent; (ii) services of consulting firms costing less than \$100,000 equivalent; and (iii) services of individual consultants costing less than \$50,000 equivalent; all under such terms and conditions as the Bank shall specify by notice to the Borrower.

SCHEDULE 2

Description of the Project

The objectives of the Project are to improve: (a) the quality of urban transport services in the RJMR by supporting the development of an integrated urban transport system; and (b) the level of service provided by FLUMITRENS' System while reducing the operating subsidies it receives from the Borrower, through substantial reduction of the Borrower's participation in the operations and management of the FLUMITRENS' System.

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

Part A: Institutional and Policy Reforms

Provision of technical assistance in the implementation of the institutional and policy reforms undertaken in connection with the RJMR's transportation sector, including activities related to concession and management of such public services, as follows:

1. In respect of FLUMITRENS: (a) provision of assistance in the preparation of the bidding documents, including concession contracts, to be used in the concession process, such documentation to cover the following areas: (i) institutional and

organizational arrangements; (ii) preparation of an investment plan; (iii) evaluation and determination of operating subsidies; (iv) valuation and identification of the assets to be included in the concession; (v) human resource-related issues such as transfer of personnel and pension benefits; and (vi) legal and administrative aspects of the concession; and (b) provision of assistance, until the Concession Contract enters into effect, to further rationalize and streamline FLUMITRENS' operations and maintenance, in the following areas: (i) rolling stock maintenance and railways operations management; (ii) management accounting; (iii) installation of payroll software; and (iv) installation of a human resources data-base; (c) carrying out of technical engineering studies in railway signaling and telecommunications; and (d) provision of consultants' services to support the supervision of the investments described in Part B of the Project.

2. Carrying out of studies to support the adoption of a modal integration policy framework for the AMTU-RJ, such studies to consist of: (a) updating of the transport, land use and air quality sections of the master plans of the RJMR with emphasis on route rationalization and modal and tariff integration; (b) inter-municipal route management and rationalization; and (c) preparation of feasibility and bidding documents for the Niterói-São Gonçalo mass transportation system.

3. Training of FLUMITRENS' staff in the management of the investments described in Part B of the Project and of assets not included in the concession and in the monitoring of the Concessionaire on behalf of ASEP-RJ.

4. Review of the Borrower's environmental program related to urban traffic issues, consisting of an inspection and maintenance strategy for vehicle emissions and noise.

5. Design of a more reliable system to collect traffic violation fines with emphasis on ways of enforcing them as a deterrent to traffic accidents.

Part B: Infrastructure and Equipment

Improvement of the infrastructure and equipment of FLUMITRENS' System through:

1. (a) rehabilitation and modernization of twelve passenger stations; (b) construction of one passenger station; (c) construction of five pedestrian over/underpasses; and (d) installation of nine Kilometers of fences in areas adjacent to passenger stations to reduce tariff evasion.

2. (a) replacement of 50,000 sleepers; and (b) conversion of one track of the Gramacho-Saracuruna segment into broad gauge.

3. (a) installation and repair of transmission lines in the Leopoldina corridor; (b) rehabilitation or construction of electric substations; (c) installation of a central traffic control in D. Pedro II and Deodoro yards and Sta. Cruz and Japeri corridors; (d) installation of an automatic train control system in the Deodoro, Sta. Cruz and Japeri corridors; (e) installation of automatic fare collection; (f) installation of fiber optic cable links in the Japeri corridor, provision of a central telephonic exchange station and an integrated telecommunication system in the operations control center.

4. Rehabilitation of about 139 electrical multiple units.

* * *

The Project is expected to be completed by December 31, 2001.

SCHEDULE 3

Interest and Principal Repayment Provisions

A. General Definitions

For purposes of this Schedule, the following terms have the following meanings:

(a) "Disbursed Amount" means, in respect of each Interest Period, the aggregate principal amount of the Loan withdrawn from the Loan Account in such Interest Period.

(b) "Interest Period" means the initial period from and including the date of this Agreement to, but excluding, the first Interest Payment Date occurring thereafter, and after the initial period, each period from and including an Interest

Payment date to, but excluding, the next following Interest Payment Date.

(c) "Interest Payment Date" means any date specified in Section 2.06 of this Agreement.

(d) "Rate Fixing Date" means, for each Disbursed Amount, the first day of the Interest Period next following the Interest Period in which such Disbursed Amount is withdrawn.

B. Interest

1. The principal amount of the Loan shall be divided into Disbursed Amounts. Interest shall accrue on each Disbursed Amount outstanding from time to time at a rate based on a floating rate index prior to its Rate Fixing Date and at a fixed rate from its Rate Fixing Date, as described in paragraph 2 of this Part B.

2. (a) From the date of withdrawal of each amount of each Disbursed Amount withdrawn and outstanding, to but not including the Rate Fixing Date for such Disbursed Amount, interest on each such amount shall accrue, at a rate equal to the applicable:

- (i) LIBOR Base Rate; plus
- (ii) LIBOR Total Spread.

(b) From the Rate Fixing Date for each Disbursed Amount until final repayment thereof, interest on such Disbursed Amount shall accrue, at a rate equal to the applicable:

- (i) Fixed Base Rate; plus
- (ii) Fixed Total Spread.

3. For purposes of paragraph 2 of this Part B, the following terms have the following meanings:

(a) "LIBOR Base Rate" means, for the Interest Period in which a Disbursed Amount is withdrawn, the London interbank offered rate for six-month deposits in Dollars for value the first day of such Interest Period (or, in the case of the initial Interest Period, for value the day occurring on the Interest Payment Date preceding the first day of such Interest Period), as reasonably determined by the Bank and expressed as a percentage per annum.

(b) "LIBOR Total Spread" means, for the Interest Period in which each Disbursed Amount is withdrawn:

- (i) one half of one percent (1/2 of 1%);
- (ii) minus (or plus) the weighted average margin, for such Interest Period, below (or above) the London interbank offered rates, or other reference rates, for six-month deposits, in respect of the Bank's outstanding borrowings or portions thereof allocated by the Bank to fund single currency loans or portions thereof made by it that include such Disbursed Amount for such Interest Period;

as reasonably determined by the Bank and expressed as a percentage per annum.

(c) "Fixed Base Rate" means, for each Disbursed Amount, the equivalent of the London interbank offered rate for six-month deposits in Dollars for value on the Rate Fixing Date for such Disbursed Amount, expressed as a single fixed interest rate based on the fixed interest rates corresponding to the repayment installments of such Disbursed Amount, as reasonably determined by the Bank and expressed as a percentage per annum.

(d) "Fixed Total Spread" means, for each Disbursed Amount:

- (i) one-half of one percent (1/2 of 1%);
- (ii) minus (or plus) the cost margin, applicable on the Rate Fixing Date for such Disbursed Amount, below (or above) the London interbank offered rates, or other reference rates, for six-month deposits, in respect of the Bank's outstanding borrowings or

portions thereof allocated to fund single currency loans or portions thereof made by it that include such Disbursed Amount; plus

- (iii) the Bank's risk spread applicable on the Rate Fixing Date for such Disbursed Amount;

as reasonably determined by the Bank and expressed as a percentage per annum.

4. The Bank shall notify the Guarantor and the Borrower of LIBOR Base Rate, LIBOR Total Spread, Fixed Base Rate and Fixed Total Spread applicable to each Disbursed Amount, promptly upon the determination thereof.

5. Whenever, in light of changes in market practice affecting the determination of the interest rates referred to in this Schedule, the Bank determines that it is in the interest of its borrowers as a whole and of the Bank to apply a basis for determining the interest rates applicable to the Loan other than as provided in this Schedule, the Bank may modify the basis for determining the interest rates applicable to amounts of the Loan not yet withdrawn upon not less than six (6) months' notice to the Guarantor and the Borrower of the new basis. The new basis shall become effective on the expiry of the notice period unless the Guarantor or the Borrower notifies the Bank during said period of its objection thereto, in which case said modification shall not apply to the Loan.

C. Repayment

1. Subject to the provisions of paragraph 2 of this Part C, the Borrower shall repay each Disbursed Amount of the Loan in semiannual installments payable on each April 15 and October 15, the first such installment to be payable on the seventh (7th) Interest Payment Date following the Rate Fixing Date for such Disbursed Amount and the last such installment to be payable on the eighteenth (18th) Interest Payment Date following the Rate Fixing Date for such Disbursed Amount. Each installment shall be one-twelfth (1/12) of such Disbursed Amount.

2. Notwithstanding the provisions of paragraph 1 of this Part C, if any installment of principal of each Disbursed Amount would, pursuant to the provisions of said paragraph 1, be payable after April 15, 2013, the Borrower shall also pay on said date the aggregate amount of all such installments.

3. After each Disbursed Amount shall have been withdrawn, the Bank shall promptly notify the Borrower and the Guarantor of the amortization schedule for such Disbursed Amount.

SCHEDULE 4

Procurement and Consultants' Services

Section I. Procurement of Works

Part A: General

Works shall be procured in accordance with the provisions of Section I of the Guidelines and the following provisions of this Section, as applicable.

Part B: International Competitive Bidding

1. Except as provided in Part C of this Section, works shall be procured under contracts awarded in accordance with the provisions of Section II of the Guidelines and paragraph 5 of Appendix 1 thereto.

2. The following provisions shall apply to works to be procured under contracts awarded in accordance with the provisions of paragraph 1 of this Part B:

(a) Notification and Advertising

The invitation to bid for each contract estimated to cost \$5,000,000 equivalent or more shall be advertised in accordance with the procedures applicable to large contracts under paragraph 2.8 of the Guidelines.

(b) Prequalification

Bidders for works related to signaling equipment shall be prequalified in

accordance with the provisions of paragraphs 2.9 and 2.10 of the Guidelines.

(c) Grouping of Contracts

To the extent practicable, contracts for works shall be grouped in bid packages estimated to cost \$5,000,000 equivalent or more each.

Part C: Other Procurement Procedures

National Competitive Bidding

Works estimated to cost less than \$5,000,000 equivalent per contract may be procured under contracts awarded in accordance with the provisions of paragraphs 3.3 and 3.4 of the Guidelines. In the procurement of works under this Part C, bidding documents in a standardized form for the Project shall be used.

Without limitation to any other provisions set forth in this Schedule or the Guidelines, the following shall apply to the procurement of works to be undertaken pursuant to this Part C:

(a) contracts shall be awarded to the bidder whose bid has been determined to be the lowest evaluated bid, such evaluation to be based on price and, whenever appropriate, to also take into account factors similar to those referred to in paragraph 2.51 of the Guidelines, provided, however, that the bid evaluation shall always be based on factors that can be quantified objectively, and the procedure for such quantification shall be disclosed in the invitation to bid;

(b) whenever required by the Bank, the invitation to bid shall be advertised for at least three consecutive days in a newspaper of wide circulation in Brazil;

(c) the arrangements, under the invitation to bid, for joint-ventures (consórcios) of Brazilian and foreign firms shall be approved in advance by the Bank in each case; and

(d) the invitation to bid shall not establish, for purposes of acceptance of bids, minimum or maximum amounts for the contract prices.

Part D: Review by the Bank of Procurement Decisions

1. Procurement Planning

Prior to the issuance of any invitations to prequalify for bidding or to bid for contracts, the proposed procurement plan for the Project shall be furnished to the Bank for its review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Guidelines. Procurement of all goods and works shall be undertaken in accordance with such procurement plan as shall have been approved by the Bank, and with the provisions of said paragraph 1.

2. Prior Review

With respect to each contract for works estimated to cost the equivalent of \$5,000,000 or more, the procedures set forth in paragraphs 2 and 3 of Appendix 1 to the Guidelines shall apply.

3. Post Review

The procedures set forth in paragraph 4 of Appendix 1 to the Guidelines shall apply to each contract not governed by paragraph 2 of this Part D.

Part E: Other

For purposes of the Guidelines, the term custom duties and other import taxes includes the Guarantor's Freight Surcharge for the Renewal of the Merchant Marine (Adicional ao Frete para a Renovação da Marinha Mercante - AFRMM), established pursuant to the Borrower's Decree-Law No. 1,142 of December 30, 1970, as amended on December 31, 1987, or any other tax, levy or charge that, in the reasonable opinion of the Bank, may substitute it, in whole or in part, after January 1, 1988.

Section II. Employment of Consultants

Part A: General

Consultants' services shall be procured in accordance with the provisions of the Introduction and Section IV of the "Guidelines: Selection and Employment of Consultants by World Bank Borrowers" published by the Bank in January 1997 (the Consultant Guidelines) and the following provisions of this Section.

Part B: Quality- and Cost-based Selection

Except as otherwise provided in Part C of this Section, consultants' services shall be procured under contracts awarded in accordance with the provisions of Section II of the Consultant Guidelines, paragraph 3 of Appendix 1 thereto, Appendix 2 thereto, and the provisions of paragraphs 3.13 through 3.18 thereof applicable to quality- and cost-based selection of consultants.

Part C: Other Procedures for the Selection of Consultants

1. Selection Under a Fixed Budget

Services for tasks that meet the requirements set forth in paragraph 3.5 of the Consultant Guidelines and estimated to cost less than \$200,000 equivalent per contract may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1 and 3.5 of the Consultant Guidelines.

2. Least-cost Selection

Services related to the supervision of works and the preparation of engineering design studies, estimated to cost less than \$100,000 equivalent per contract, may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1 and 3.6 of the Consultant Guidelines.

3. Selection Based on Consultants' Qualifications

Services related to the preparation of institutional, policy and engineering studies (other than engineering design studies), estimated to cost less than \$100,000 equivalent per contract, may be procured under contracts awarded in accordance with the provisions of paragraphs 3.1 and 3.7 of the Consultant Guidelines.

4. Individual Consultants

Services for tasks that meet the requirements set forth in paragraph 5.1 of the Consultant Guidelines shall be procured under contracts awarded to individual consultants in accordance with the provisions of paragraphs 5.1 through 5.3 of the Consultant Guidelines.

Part D: Review by the Bank of the Selection of Consultants

1. Selection Planning

Prior to the issuance to consultants of any requests for proposals, the proposed plan for the selection of consultants under the Project shall be furnished to the Bank for its review and approval, in accordance with the provisions of paragraph 1 of Appendix 1 to the Consultant Guidelines. Selection of all consultants' services shall be undertaken in accordance with such selection plan as shall have been approved by the Bank, and with the provisions of said paragraph 1.

2. Prior Review

(a) With respect to each contract for the employment of consulting firms estimated to cost the equivalent of \$200,000 or more, the procedures set forth in paragraphs 1, 2 (other than the third subparagraph of paragraph 2 (a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(b) With respect to each contract for the employment of consulting firms estimated to cost the equivalent of \$100,000 or more, but less than the equivalent of \$200,000, the procedures set forth in paragraphs 1, 2 (other than the second subparagraph of paragraph 2 (a)) and 5 of Appendix 1 to the Consultant Guidelines shall apply.

(c) With respect to each contract for the employment of individual consultants estimated to cost the equivalent of \$50,000 or more, the qualifications, experience, terms of reference and terms of employment of the consultants shall be furnished to the Bank for its prior review and approval. The contract shall be awarded only after said approval shall have been given.

3. Post Review

With respect to each contract not governed by paragraph 2 of this Part, the procedures set forth in paragraph 4 of Appendix 1 to the Consultant Guidelines shall apply.

SCHEDULE 5

Special Account

1. For the purposes of this Schedule:

(a) the term "eligible Categories" means Categories (1) and (2) 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 equal to \$8,000,000, or such other amount as the Bank shall establish, to be withdrawn from the Loan Account and deposited into the Special Account pursuant to paragraph 3 (a) of this Schedule, provided, however, that unless the Bank shall otherwise agree, the Authorized Allocation shall be limited to an amount equal to \$6,000,000 until the aggregate amount of withdrawals from the Loan Account plus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions shall be equal to or exceed \$25,000,000.

2. Payments out of the Special Account shall be made exclusively for eligible expenditures in accordance with the provisions of this Schedule.

3. After the Bank has received evidence satisfactory to it that the Special Account has been duly opened, withdrawals of the Authorized Allocation and subsequent withdrawals to replenish the Special Account shall be made as follows:

(a) For withdrawals of the Authorized Allocation, the Borrower shall furnish to the Bank a request or requests for deposit into the Special Account of an amount or amounts which do not exceed the aggregate amount of the Authorized Allocation. On the basis of such request or requests, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount or amounts as the Borrower shall have requested.

(b) (i) For replenishment of the Special Account, the Borrower shall furnish to the Bank requests for deposits into the Special Account at such intervals as the Bank shall specify.

(ii) Prior to or at the time of each such request, the Borrower shall furnish to the Bank the documents and other evidence required pursuant to paragraph 4 of this Schedule for the payment or payments in respect of which replenishment is requested. On the basis of each such request, the Bank shall, on behalf of the Borrower, withdraw from the Loan Account and deposit into the Special Account such amount as the Borrower shall have requested and as shall have been shown by said documents and other evidence to have been paid out of the Special Account 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 said documents and other evidence.

4. For each payment made by the Borrower out of the Special Account, the Borrower shall, at such time as the Bank shall reasonably request, furnish to the Bank such documents and other evidence showing that such payment was made exclusively for eligible expenditures.

5. Notwithstanding the provisions of paragraph 3 of this Schedule, the Bank shall not be required to make further deposits into the Special Account:

(a) if, at any time, 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;

(b) if the Borrower shall have failed to furnish to the Bank, within the period of time specified in Section 4.01 (b) (ii) of this Agreement, any of the audit reports required to be furnished to the Bank pursuant to said Section in respect of the audit of the records and accounts for the Special Account;

(c) if, at any time, the Bank shall have notified the Borrower of its intention to suspend in whole or in part the right of the Borrower to make withdrawals from the Loan Account pursuant to the provisions of Section 6.02 of the General Conditions; or

(d) once the total unwithdrawn amount of the Loan allocated to the eligible Categories, minus the total amount of all outstanding special commitments entered into by the Bank pursuant to Section 5.02 of the General Conditions with respect to the Project, shall equal the equivalent of twice the amount of the Authorized Allocation.

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 the Special Account 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 the Special Account: (i) was made for an expenditure or in an amount not eligible pursuant to paragraph 2 of this Schedule; or (ii) was not justified by the evidence furnished to the Bank, the Borrower shall, promptly upon notice from the Bank: (A) provide such additional evidence as the Bank may request; or (B) deposit into the Special Account (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. Unless the Bank shall otherwise agree, no further deposit by the Bank into the Special Account shall be made until the Borrower has provided such evidence or made such deposit or refund, as the case may be.

(b) If the Bank shall have determined at any time that any amount outstanding in the Special Account 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.

(c) The Borrower may, upon notice to the Bank, refund to the Bank all or any portion of the funds on deposit in the Special Account.

(d) Refunds to the Bank made pursuant to paragraphs 6 (a), (b) and (c) of this Schedule shall be credited to the Loan Account for subsequent withdrawal or for cancellation in accordance with the relevant provisions of this Agreement, including the General Conditions.

