

INTER-AMERICAN DEVELOPMENT BANK



ENVIRONMENTAL AND SOCIAL MANAGEMENT REPORT (ESMR)

March 2007

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EMBRATEL

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I. PROJECT DESCRIPTION

A. Project investments

- 1.1 Empresa Brasileira de Telecomunicações S/A (Embratel, the “Borrower” or the “Company”) is a Brazilian telecommunications provider and the main operating company held by Embratel Participações S/A (Embrapar), which in turn is controlled by Teléfonos de México S.A. (Telmex).
- 1.2 As the incumbent long distance carrier derived from the 1998 telecommunications privatization process, Embratel is the leading Brazilian long-distance service provider but has also been developing other business lines since the opening of the market to competition in 2002.
- 1.3 Today, the group’s portfolio includes local and long distance telephony, Internet and corporate data services, satellite communications, and cable television. The group’s strategy of diversifying its services has been triggered by increasing competition and is in line with the industry trend of convergence. Long distance revenues, in which Embratel was originally very concentrated, have been reduced to less than 60% of Embratel’s total sales as a reflection of this strategy.
- 1.4 The IDB will provide an A/B loan of approximately US\$300 million, which includes an US\$80 million A loan from the Bank, in order to finance the Company’s 2006-2007 capital expenditure program. The Company’s capital expenditure program includes in particular (i) investments for the installation of the 900 km fiber optic cable from Porto Velho to Manaus, which will free satellite capacity to serve more remote areas of the Amazon region, where Embratel is in effect the sole operator; and, (ii) last mile access/local telephony investments to diversify its business and compete against incumbent companies.
- 1.5 Embratel’s investment program, in line with its business strategy of diversification and competition, will help develop telecom-related infrastructure and services and also support the development of a competitive market in the local service segment against local service incumbents.

B. Project rationale

- 1.6 Embratel’s investment program will facilitate the expansion and modernization of its network allowing the Company to: (i) improve its network through transmission investments focused on expanding Embratel’s backbone transmission capacity; and (ii) develop and strengthen competition in local

services as one of the main players emerging out of the ongoing consolidation of the sector in that segment of services.

- 1.7 The network access investments for local services have the main purpose of increasing last mile access for Embratel's corporate clients (large, mid-sized and small companies and telecom companies), using one of the following access solutions: fiber optic, metallic and copper cables and radio transmission.¹ Equipment purchased related to these investments, such as routers, splitters, cable modems, etc, aims to provide the necessary communication capacity to connect clients.
- 1.8 The transmission investments program includes investments made in the following areas:
 - i. Backbone: designed and conceived to use all the available transmission technologies (fiber optic routes interconnecting state capitals and connecting certain cities such as Manaus and Porto Velho, previously only served by satellites) to ensure that the company has national coverage. In past years, the investment program focused on enabling the backbone to converge into new technologies and uses (using Internet Protocol, for instance). Equipment associated with these investments includes radios, converters, multiplexers, etc.
 - ii. Information technology: includes investments related to transmission that are getting more important to the Company since the future of telecommunications services is increasingly relying on its convergence and flexibility, ultimately provided by integrated software solutions.

II. ENVIRONMENTAL AND SOCIAL IMPACTS

A. Background

- 2.1 The investment program of Embratel (CAPEX) relates mainly to the expansion and upgrade of equipments (routers, switches, cable modems, network cards, computers, and PABX, among the principal), as part of two main components. The first and principal component comprises projects to build the "last mile" access to Embratel's clients, mostly upgrades of the existing networks, mainly in the urban areas. In each case, Embratel analyzes the client's service requirements in light of its existing network. Therefore, civil works are inexistent or minimal and require only standard construction permits, with no EIA or EAs required. The second component comprises expansion of transmission systems, also involving minimal civil works using the existing FURNAS and Eletronorte aerial transmission lines. Civil works are inexistent or minimal and require only

¹ In a total of 3,500 km of aerial network throughout several regions of Brazil using the existent Furnas and Eletronorte transmission lines.

standard construction permits. To date, no EIA or EA has been required for any of Embratel's proposed activities and operations.

- 2.2 Therefore, the CAPEX is expected to have minimal negative environmental and social impacts. The operational phase is not expected to have negative impacts either, other than those that can be easily and effectively mitigated by appropriate standard management practices. Therefore, the majority of the potential impacts are limited to some degree of nuisances in urban areas and standard environmental and social inconveniences in relation to small scale construction works, where no large workforce is required. In particular, implementation of the CAPEX will not require any involuntary resettlement. The potential environmental, social and health and safety impacts are mainly related to the existing operations and associated with networks and tower maintenance.
- 2.3 The most significant potential positive environmental, social and economic impacts associated with Embratel's investment program are: expansion of the area and number of business and peoples served; enhancement of the services provided, with increased liability, reduced number and duration of network outages; expanded job opportunities; and enhancement of the local economy in the areas where such investments will be made.
- 2.4 The principal health and safety potential impacts from the Embratel's investment plan are typical of small scale telecommunications operations and maintenance, such as risk of falls, electrocution, vehicles accidents, fires, as well as some minor occupational related health minor problems such as burns, stress and fatigue, other than the low risk to over exposure to radiation.
- 2.5 The federal, state and municipal environmental and health and safety legislation include applicable permits for construction, installation, expansion, and operation of a number of Embratel's facilities and activities, in particular those located in Environmental Protection Areas. Environmental permitting requirements vary among states and municipalities. In some states, such as in Alagoas, the radio bases and cellular services in frequency between 500 MHz e 2500 MHz must obtain an applicable environmental permit (*Resolução Normativa 18/2005 form CEPRAM-Environmental Protection State Council*). In other states, such as in Rio de Janeiro, there are no environmental permit requirement for telecommunication activities, leaving it to IBAMA, the national environmental agency. Some municipalities have included the environmental permit among the legal requirements for the installation and operation of telecommunications. Security aspects are regulated by the Fire Services of the Military Sate Police. *Safety aspects are regulated by Brazilian Government / Department of Labour.*
- 2.6 Embratel has approximately 600 radio station towers (*Estação Rádio Base -ERB*), of which 555 are in the process of obtaining some of the applicable municipal permits (excluding the environmental permits), of which 49 *Alvarás de Localização e Funcionamento* (or "*Habite-se*") have been granted.

- 2.7 Two of Embratel's operations are inside Environmental Protection Areas: (1) in the Ipanema National Forest, in the State of São Paulo and (2) in the Tijuca National Forest, in the State of Rio de Janeiro. Embratel will file a request to IBAMA for the applicable environmental permit for the operation in the Tijuca National Forest soon. The environmental permit for Embratel's operations in the Ipanema National Forest are pending the submission of the applicable environmental studies requested by IBAMA, as a requirement to renew the Operation Permit expired in December 2005.
- 2.8 On September 2, 2004, Embratel filed the application with IBAMA for the Installation Permit for the expansion of the interconnection of Terminal Station Manaus/AM with Terminal Station Porto Velho /RO with optic fiber cables. The Installation Permit was made public in local newspapers and the Official Gazette. Embratel has also filed the applications for the Operation Permit, which were also made public in the same newspapers.
- 2.9 The PCD and the Environment and Social Strategy (ESS) were submitted to and approved by the Committee on Environmental and Social Impacts (CESI) on January 12, 2007. No additional assessment or documentation was requested at that time and in particular no Environmental and Social Management Report ("ESMR") was requested to be submitted to CESI.

B. Environmental and Social Management

- 2.10 During due-diligence the Bank confirmed that, in spite of not having a formal Environmental, Social and Health and Safety Management System, Embratel has the adequate capacity and commitment to implement an Integrated Environmental, Social and Health and Safety Management System. In addition, Embratel has an organizational structure with human resources to address the environmental and social and health and safety aspects. Embratel has also a number of corporate procedures to address the environmental, social and health and safety management of the Company's operations. The occupational safety and risks potential risks can be easily avoided by the Safety Management System of Embratel by complying with standard health and safety Brazilian regulations, such as the use of individual and collective protective equipment. In addition, Embratel has developed procedures to address some of the principal potential health and safety impacts and risks. For example, to avoid, control and mitigate the potential impacts from exposure to radiation, Embratel developed a specific procedure of non-ionizing radiation, where it defines the types of radiation, the magnetic fields, criteria for evaluation of the radiation from radiofrequency and microwaves, the protective measures required and the maximum levels of occupational exposure allowed.
- 2.11 Nevertheless, the organizational structure needs to be expanded to address all the environmental and social and health and safety requirements in all of the Company's units and operations in the several areas of the country until the formal system is fully implemented.

D. RECOMMENDATIONS

- 2.12 To ensure full compliance with the Bank's environmental, social, and health and safety requirements, Embratel is required to (a) develop and implement an Integrated Environmental, Social, and Health and Safety Management System (ESHSMS) consistent with the principles of ISO14001 and BS8800 (or OHSAS 18001) for environmental and health and safety, respectively; the ESHSMS will include corporate policies, documentation and registers, institutional organization, human, operational and financial resources, operational procedures, social and institutional communication, and systematic audits and reevaluation; (b) comply with all applicable in-country environmental and social, and health and safety legislation, including obtaining the environmental permits for all relevant facilities; and (c) address the deficiencies identified by IDB during the environmental and social and health and safety due-diligence. Such requirements will be consolidated in an Environmental and Social and Health and Safety Action Plan (ESHSAP) and included as part of the Loan Agreement. In addition, the Bank will require compliance with all applicable environmental, health and safety Brazilian legal requirements, in particular environmental permits; applicable Bank environmental and social policies and guidelines, including specifically the Bank's operational policies on Information Disclosure (OP-102); and applicable aspects of the International Finance Corporation General Health and Safety Guideline (1998).
- 2.13 The Bank, through the Environment and Social Unit of the Private Sector Department (PRI) will monitor the social and environmental and social impacts throughout the duration of the Loan on a semi-annual basis, using the indicators established in the Environmental and Social and Health and Safety Action Plan.