

**PROGRAM OF SUPPORT FOR THE MODERNIZATION AND REHABILITATION
OF THE WATER SUPPLY AND SANITATION SECTOR**

(VE-0056)

EXECUTIVE SUMMARY

**BORROWER AND
GUARANTOR:** Republic of Venezuela

EXECUTING AGENCY: HIDROVEN and HIDROLARA

AMOUNT AND SOURCE:	IDB:	US\$30 million
	Local counterpart funding:	US\$30 million
	Total:	US\$60 million

FINANCIAL TERMS AND CONDITIONS:	Amortization period:	20 years
	Disbursement period:	3 years
	Interest rate:	variable
	Inspection and supervision:	1%
	Credit fee:	0.75%
	Currency:	U.S. dollars under the Single Currency Facility

OBJECTIVES: The objective of the proposed operation is the development of institutional guidelines and strategies to boost the sector's operational and financial efficiency; to encourage service providers to take responsibility for the functions, assets, and services (including the improvement of water quality) entrusted to them and to respond appropriately to users and authorities; and to support private sector participation in the operation of the systems.

SCOPE: The Bank's strategy for the sector is to make spending more efficient and promote and consolidate its financial sustainability. The problems faced are structural in nature and solving them will require a transitional period of some five years. In an initial stage, therefore, the object of this program is limited to establishing the institutional framework necessary for the sector to evolve gradually and consistently towards the desired levels of efficiency under HIDROVEN's technical secretariat and to promoting the consolidation of the operator - HIDROLARA. In addition, under the technical assistance component of the proposed operation, the restructuring of other operators, which will be able to participate in a second rehabilitation program, will be started.

DESCRIPTION: Engineering and administration (US\$5.5 million)

This category will cover: personnel costs, equipment, and overhead for the program executing unit at HIDROVEN and HIDROLARA's coexecuting unit; and the cost of hiring a consulting firm to inspect the rehabilitation works under the individual meter program.

Sector component (US\$14.9 million)

This subcomponent will finance equipment and hiring of consultants to provide the technical training needed, to implement the new regulatory framework for the sector, and to carry out the following **technical assistance** activities:

1. A study to review the sector profile proposed in the study on the institutional and legal framework of the water supply and sanitation sector.
2. Design and implementation of policies and administrative procedures for systems still under the responsibility of the regional water companies.
3. Development of a management information system and preparation of a basic sector information inventory needed for planning and regulatory tasks.
4. Drafting of sector guidelines and standards.
5. Development and implementation of general policies such as water resource regulation, rural water supply systems, and conditions for private-sector participation.
6. Payment of HIDROVEN staff benefits so that the new regulatory agency is able to begin work with no liabilities (estimated at US\$300,000).

Hiring of an integrated management services company (IMSC) for HIDROLARA (US\$3.8 million)

This component involves hiring an international specialized private-sector firm ("management company") to handle the technical and operational aspects of HIDROLARA's service delivery. The IMSC will be in charge of all decisions in the administrative, technical, business, and financial

areas and will be responsible for fulfillment of operational and financial management indicators set forth in the performance contract.

This component will include the fixed costs associated with managerial and institutional strengthening functions undertaken by the private management company during the first three years. The second part of the cost involves a variable payment incentive to the company based on progress in attaining operating and financial indicators. The variable payment would be financed with internally-generated resources from HIDROLARA (HL) operations and is not part of the program costs.

Minor rehabilitation and improvement works on existing infrastructure in HL's existing water supply and sewerage systems (US\$21.4 million)

This component is comprised of: (i) works for the rehabilitation and improvement of HL's urban water supply systems; (ii) works for the rehabilitation, replacement, and repair of the existing sanitary sewer system in the city of Barquisimeto; (iii) unmetered water program; and (iv) construction of minor rehabilitation and improvement works for water supply and sewer systems in small urban and rural communities in the state, costing up to US\$100,000 equivalent each.

Studies, equipment, and technical assistance for HL (US\$3.1 million)

This component covers consulting services contracts for the following activities: (i) master plans for water supply, sewerage, and drainage for Barquisimeto; (ii) studies to optimize the use of electricity at water supply facilities administered by HL; (iii) improvement of operations at HL treatment plants; (iv) review of HL's accounting process to reconcile differences between business and accounting systems; (v) establishment of the internal audit office of the IMSC; (vi) continuation of the user census initiated by HL; (vii) study to identify a way of managing the state's rural water systems, currently being administered by the MSAS; (viii) regularization of HL's assets; (ix) observation and study visit for HL, municipal, and state authorities to familiarize them with integrated management activities in a similar company; and (x) equipment for HL.

ENVIRONMENTAL CLASSIFICATION: The Environment Committee, at its meeting of October 17, 1995, classified this as a Category III operation. The environmental summary was approved on October 22, 1996.

POVERTY TARGETING: Under the terms of the Eighth Replenishment mandate on poverty alleviation and the Bank's criteria for implementing that mandate, this program does not qualify as a poverty-targeted investment.

CONTRACTING OF CIVIL WORKS, GOODS, AND RELATED SERVICES: The threshold amounts above which international competitive bidding will be required for procurement under this program are US\$3 million for works and US\$350,000 for goods and related services.

BENEFITS: The following goals are expected to be achieved through execution of the program:

- a. For the sector: (i) creation of an autonomous regulatory agency for the sector and implementation of the new legal and institutional framework for the sector; and (ii) completion of the process of decentralizing operations into at least four new companies that would participate in a future rehabilitation stage.
- b. For HIDROLARA, by the end of the program the following targets will have been reached: (i) establishment of efficient systems for reviewing and setting rates and for billing and collection system; (ii) incorporation of 81,000 unregistered hook-ups into the business system; (iii) improvement of service conditions for 331,000 users; (iv) installation of individual meters for 54% of residential users, 86% of business users, and 100% of industrial users; (v) reduction in percentage of unmetered water to 41.3%; (vi) operating margin of 61.2%; (vii) 100% coverage of operating costs, including depreciation of program investments; (viii) 33.5% coverage of depreciation of assets transferred to HL; (ix) billing of 84% of users compared to current level of 55%; (x) accounts receivable equivalent to no more than three months of billing; and (xi) if investments additional to the program's are not made, a debt coverage ratio of 4:1 and an investment coverage ratio of 3.3:1.

RISKS: The main risks that could negatively affect the operation are:

- a. Lack of interest on the part of international firms regarding the integrated management

services contract and high bids due to perceived risk. To make participation more attractive to such firms and decrease the perception of risk, the program will use Bank resources to finance the fixed component of the payment to the firm for the first three years of the contract.

- b. Counterpart resources are not transferred on a timely basis. This risk is minimized by the support that has been received from the regional and municipal governments in the process of setting up the company; by reducing the country's financial restriction associated with recovery of fiscal accounts through the World Bank loan and allocation of counterpart resources in 1997 from the treasury's ordinary resources.
- c. Lack of consensus on the sector profile to aim for among the various institutions involved in service delivery. To reduce this risk under the program, technical assistance will be included and a series of special workshops will be held to provide an opportunity to discuss the details of the proposals submitted and the consequences on the future development of the sector.
- d. Absence of political support at the highest levels for adoption of the legislation needed to implement the regulatory framework. To ensure that sector reform will have the support required for the necessary changes, the National Commission for Water and Sanitation Sector Development will be set up with representatives from the various institutions involved in the sector. This commission's functions will include considering and approving the various sector restructuring proposals and fostering political support for approval of the new regulatory legislation.
- e. Insufficient interest on the part of the regional and local governments in the service decentralization and transfer process. To mitigate this risk, HIDROVEN has established a Decentralization Committee in charge, among other things, of informing local governments about the decentralization process. In addition, to participate in the program, local authorities shall undertake to set up an autonomous enterprise that will be in charge of delivering the service and grant working capital for the necessary studies to be conducted.

**THE BANK'S
COUNTRY AND
SECTOR STRATEGY:**

The Bank's strategy in Venezuela is aimed, *inter alia*, at supporting modernization of the State, particularly the decentralization process and improving efficiency and equity in social service delivery. In this regard, the proposed operation would seek to consolidate structural regulatory reforms, in particular through efficient institutional and regional decentralization of the service and increased participation by users and private firms.

**SPECIAL
CONTRACTUAL
CONDITIONS:**

Prior to the first disbursement for the components involving the IMSC and minor rehabilitation works for HL, the borrower will submit to the Bank:

- a. Evidence that HL's rate base has been reviewed and that its application makes it possible to be consistent with the financial indicators expressed in the performance contract (paragraph 5.15);
- b. Evidence that the performance contract has been ratified by the municipal councils (paragraph 3.20);
- c. The agreement signed by the nation and HL for the transfer of the loan proceeds and establishment of the trust (paragraph 3.30).

Other special conditions that will be included in the contract are:

- a. Presentation of the integrated management services contract signed by a private operator will be a condition precedent to the commitment of resources for the second group of rehabilitation works (paragraph 3.16);
- b. The commitment of resources for the third group of rehabilitation works will be subject to the fulfillment of efficiency indicators (paragraph 3.16); and
- c. Investments in addition to those in the program during its execution period are not to exceed certain limits (paragraph 5.14).

(Other contractual conditions are described in the following paragraphs: 3.31, annual supervision meetings; 3.32, reports; 3.39, recognition of expenditures; 3.44, maintenance; 3.46, auditing; and 3.45, environmental conditions).

I. FRAME OF REFERENCE

A. Introduction

- 1.1 The proposed operation is a key element of the government's reform strategy for the water supply and sanitation sector, which seeks to improve service by: (i) decentralizing service delivery to make it more efficient; (ii) promoting and consolidating the sector's financial sustainability; and (iii) establishing the institutional framework necessary for the sector to develop consistently towards the desired levels of efficiency and towards consolidation of viable operators of a size and structure that will make efficient operation possible.

B. Economic situation

- 1.2 The Venezuelan economy depends on oil and this dependence stimulates public spending patterns in which low efficiency and low cost recovery by public utilities are characteristic.
- 1.3 When the government took office at the beginning of 1994, it initially focused its economic policy on containing the increase in macroeconomic imbalances through administrative controls. However, from mid-1995, the controls lost effectiveness because of exacerbated internal imbalances, which resulted in increased monthly inflation and a loss of international reserves.
- 1.4 To rectify this untenable economic situation, in April 1996 the government announced an economic stabilization plan which included higher gasoline taxes and prices, exchange and interest rate deregulation, and a reduction of the fiscal deficit. It should be noted that, as part of the letter of intent signed with the International Monetary Fund (IMF) in May 1996, the government undertook to reduce the transfers to finance the enormous deficits and capital expenditures of public utilities and to depend on internally generated funds to defray the sector's expenditures.
- 1.5 **Outlook.** Because of a higher level of oil revenues than anticipated (of approximately US\$3.5 billion) and lower interest and inflation rates after an initial rise, the 1996 exchange and fiscal goals will be met. Due in part to the opening of the oil sector, the expected increase in oil earnings suggests that, in the medium term, the external and fiscal deficits will not be inevitable. However, to ensure the sustainability of the adjustment policies, it is necessary to implement policies combined with structural reforms, including public sector and budget reform and more effective administration of assets and liabilities. This means that, to make the public sector solvent, the transfer of State-owned enterprises to the private sector, the sale of future oil production, and the retirement of the public debt will have to be accelerated.

- 1.6 **Impact on the water supply and sanitation sector.** As a result of the structural adjustment programs and the critical macroeconomic situation, investments in the sector dropped from 0.18% of gross domestic product (GDP) in the 1990 to 1993 period to 0.05% in 1994, which is substantially lower than the levels recommended by international standards for the water supply and sanitation sector (1% of GDP).

C. The water supply and sanitation sector

- 1.7 Until 1989, the water and sanitation sector was centralized in the Instituto Nacional de Obras Sanitarias [National Sanitation Works Administration] (INOS). INOS was in charge of all activities and stages involved in the delivery of service throughout the country. Since investment needs happened to coincide with the availability of abundant resources, INOS's mission was biased in favor of construction of enormous water supply infrastructure works to the detriment of maintenance and efficient operation of the systems built. INOS became increasingly inefficient in its institutional, operational, and business functions, thereby limiting its capacity to provide service.
- 1.8 The institutional situation affected the quality of water service. By the end of the 1980s, the service displayed: high levels of water loss reflected in an average level of unmetered water of 51%; lack of preventive maintenance; use of obsolete technologies for tapping and use of water resources; inefficient and overstaffed production structure; high levels of environmental pollution caused by scant sewage treatment; deficient service in terms of quality and reliability; and a management model that was not financially viable because of the administrative and business policies in place. Collections represented 65% of billings and billings covered only 80% of the volume produced.
- 1.9 In 1989, a structural reform program for the sector was started in order to improve the quality and coverage of the services based on a change from a centralized management model to one based on decentralization of service to local and regional authorities, in which the emphasis was placed on efficient operation and rehabilitation of systems rather than infrastructure expansion. The reform program also sought to make the companies responsible for service delivery financially self-sustaining and to establish an appropriate regulatory framework for the sector.
- 1.10 Under these circumstances, the process for eliminating INOS began in 1991 and a transitional institutional framework was set up comprising the Compañía Anónima Hidrológica Venezolana (HIDROVEN) and 10 regional water companies [Empresas Hidrológicas Regionales] (EHRs). HIDROVEN assumed responsibility for the sector's regulatory, macrosectoral planning, and technical support and control functions, and the EHRs took on the functions of providing

service, as a transitional deconcentration phase prior to effective decentralization of service to local companies. 1/

- 1.11 The sector reform process made it possible to reduce staff. Preventive and corrective maintenance actions were undertaken by private companies hired under service contracts (outsourcing). The private sector participated in billing and collection activities and a new rate structure was implemented which, added to the business efforts, made it possible to increase the percentage of expenditures covered by own revenues (18% in 1991 and 45% in 1994) and reduce transfers from the central government.
- 1.12 Despite the progress achieved, there are still problems that need to be resolved, such as a deficient regulatory framework; in addition, the sector's institutions do not have the administrative capacity to plan, operate, and maintain the services. As a result, companies operating water and sewer service experience chronic financial deficits and the sector is a great burden on public finances.
 - a. Regulatory framework
- 1.13 Under the current regulatory framework, the planning, regulation, and service delivery functions are not separated, which means that adequate legislation is required.
- 1.14 HIDROVEN 2/ is responsible for coordinating and supervising the operational activities of the water companies, promoting decentralization of services, and establishing, together with the Ministry of the Environment and Renewable Natural Resources (MARNR), the guidelines for development of the sector. In practice, however, the sector has been functioning without clear development policies or strategies. With the exception of water quality indicators, the water companies have been operating without operational or service quality indicators.
- 1.15 In addition, the MARNR not only owns the production systems but is also the agency in charge of sector planning and shares responsibility for regulation of rates and environmental matters with HIDROVEN. Its regulatory function in relation to rates is shared with the Ministry of Industry and Trade (which establishes maximum rates) and with the municipal authorities, which have the power to set rates in their jurisdiction under the Constitution.
- 1.16 For the sector to run properly, legislation is needed that clearly defines the structure of the sector, its agencies and their respective roles, as well as mechanisms for setting rates that guarantee appropriate cost recovery and make it possible to expand

1/ See Annex I-1 - structure of the sector.

2/ See chapter IV-A for a detailed description of HIDROVEN.

the systems. It is deemed advisable for: (a) policies to be set by a single institution; (b) an independent body, with financial and administrative autonomy, to be the sector's regulatory and oversight agency; and (c) service to be provided by autonomous companies created especially for that purpose.

b. Service quality

- 1.17 The country has a population of 21.2 million, of which 84% live in urban areas. Coverage for water and sanitation service in urban areas deteriorated from 81% and 57%, respectively, in 1986, to 76% and 53% by 1995.
- 1.18 The deterioration in the quality of service is due primarily to an inadequate program of systems operation and maintenance, which is reflected in elevated physical losses and distribution system expansion without appropriate planning.
- 1.19 The supply of potable water is close to 70 m³/s, which is deemed sufficient to cover demand nationally, assuming a normal endowment and an acceptable technical loss level (about 25%). The endowment has been above 300 lpd and physical losses have averaged about 61%, according to data available for 1994. Additional business losses - which are high - are the result of unmetered consumption by illegal use in urban areas and illegal connections for irrigation.

c. Rate policy and cost recovery

- 1.20 In March 1993, a new rate structure was introduced so that the EHRs could achieve financial self-sufficiency. Although the goal of the rate policy is for income from rates to be sufficient to cover maintenance, operation, depreciation, and investment costs, this goal has not been achieved because of the absence of incentives for the EHRs to apply the highest rates allowable and bill and collect for the service. The sources of the existing problems are: (i) the systems' operating deficits being covered by direct transfers from the central government; (ii) state agencies of the EHRs operating on the basis of monthly budgets; and (iii) political interference at the local level, making it difficult to adjust the rates.
- 1.21 As a result of the above, cost recovery is grossly inadequate and all the EHRs have incurred operating deficits, with revenue from user charges covering on average 40% of operating and maintenance costs. The sector has been funded primarily through debt financing with suppliers, contractors, and electric companies. During the period from 1991 to 1996, the debt with the electricity sector was BS 50 billion. To cover the sector's operating and maintenance costs alone, rates in force in late 1995 would have to be increased by 200% to 300% in real terms.

d. Rural water supply systems

- 1.22 In the mid-1970s, the rural water supply systems serving communities with 1,000 to 5,000 residents were transferred by the Ministry of Health and Social Welfare (MSAS) to INOS, which contracted out the operation and maintenance of the systems to state-run companies. In 1980, INOS began to charge nominal fees in some states, but the accounts were usually not collected during electoral campaigns, reflecting political interference in the systems' operation. It should be noted that the rural water supply systems serving communities with under 1,000 residents remained under the MSAS's responsibility.
- 1.23 In 1991, the MSAS transferred all of its systems to the state public works divisions and INOS's systems to the EHRs. In many cases, municipal governments have actively stepped in to make up for the shortcomings in the service provided by these entities.

D. The government's strategy for the sector

- 1.24 In view of the sector's circumstances, the authorities have prepared an adjustment program for the water supply and sanitation sector that continues the process begun in 1989 in terms of expanding decentralization and improving efficiency in the delivery of services. This program, which will be supported by the proposed operation, will consist of the following elements: (i) the national government will stop participating in service delivery and will concentrate on performing its regulatory functions (based on a modern institutional system of regulation) and providing technical assistance to the sector; (ii) the decentralization process will be expanded - service delivery is to be transferred to local entities and institutional capacity is to be improved; the establishment of local companies will take into account, *inter alia*, economies of scale and financial and institutional viability; (iii) the rate structure will cover the companies' operating costs; and (iv) the sector's efficiency will improve through increased private sector participation in service delivery.

E. The Bank's experience in the sector

- 1.25 The Bank has participated financially in the execution of six water supply and sanitation sector projects, totaling US\$242 million in loans. Four of these projects - none of which were in the state of Lara - were executed in the 1960s; the projects achieved their objectives and the loans have been repaid.
- 1.26 In 1987, the Bank approved two loans totaling US\$203.4 million (loan 538/OC-VE for US\$153.4 million and loan 557/OC-VE for US\$50 million).

- 1.27 **Water supply project for the central region (loan 538/OC-VE; approved in December 1987)** partially financed potable water supply expansion works in the central region (Carabobo, Aragua, and Cojedes) and catchment and pumping works.
- 1.28 To date, the general rate of advance of the project is 87% and the equivalent of US\$21.8 million remains to be disbursed. The water supply system works have been completed as has the first stage of the institutional development of HIDROCENTRO. The business, master metering, pipe installation, and rehabilitation works programs are unfinished. Execution of the project has been delayed because counterpart resources have not been made available on a timely basis. The authorities have earmarked such resources from extraordinary income (internal borrowing), which requires additional time for issuing, placing, and negotiating the acceptance of bonds. The rate and collection clauses have not been fulfilled because of delays in the implementation of the business system.
- 1.29 **Sewage treatment system project for the Lake Valencia basin (loan 557/OC-VE; approved in November 1988)** is the second stage of the basin comprehensive sanitation program. The works began in mid-1991 and the rate of advance is 50%. The amount to be disbursed is the equivalent of US\$12.3 million.
- 1.30 As in the previous case, execution has been hindered by delays in making local counterpart resources available and holdups in the approval of contracts by the Office of the Comptroller General of the Republic. The lack of local counterpart resources caused the works to be halted in early 1996. The rate clause is not being fulfilled because the rate increases have been insufficient to cover all operating and maintenance costs.
- 1.31 Lastly, as part of the **State-owned enterprise reform program (loan 600/OC-VE)**, cofinanced with the World Bank, INOS was restructured and the water supply systems were thereby decentralized. The proposed decentralization of the water supply sector (from INOS to water companies) was implemented and the agreed rate adjustments were made, albeit slowly.

F. Participation by other institutions

(i) **World Bank**

- 1.32 In June 1996, the World Bank approved a loan for US\$39 million. It includes consulting services to prepare standard technical guidelines for the sector, development and implementation of policies that would be part of the new regulatory framework - to be cofinanced with the loan proposed herein - and the rehabilitation of water supply systems in the state of Monagas with institutional support so that the state water company, Aguas de Monagas, will

operate with a service management contract. The company is in the process of evaluating bids for a management contract to be awarded to a private sector company and has begun the bidding process for the first group of emergency works. HIDROVEN is preparing the short list for consulting services related to technical assistance for the regulatory framework.

(ii) **Andean Development Corporation (CAF)**

- 1.33 HIDROCAPITAL has prepared a program for comprehensive rehabilitation of the water supply system in metropolitan Caracas, which is being considered by the Bank. However, given the urgency of executing certain works to prevent part of the system from collapsing, the CAF, with technical support from the Bank, approved a loan in May 1996 for US\$25 million to finance emergency works involving the distribution and production systems. The loan contract has not yet been signed.

G. Implementation of a sector modernization process

- 1.34 In view of the economic situation in the country and the economic adjustment program agreed upon with the IMF, in which public spending is cut substantially, it has become necessary to seek alternative means of providing the services that have traditionally been financed almost exclusively with public resources and managed essentially by centralized institutions.
- 1.35 To begin restructuring the sector, it was agreed with the national authorities to begin with the decentralization and modernization of a few operators to achieve a demonstration effect. From the study of the EHRs, HIDROLARA (HL) was identified as having made progress in its institutional restructuring, which will allow it to become an efficient and financially self-sufficient company.
- 1.36 HL is a business enterprise established in the state of Lara, which separated operationally from the regional company HIDROCCIDENTAL (HO) (in charge also of the states of Yaracuy and Portuguesa) in August 1996. One half of the company's equity is owned by the state government and the other half by the nine municipalities in the state of Lara and it operates through concessions from the municipalities. The business and operating systems of the Lara branch of HO were transferred to HL. HL inherited not only all of the HO's managerial inefficiencies but also insufficient financial and rate-generated resources to cover operating costs, a characteristic typical of the EHRs. 3/

3/ See chapter IV for a full description of HL's institutional and financial situation.

- 1.37 To support HL in achieving its potential as an efficient and self-sufficient company, rather than to continue with the institutional management model of the existing company, a structure based on two instruments was agreed upon with the regional and local authorities: an integrated management services contract with a private sector operator and a performance contract that establishes independent administration in the company and management indicators.
- 1.38 Through an integrated management services contract, the management of HL will incorporate the operational, business, and administrative management practices of a company with proven capacity and experience in the management of services similar to those provided by HL. The contract exclusively comprises integrated management, technical assistance, and technology transfer and the control and monitoring of the works to be executed under the Bank-financed program.
- 1.39 The contract will be signed by HL, the government of Lara, and the municipalities in which the company operates. It will set out the responsibilities of each party in terms of resource allocation and will include an automatic rate-adjustment mechanism that takes into account efficiency indicators to be reached by the company annually during project execution and that will also be the responsibility of the private company in charge of managing HL. ^{4/} It is estimated that the aforementioned focus is essential to make HL efficient and financially self-sustaining over the long term.

^{4/} See chapter III for a description of the indicators to be achieved under the performance contract.

II. THE PROGRAM

A. Objectives

- 2.1 The objective of the proposed operation is to develop institutional guidelines and strategies to: boost the sector's operational and financial efficiency; encourage service providers to take responsibility for the functions, assets, and services (including the improvement of water quality) entrusted to them and respond appropriately to users and authorities; and support private sector participation in the operation of the systems.
- 2.2 The specific objectives of the program are: (a) to support the establishment of a new legal and institutional framework in the sanitation sector; (b) to design and adopt incentive structures to promote efficient behavior by agents; and (c) to establish HIDROLARA (HL) as a technically and financially viable operator with a structure that will make for efficient service delivery.

B. Goals of the program

- 2.3 Program execution seeks to achieve the following goals:
- a. In terms of the sector: (i) establishment of an autonomous regulatory agency within 24 months of the date on which the consulting services begin; and (ii) implementation of the sector's new legal and institutional framework within 36 months of the date on which the consulting services begin; completion of the process of decentralizing operations into at least four new companies that would participate in a future rehabilitation stage.
- b. In terms of HL, by the end of the program the following goals will have been met: (i) establishment of efficient rate review and implementation and billing and collection systems; (ii) addition of 81,000 unregistered connections to the company system; (iii) improved service for 331,000 users; (iv) installation of meters for 54% of residential users, 86% of business users, and all industrial users; (v) reduction of unmetered water to 41.3%; (vi) operation margin of 61.2%; (vii) full coverage of operating costs, including depreciation of program investments; (viii) 33.5% coverage of depreciation of assets transferred to HL; (ix) billings of 84% of users; (x) accounts receivable equivalent to no more than three months of billings; and (xi) if investments additional to the program's are not made, a debt coverage ratio of 4:1 and an investment coverage ratio of 3.3:1.

C. Description

2.4 To achieve the aforementioned objectives and goals, the program is comprised of the following components:

1. Engineering and administration (US\$5.5 million)

2.5 This category will cover: personnel costs, equipment, and overhead for the program executing unit at HIDROVEN and HIDROLARA's coexecuting unit; and the cost of hiring a consulting firm to inspect the rehabilitation works under the individual meter program.

2. Sector component (US\$14.9 million)

2.6 This subcomponent will finance equipment and hiring of consultants to provide the technical training needed, to implement the new regulatory framework for the sector, and to carry out the following **technical assistance** activities:

- a. A study to review the sector profile proposed in the study on the institutional and legal framework of the water supply and sanitation sector, design of the supervisory and control mechanisms for the transitional stage, and review of the proposed law for the service.
- b. Design and implementation of policies and administrative procedures for systems still under the responsibility of the regional water companies in the following areas: (1) budget formulation and control; (2) human resources policy; and (3) accounting and finance.
- c. Development of a management information system and preparation of a basic sector information inventory needed for planning and regulatory tasks and provision of technical assistance to sector institutions that have not been decentralized.
- d. Drafting of sector guidelines and standards and assistance in preparing model regulations and by-laws needed by the states and municipalities to supplement the national regulatory structure.
- e. Development and implementation of general policies for:
 - (i) Regulation of water resources shared by different systems. This policy is needed because there is no water act.
 - (ii) Administration of rural water systems. This would finance: (i) the preparation of an inventory of rural water systems; and (ii) development of various models

for operation and maintenance, community participation, and financing of future investments.

- (iii) Establishment of terms and conditions for private sector participation through the development of a general policy to encourage private-sector participation in the administration of water supply and sanitation services, including the drafting of model contracts and bidding documents and procedures for full concessions.

f. Payment of HIDROVEN staff benefits so that the new regulatory agency is able to begin work with no liabilities (estimated at US\$300,000).

- 2.7 This component will support the sector decentralization program in at least four state-owned companies in the following tasks: (i) identification and definition of the level of private-sector participation in the companies not included in the first components; (ii) legal assistance for the service transfer process and the preparation of the contract to delegate operations and of the by-laws of the new companies; (iii) evaluation of assets and liabilities (including estimates of staff-related liabilities of the EHRs) to be transferred to the companies; (iv) support in the business and financial areas, including the preparation of financial statements and willingness-to-pay studies; and (v) feasibility studies, economic evaluation, and final designs of rehabilitation projects and unmetered water programs, including environmental studies for projects to be financed at a later stage. The EHRs that are expected to be able to participate in this component are HIDROANDES, HIDROCENTRO, and the branches of HIDROCCIDENTAL in the states of Yaracuy and Portuguesa.

3. Hiring of an integrated management services company (IMSC) for HIDROLARA (US\$3.8 million)

- 2.8 This component involves hiring an international specialized private-sector firm ("management company") to handle the technical and operational aspects of HIDROLARA's service delivery. The IMSC will be in charge of all decisions in the administrative, technical, business, and financial areas and will be responsible for fulfillment of operational and financial management indicators set forth in the performance contract. The IMSC arrangements consist of the provision by the firm of a group of professionals with expertise and experience in managing water supply and sewerage companies. One of these professionals will become the manager of HL and the others will hold key management positions. HL will place its facilities, assets, and existing middle-management and support staff at their disposal.

- 2.9 The management company will develop and implement the appropriate structure, operating and financial information systems, procedures, and manuals and will train HL staff in their use. As part of the contract, the company will institute the following systems, which were found to be necessary during program preparation: (i) integrated business system consisting of digitized registry, billing, and collections; (ii) accounting, budget, and cash flow statement and projection systems; (iii) operational statistics system, with emphasis on performance indicators and progress in the unmetered water program; and (iv) fixed asset and inventory and supply management system. In addition, the existing customer service system will be reviewed and modernized and a technical evaluation of assets will be conducted.
- 2.10 This component will include the fixed costs associated with managerial and institutional strengthening functions undertaken by the private management company during the first three years. The second part of the cost involves a variable payment incentive to the company based on progress in attaining operating and financial indicators. The variable payment would be financed with internally-generated resources from HL operations and is not part of the program costs.
4. Minor rehabilitation and improvement works on existing infrastructure in HL's existing water supply and sewerage systems (US\$21.4 million)
- 2.11 This component is comprised of: (i) works for the rehabilitation and improvement of HL's urban water supply systems; (ii) works for the rehabilitation, replacement, and repair of the existing sanitary sewer system in the city of Barquisimeto; (iii) unmetered water program, which includes the procurement and installation of master meters at all production sources and at selected distribution points and the procurement, repair, and installation of individual meters needed to cover 50% of water supply system users; and (iv) construction of minor rehabilitation and improvement works for water supply and sewer systems in small urban and rural communities in the state, costing up to US\$100,000 equivalent each.
- 2.12 The works to be financed have been divided into three groups: (i) those required to make the system more reliable, to eliminate major losses, and to reduce water cutoffs, which have had a negative impact on the level of user satisfaction (25%); (ii) works aimed at reducing unmetered water and making the system more efficient (50%); and (iii) improvement works at drinking water plants and partial rehabilitation of the sewer system in Barquisimeto (25%).

5. Studies, equipment, and technical assistance for HIDROLARA
(US\$3.1 million)

- 2.13 This component covers consulting services contracts for the following activities: (i) master plans for water supply, sewerage, and drainage for Barquisimeto; (ii) studies to optimize the use of electricity at water supply facilities administered by HL; (iii) improvement of operations at HL treatment plants; (iv) review of HL's accounting process to reconcile differences between business and accounting systems; (v) establishment of the internal audit office of the IMSC; (vi) continuation of the user census initiated by HL; (vii) study to identify a way of managing the state's rural water systems, currently being administered by the MSAS; (viii) regularization of HL's assets; (ix) observation and study visit for HL, municipal, and state authorities to familiarize them with integrated management activities in a similar company; and (x) equipment for HL.

D. Cost of the program

- 2.14 The total cost of the program is estimated at US\$60 million equivalent. The breakdown by source of financing and investment category is shown in the following table. The criteria and methodology used to prepare the budgets and estimates are considered acceptable.

**Cost and financing
(in US\$000)**

CATEGORIES	IDB	LOCAL	TOTAL	Z TOTAL
I. ENGINEERING AND ADMINISTRATION	1,710	3,770	5,480	9.1
Sector engineering and administration component	1,060	2,010 <u>a/</u>	3,070	-
HL engineering and administration component	650	1,760	2,410	-
II. DIRECT COSTS	22,400	17,690	40,090	66.8
Sector component	7,940	6,990 <u>a/</u>	14,930	-
IMSC contracting	3,770	-	3,770	-
Rehabilitation works	10,690	10,700	21,390	-
III. ASSOCIATED COSTS	1,420	1,670	3,090	5.1
Studies, master plan, and improvement of drinking water plants and power for HL	450	1,350	1,800	-
Technical assistance for HL	230	320	550	-
Equipment for HL	740	-	740	-
SUBTOTAL	25,530	23,130	48,670	-
UNALLOCATED	4,170	3,840	8,010	13.4
CONTINGENCIES	2,520	2,720	5,240	-
COST ESCALATION	1,650	1,120	2,770	-
FINANCE CHARGES	300	3,030	3,330	5.6
INTEREST	-	2,700	2,700	-
CREDIT FEE	-	330	330	-
INSPECTION AND SUPERVISION	300	-	300	-
TOTAL	30,000	30,000	60,000	100.0
% FUND/PROJECT	50	50	100	

a/ Resources of World Bank loan 4031-VE in the amount of US\$9 million.

E. Program financing

2.15 The Bank will finance program execution with US\$30 million equivalent, which will be disbursed in United States dollars drawn

on the Single Currency Facility. This amount represents 50% of the program's total cost.

- 2.16 The terms and conditions of the Bank loan will be as follows:
(i) amortization period: 20 years; (ii) interest rate: variable;
(iii) disbursement period: 3 years; (iv) credit fee: 0.75% on
undisbursed amounts; and (v) inspection and supervision: 1% of
loan amount.
- 2.17 The local contribution for the equivalent of US\$30 million, i.e.
50% of the program's cost, will be covered with resources from the
World Bank loan of US\$9 million equivalent to finance part of the
sector component; budget allocation from the central government in
the amount of US\$11.5 million (US\$2 million for the sector
component and US\$9.5 million for HL); budget allocations from the
Lara state government, US\$5 million, allocations from the pertinent
municipal governments, US\$2.5 million, and HL's internally-
generated resources, US\$2 million.

III. PROGRAM EXECUTION

A. Executing agencies

- 3.1 The borrower will be the Republic of Venezuela. Execution of the sector component will be the responsibility of HIDROVEN, the coexecuting agency, through a program executing unit (PEU-NIC). The components involving the integrated management services contract and rehabilitation works for HIDROLARA's systems will be executed by the management company (coexecuting agency) through a coexecuting unit to be created specifically for that purpose.

B. Method of execution

1. Program executing unit at HIDROVEN

- 3.2 The PEU-NIC will be set up at HIDROVEN under the supervision of its president. The PEU-NIC will have the following functions: (i) contracting of consulting services and issuing calls for bids on equipment for the technical assistance and training needed for regulatory framework design and development; (ii) supervision and evaluation of consultants hired; (iii) preparation and presentation of progress reports on the implementation of the regulatory framework and decentralization program and administration of its execution; (iv) general program coordination and supervision; and (v) presentation of the program's consolidated financial statements. It should be noted that the terms of reference for the studies and the results thereof will be approved by the National Commission for Water and Sanitation Sector Development (CNDAPS) (see paragraph 3.7).
- 3.3 The PEU-NIC will be headed by a general manager, who will be assisted by legal and institutional experts for matters related to the regulatory framework. In the administration of the program, the general manager will be assisted by consultants, support staff, and the necessary resources hired for this purpose in addition to HIDROVEN's permanent staff.

2. HIDROLARA program coexecuting unit

- 3.4 The components involving the integrated management services contract and rehabilitation works will be executed by HIDROLARA (HL) through the program coexecuting unit (PEU-HL). This unit will hire all of the consultants, carry out all of the rehabilitation works and equipment procurement included in the program.
- 3.5 The PEU-HL, with participation from HL's project department, will be responsible for overseeing execution of the technical studies. The company already has the preliminary terms of reference for the

studies and is preparing the bidding documents for the respective calls for proposals.

C. Status of program preparation and mechanisms for execution of program components 5/

1. Sector component

a. Design and development of the regulatory framework

- 3.6 As part of the sector transformation process, the authorities will issue a decree (probably in mid-January 1997) containing the initial actions involving the regulatory and institutional framework for the sector during its transitional stage. These actions will be aimed at separating the regulatory functions from the service delivery functions and at continuing the process of decentralizing to local companies.
- 3.7 As provided for in the decree, the CNDAPS will be established with the following membership: representatives from the Ministries of the Environment, Health and Social Welfare, Industry and Commerce, CORDIPLAN, and the National Council of Mayors. This commission will be supported by a technical secretariat, in which capacity HIDROVEN will serve. The commission's functions will be to consider proposals for reform prepared by the technical secretariat and to develop mechanisms for deepening the decentralization process.
- 3.8 One of the first actions to be carried out by the technical secretariat and the commission will be analysis and implementation of the HIDROVEN-drafted policy guidelines for the sector reform program. The draft guidelines agreed upon with the Bank can be found in Annex III-2.
- 3.9 In addition, the commission and the technical secretariat will review the preliminary outline of the regulatory framework for the sector developed by a consulting firm. As part of the proposed operation, studies will be conducted - to be cofinanced with the World Bank - to support the commission in its analysis of the proposed outline and to recommend necessary modifications. In addition, control, supervision, and regulatory mechanisms will be designed for the transitional period until the new regulatory agency is in place, and the bill establishing the permanent regulatory framework will be drafted. It is estimated that the bill will be presented to the Congress at the end of the first year of execution of this component. HIDROVEN has prepared preliminary terms of reference for these studies.

5/ The program's logical framework appears in Annex III-1.

- 3.10 A review of the draft decree and guidelines submitted by the authorities show that the regulatory process instituted for sector reform is modern and suitable.

b. Support for the decentralization program

- 3.11 The main objective of the decentralization subcomponent is to conduct all the studies and activities needed for the decentralization of up to four additional integrated water supply systems. The PEU-NIC at HIDROVEN will carry out this subcomponent with support from the pertinent regional water company. Access to nonreimbursable resources for this component will be subject to:

- (i) The establishment of an autonomous local stock company that would be responsible for delivering and administering the services provided under the respective system.
- (ii) Provision of working capital by the regional government and municipalities for the startup of the new company equivalent to at least 10% of the proposed technical cooperation support or the equivalent of three months of operations, whichever is greater.
- (iii) The commitment to adopt cost recovery and financial self-sufficiency practices and to promote private-sector participation.

2. Integrated management services company for HL

- 3.12 As mentioned above, an integrated management services contract will be executed with a private-sector operator for a period of four years, for the purpose of ensuring that the program's objectives to improve HL's service are achieved. The management company will be responsible for overall operation, services, technology transfer, and control and follow-up related to works to be executed under the Bank-financed program, and for fulfillment of the efficiency indicators set forth in the performance contract. HL's shareholders and board of directors will continue to be responsible for strategic decisions and will supervise the progress of the integrated management services company (IMSC) through a supervisory committee (paragraph 3.18).
- 3.13 The management company will undertake commitments in the following areas:
- a. Management of operations, including implementation, supervision, and maintenance of systems and service delivery methods;
 - b. Business management, for the purpose of optimizing collections and controlling spending, modernizing business methods and

procedures, updating and maintaining the registry of users, and improving business operations and making them more efficient;

- c. Administrative management, including development and implementation of budgetary techniques and adoption of modern and efficient administration and supervision methods;
 - d. Financial management, with analysis of financial needs and related recommendations, while focusing attention on and obtaining access to more appropriate sources;
 - e. Legal management, in particular with regard to relations with suppliers and contractors, auditors, the regulatory and supervisory authority, and other responsible authorities, including users.
- 3.14 The management contract will include the requirement that HL be provided with specific advisory services to improve its abilities in resolving any short-term organizational, operational, and managerial problems that may arise.
- 3.15 With resources from the technical assistance service program (loan 606/OC-VE), in late February 1997, a consulting firm will be hired to take charge of the IMSC contracting process. The terms of reference for this activity have been agreed upon with HL. The process is expected to begin in early 1997 with expressions of interest and a short list being prepared at the beginning of the second quarter of 1997. The entire process will be completed in late 1997. It should be noted that several international private operators have already expressed interest in submitting bids. One of the responsibilities of the consulting firm in charge of the process of hiring the management company will be to generate interest among other international firms to promote competition for HL's integrated management services contract.
- 3.16 The integrated management services contract with a private operator must be presented as a condition precedent to the commitment of resources for the second group of rehabilitation works. For the continued commitment of resources for the third group of works, the efficiency indicators for the first year must have been met and, on the basis of new projects, revised indicators agreed upon with the Bank.

a. Performance contract

- 3.17 As a complement to the IMSC contract, a performance contract will be signed by HL and its shareholders detailing the responsibilities of each of the parties. The performance contract will be the instrument by which the shareholders and the Bank can evaluate progress in project execution.

3.18 The performance contract will incorporate the efficiency indicators that HL must satisfy annually during the project execution period. In addition, the following commitments will be included:

- a. The counterpart resources needed for project execution will be included in the appropriations in the respective budgets of the municipalities and state government and the resources will be transferred on a timely basis;
- b. If there is a shortfall of funds in the course of project execution, the contributions needed to overcome such a situation will be made;
- c. A single rate base will be established for the entire state of Lara, high enough to achieve the various self-sufficiency goals;
- d. HL is to be given autonomy in its management, including hiring of staff; a mechanism for compensating staff when goals are met will be created and actions will be taken when the desired performance is not achieved by the entire staff;
- e. HL will be given autonomy in business matters, including meter reading and billing, rate increases, and service cutoffs for nonpayment, even in the case of shareholders.

3.19 The performance contract will cover a period of at least four years. To ensure the success of this contract, a supervisory committee will be set up comprised of representatives from each of the parties (government, municipalities, and company). In addition, external auditors will assess the extent to which goals are met. The supervision reports will be sent to the Bank. On the basis of the annual evaluations, the supervisory committee will meet to propose the necessary changes, if applicable, to make it possible to reach the original goals.

3.20 During the analysis mission, a special meeting of HL's shareholders was called to discuss the content of the performance contract (including indicators proposed by the project team) and the IMSC contract. The shareholders approved both proposals. The ratification of the performance contract by the municipal councils is a condition precedent to the first disbursement of the IMSC contract and rehabilitation works components.

3.21 Efficiency indicators agreed upon with the Bank on a preliminary basis are shown below.

Table III-1. HIDROLARA's efficiency indicators

Indicator	1996	1997	1998	1999	2000	2001	2002
Financial indicators							
Operating ratio	151	78	73	71	61	59	58
Coverage of operating costs including depreciation on program assets (%)	66	100	100	100	100	100	100
Coverage of depreciation on assets transferred (%)	-	21	26	27	33	38	41
Debt coverage ratio (times)	-	-	-	-	4.9	4.0	4.0
Rate of return ^{6/}	-	-	-	-	-	-	-
Contribution to the investment program (%)	-	0.4	0.4	0.4	3.0	6.8	19.9
Accounts receivable (months)	5	4	4	3	3	3	3
Users billed (%)	57	66	73	79	84	87	90
Fund surplus or deficit (US\$ 000s)	-1,725	521	4,328	4,425	3,172	4,724	6,441
Physical indicators							
No. of water hook-ups (thousands)	276	292	313	324	331	338	346
Residential clients with meters (%)	-	14	35	53	54	55	56
Commercial clients with meters (%)	-	32	67	86	86	86	86
Industrial clients with meters (%)	-	95	100	100	100	100	100
Meters installed per year (%)	-	15	38	55	56	57	58
Unmetered water (%)	56.6	53.3	48.4	45.4	41.3	37.8	34.8
Days of rationing per year	20	18	15	10	6	5	5
Cumulative investment (US\$ 000s)	-	9,460	25,522	40,347	42,697	43,968	44,445

3. Rehabilitation works on existing infrastructure

a. Water supply and sewer systems

3.22 This component will be executed entirely through contracts with specialized construction companies. With the sole exception of works in small and rural communities, contracts for the works will be let through competitive bid solicitation, in accordance with the Bank's regulations.

^{6/} To be determined after the technical valuation of assets expected to take place in mid-1998.

- 3.23 Final designs have been completed for all the water supply and sewerage works in larger communities. The Bank has reviewed the designs and deemed them acceptable. The hiring of a consulting firm for works inspection is being considered. The firm will be in charge of monitoring and inspecting rehabilitation works.
- 3.24 The rehabilitation works in small and rural communities involve a large number of simple, independent low-cost works in scattered locations. They will therefore be contracted out to specialized contractors previously approved by and registered with HL. In no case will these works exceed the equivalent of US\$100,000. Contracts will be let through a call for a minimum of three offers from registered contractors invited to submit bids.
- 3.25 HL is preparing the inventory of works in small and rural communities in order to prepare the projects and cost estimates, which are expected to be completed in the course of 1997. The Bank reviewed an indicative sample of six projects, with a cost equivalent to 17% of the total cost of this component, and deemed them acceptable. These works will be submitted to the Bank for approval in packages with a minimum value of US\$500,000. The eligibility criteria for these works are as follows: (i) creation of an entity responsible for the rural water system, in accordance with the results of the studies conducted under the HL institutional component; (ii) agreement signed by the entity and HL with commitments to: (a) pay HL a fee for the supply of water in bulk if the production system is operated by HL; and (b) the entity will be responsible for covering the distribution system operation and maintenance costs; and (iii) the system rehabilitation costs may not exceed US\$50 per hook-up.

b. Unmetered water reduction

- 3.26 Both master- and house-metering will be carried out under contract. The locations of the master meters to be installed have already been identified and the technical specifications prepared. Their procurement and installation will be performed by a single contractor. The bidding documents are being prepared. The PEU-HL will inspect the works with support from technical staff at HL and the operating companies.
- 3.27 The procurement and installation of house meters will also be contracted out to a single firm in order to guarantee uniformity and the quality of the works and equipment warranties.
- 3.28 The PEU-HL will be responsible for overseeing meter installation through an inspection firm to be hired. It will also be responsible for maintaining a registry of new hook-ups and meters installed, and this information will be reported daily to the Commercial System Property Records Office for the purposes of registration and so that meter reading and billing based thereon can begin.

D. Flow of funds

- 3.29 The resources allocated to finance the design and development of the regulatory framework will be transferred from the government to HIDROVEN in the form of a grant.
- 3.30 The loan proceeds to finance the HL components will be deposited in a trust and transferred by the borrower on a reimbursable basis. The nonreimbursable counterpart funds from the central government, the municipalities, the state government, and HL will also be deposited in the trust. The subloan between the central government and HL will be subject to the same terms as the Bank loan, with a variable interest rate calculated by the Central Bank of Venezuela on the basis of the average lending rate of the country's six largest commercial banks. Presentation of the signed agreement for the transfer of the subloan to HL and of the trust agreement and operating conditions will be a condition precedent to the first disbursement.

E. Program supervision

- 3.31 The Country Office will supervise the program with support from the project team. This process will include joint annual meetings of HIDROVEN, HL, and the Bank beginning 12 months from the start of the program. These meetings will be held by February 28 of each year and will review the results obtained during program execution, including: (i) progress in the implementation of the regulatory framework; (ii) progress in implementation of the recommendations arising from the studies involving HL's institutional development; (iii) evaluation of fulfillment of HL's financial and operating indicators; (iv) rate of advance in the implementation of the decentralization program; and (v) water quality indicators to be published quarterly (see section IV-B.2).
- 3.32 Within 15 days prior to the supervision meetings, HIDROVEN and HL will submit the reports required for the meetings on the basis of the aforementioned issues.
- 3.33 The Bank will monitor fulfillment of these requirements. If their status is not considered satisfactory at the above-mentioned meetings, the borrower, through the coexecuting agencies, will have 60 days from the date on which the Bank expresses its reservations to submit the corrective measures it proposes and the timetable therefor.

F. Execution period and investment timetable

- 3.34 The disbursement period for the loan proceeds has been estimated at three years from the entry into force of the loan contract. This time frame is deemed sufficient for the calls for proposals and awarding of contracts for the works and the execution thereof to be

completed and for the technical assistance activities to be performed.

- 3.35 The following table summarizes the investment timetable for the program. Region 3's technical files contain a detailed schedule.

PROGRAM INVESTMENT TIMETABLE (in US\$000s)				
YEAR	IDB	LOCAL	TOTAL	Z
1	6,720	9,170	15,890	6
2	12,500	11,360	23,860	40
3	10,780	9,470	20,250	34
TOTAL	30,000	30,000	60,000	100
%	50	50	100	

G. Procurement procedures and bidding schedule

- 3.36 The procurement of goods and related services and the letting of contracts for construction works are to take place in accordance with the procedures set forth in Annex B to the loan contract. International competitive bidding will be required for procurement of goods and services in excess of US\$350,000 and for construction in excess of US\$3 million. These thresholds are justified since foreign bidders have competed for similar projects in Venezuela only when the amounts involved exceed these levels. Procurement in amounts under the specified thresholds will take place pursuant to national legislation, which requires competitive bidding for procurement in excess of US\$400,000 for works and US\$150,000 for goods, and limited bidding for lesser amounts. The rehabilitation works will be tendered in packages, within a single call for bids. The bidders will therefore be permitted to submit proposals contingent on contracts for some or all of the packages up for tender. In this way, the bidding will attract larger construction companies, without limiting participation by smaller ones. In all cases, contracts will be awarded individually, jointly, or by group on the basis of least combined price per package.
- 3.37 For the procurement and installation of master and individual metering equipment, a single call for bids is planned so that the equipment will be uniform, thereby making maintenance easier.
- 3.38 Consulting services contracts will be awarded in accordance with the procedures set forth in Annex C to the loan contract. Annex III-3 contains the procurement plan.

H. Recognition of expenses

- 3.39 HL has requested that the Bank recognize, as the local counterpart costs, up to US\$250,000 incurred since June 1996 in connection with the hiring of consultants and the procurement of equipment used to prepare the program. The consultants were hired on the basis of procedures similar to the Bank's. It is recommended that the Bank recognize the aforementioned amount as local counterpart resources.

I. Advance of funds

- 3.40 Given the characteristics of the program, its wide coverage, and geographical distribution, it is recommended that the equivalent of 10% of the loan be advanced to ensure that funds are available to meet payments as they come due.

J. Maintenance of works and equipment

- 3.41 Once the works have been constructed, ownership will pass to HIDROLARA, which will be responsible for operating and maintaining them in a technically appropriate way. For these purposes, the works to be built under the program will be incorporated into the respective systems, whose operation and maintenance is currently performed under contract by private operators that have the necessary capacity to operate the new works.
- 3.42 To ensure that the program works are properly operated and maintained, it is recommended that the loan contract stipulate the borrower's obligation to include in the performance contract to be signed by HL, the municipalities, and the government of the state of Lara, the requirement that acceptable levels of operation and maintenance be carried out and that HL submit to the aforementioned authorities annual operation and maintenance reports on the systems under its management, for a period of 10 years, starting from the second year of loan eligibility.
- 3.43 HL will submit to the Bank, within the first 120 days of each year, beginning in the second year of program execution and continuing as long as the contractual obligation exists vis-à-vis the municipalities and the state government, a copy of the reports distributed to these authorities, including evaluations of the reports and a description of the actions proposed to correct any deficient situations.

K. External audit

- 3.44 The consolidated financial statements for the program and HL will be submitted by HIDROVEN to the Bank during the program execution period. They must have been audited by a firm of independent public accountants acceptable to the Bank. These statements will be submitted within 120 days after the end of HIDROVEN's and HL's fiscal year and will include the evaluation of the management

indicators developed for HL. HIDROVEN will be in charge of consolidating the program's financial statements prior to the audit by the aforementioned firm. The cost of the audit is included in the program with Bank financing to strengthen the independence of this activity and ensure the timely availability of funds.

L. Environmental impact

3.45 The Environment Committee, at its meeting of October 17, 1995, classified this as a Category III operation. The CMA considered the program's environmental summary on October 22, 1996, and the recommendations made were incorporated into the program design. The most significant are:

- a. In the bidding documents and conditions, include the mitigation measures related to the works, which appear in section VI of the environmental summary;
- b. In the Bank's semiannual progress reports, cover the rate of advance and fulfillment of the mitigation measures recommended in section VI of the environmental summary; and
- c. During design of the component to implement the sector's regulatory framework, prepare mechanisms that will allow the companies that operate the systems to: (i) identify and propose an action plan for environmental liabilities identified; (ii) prepare an environmental quality control system for new works to be constructed.

M. Natural disasters

3.46 The project area is subject to seismic activity and high-intensity rains. The rehabilitation works proposed under the program have been designed on the basis of earthquake-resistant and flood-prevention technical specifications consistent with the design specifications of the original facilities. During the construction of the works, necessary measures will be adopted, in particular with regard to flood prevention in work areas.

N. Ex post evaluation

3.47 The executing agencies have decided against conducting an ex post evaluation. It should be noted that the estimates of the financial and operating indicators in the performance contract will provide a way to evaluate whether or not the program has reached its targets. Follow-up will be conducted by the project team to verify this component's progress and implementation of the sector component.

IV. INSTITUTIONAL EVALUATION OF PARTICIPATING ENTITIES

A. HIDROVEN

1. Background

- 4.1 According to its by-laws, HIDROVEN's main functions are: (i) to carry out policies and programs established by the MARNR on water supply and sewage collection and treatment; (ii) establish guidelines and policies for development of the sector; (iii) coordinate the administrative, technical, and legal arrangements related to the sector restructuring process; (iv) follow up on regional companies so that they can become financially self-sustaining; (v) foster the transfer of services to regional entities; and (vi) assist in the raising of funds for sector investments. As a shareholder of the EHRs, it may propose their merger, association, restructuring, or liquidation.
- 4.2 As the above shows, the functions are consistent with those of an agency attached to the central organizational structure of the Ministry of the Environment and Renewable Natural Resources (MARNR). Although such a formula was adopted to minimize the impact and breakdown of the government function over the proposed functions, HIDROVEN's management has been affected by political interference generated at various levels and external conditionalities that the corporation designation was intended to overcome (budgetary and administrative constraints, inflexible management, lack of clear policies).
- 4.3 To a large extent, this is the result of a sector structure that is not self-sufficient (economically or in decision-making) and which was designed to be temporary. The lack of autonomy of the central administration's agencies has therefore not been resolved either. By being part of and attached exclusively to the MARNR, HIDROVEN's capacity to act on the other agencies involved in the sector has been limited.

2. Reform of HIDROVEN

- 4.4 During the transitional phase of implementation of the new regulatory framework, HIDROVEN is expected to become the technical secretariat of the National Commission for Water and Sanitation Sector Development (CNDAPS). In this role, HIDROVEN's functions will include conducting an analysis of the various proposals on the new institutional and regulatory framework and continuing to carry out activities involving planning and technical assistance to regional water companies (EHRs). Among the sector organizations being considered is the possibility of making HIDROVEN the national regulatory agency.

- 4.5 To fulfill its new responsibilities and overcome the aforementioned weaknesses, the proposed program includes a technical assistance component to support HIDROVEN in the formulation of institutional proposals and in the required analysis of the various proposals. Once the new regulatory framework has been developed, HIDROVEN's resources will be transferred and/or trimmed so that the new entity can begin the following stage without labor liabilities. The program includes training for the new agency to be able to fulfill its new functions.

B. HIDROLARA and its predecessor

1. Background

- 4.6 Since 1990, when Venezuela reorganized water supply and sanitation service delivery, there have been two agencies in charge of delivering the services in the state of Lara: first HIDROCCIDENTAL (HO), through its Lara branch office, and then HIDROLARA (HL).
- 4.7 HO began providing services in 1990 with a central corporate organization headquartered in Barquisimeto and branches in the states of Portuguesa and Yaracuy. Each of these offices was totally independent in terms of operation and maintenance, while the business and financial functions were centralized through Barquisimeto, where the Lara branch, in charge of operations for the state of Lara, was also located.
- 4.8 In the context of the national government's decentralization policy, studies were begun in 1992 to improve service in the state of Lara and focused on setting up an autonomous company and creating the conditions to improve operations and business management so that the new company could become self-financing. In October 1994, HIDROLARA was formed. Its board of directors is comprised of nine members: four directors for the state of Lara, appointed by the governor; two directors for the Municipality of Iribarren, appointed by the mayor; one director appointed by the other shareholders; and two directors representing employees chosen in accordance with the Labor Act in force.
- 4.9 The startup of HL was delayed because of institutional problems, in particular difficulties with the termination of Lara branch staff. HL began functioning as a company in April 1996, gradually increasing its operations in a transfer process that was completed in August 1996 with the transfer of the operating systems.

2. The Lara branch

- 4.10 The Lara branch office had a traditional organization with offices for administration and finance, marketing, operation and maintenance, and planning. An evaluation of its management performance follows:

- 4.11 **Quality of service and coverage:** In late 1995, average coverage of water and sewer service for the population in the state serviced by the Lara branch was 78% and 56%, respectively. Coverage varied for water supply from a maximum of 96% in Cabudare to a minimum of 65% in rural areas; and for sewer service, from a maximum of 87% in Cabudare and Carora to a complete lack of this service in rural areas. Failings in the business and operations systems, including the absence of metering and water quality control, resulted in a high rate of unmetered water, ranging between 55% and 60% in late 1995 estimates.
- 4.12 HL will provide temporary control over water quality until the sector regulatory framework is implemented and the sector authority is delegated to perform this role by the Ministry of Health and Social Welfare (MSAS). At the request of HL, the state university will conduct chemical analyses of the water and will report to the MSAS directly regarding relevant parameters such as chlorine, fecal coliform, and turbidity. HL undertakes to publish the results of the analyses in the newspaper with the largest circulation in Barquisimeto on a quarterly basis and to notify the population immediately if there is anything in the water that would make it unfit for human consumption.
- 4.13 **Operating and business practices.** Systems operation and maintenance was performed under short-term service contracts with local "operators". The contracts were not based on performance standards but rather on the provision of a certain number of employees and equipment at a specific unit cost, without responsibility for the results related to cost or performance. The large number of contractors made it impossible for HL staff to supervise them properly which, with the general delays in paying contractors, resulted in a low-quality, high-priced operating system.
- 4.14 For several years, the Lara branch's business function was performed under service contracts with an operator in charge of billing and in complete control of these operations and the inventory of users. The lack of supervision, late payments, and absence of review of the contractual terms resulted in a collection rate of about 50% of the amount billed and a corresponding increase in accounts receivable. There were also large numbers of unregistered users, estimated at 117,000 by the end of 1995.
- 4.15 **Staff.** At the end of March 1996, SL had 268 regular staff and 646 people working in the operating companies. With 125,200 water customers at that date, the ratio was 7.3 employees per 1,000 customers, which is high when compared with well-managed companies. There was a lack of high-level, skilled staff and an overabundance of mid-level and unskilled staff.
- 4.16 **Financial performance.** The Lara branch's accounting and financial information systems exhibited serious shortcomings and practically ceased to exist during the first half of 1996. As part of program

preparation, an accounting paper was drafted. It indicates that in 1995, the Lara branch invoiced a total of 121 million m³ of water with a value 7/ of US\$7 million, i.e., an average rate of US\$0.06 per m³ (BS 17 per m³). These revenues represented only 58.4% of operating costs, not including depreciation. Of the total amount invoiced (US\$7 million) plus accounts receivable in early 1995 (estimated at US\$2.6 million), an estimated US\$5.6 million was collected which, added to central government transfers of US\$2.3 million, were insufficient to cover cash requirements. Consequently, accounts payable increased by US\$4.4 million, particularly in electricity and contracts with operators.

- 4.17 The reasons for the Lara branch's mediocre financial performance are: (i) absence of clearly identified operating objectives, autonomy, and assignment of responsibilities; (ii) deficient planning and control; (iii) low rates and financial dependence on the central government; (iv) insufficient qualified technical and upper-management staff as well as uncompetitive wages vis-à-vis the private sector, and overstaffing at the lower levels; (v) a high level of unmetered water and inadequate business system; (vi) deficient accounting and financial information system; and (vii) low level of infrastructure maintenance, which has affected the quality and reliability of the service.

3. HIDROLARA and reforms in progress

- 4.18 With the support of external consultants, HL has been preparing to take control of service delivery in the state. Priority has been given to organizing the company in a context of downsizing permanent and contract staff. A system is being developed for contracting operators that will promote competition and measure and monitor performance. A census has been conducted of part of the inventory of users. Service is beginning to be cut off for unpaid bills and rates have been increased. The success of this action is shown in the following comparative table.

7/ All monetary figures are expressed in constant December 1995 values.

COMPARATOR	Lara branch at 12/31/95	HL at 09/30/96
Number of permanent employees	268	108
Number of employees of operators	646	482
Number of users	125,196	157,600
Number of users counted	0	58,000
Average rate/m ³ of water (bolívares)	17	50
Monthly billing (millions of bolívares)	88.3	253.2
Monthly payroll (millions of bolívares)	20.5	10.4
Employees per 1,000 customers	7.3	3.7

- 4.19 In addition, HL began its operations without payroll or long-term liabilities.
- 4.20 Despite these achievements, scarce resources and the urgency over the last eight months of setting up the company have generated problems in the structure and operations. HL is organized basically like its predecessor and the assignment of functions is still not adequate; there are no procedures to guarantee control over the activities performed in the operational areas and the operators hired for operation and maintenance, the information systems have been partially incorporated or are incomplete, there are even inconsistencies between the financial and business information, and a lack of financial programming functions.
- 4.21 In the context of the program, the company will continue to be improved through an integrated management services contract with a private sector company. Under this plan, which is expected to begin during the first year of execution, the private operator will provide high-level, technical, business, and administrative management, install needed systems and procedures, train staff, and be responsible for fulfillment of operating and financial management indicators.
- 4.22 In addition, the technical assistance component of the program includes specific actions to resolve problems that urgently require solutions or that are necessary and independent of the institutional strengthening work that will be done by the management firm (see chapter II.B.3).

4. Rates

- 4.23 The Municipal Regulations Act makes municipalities responsible for approving rates on the basis of nationally set policies. For water companies under the HIDROVEN umbrella and state-owned companies that receive resources from the national government, the rate policy is established in Resolution 304 issued by the Ministries of Development and Environment and Natural Resources. This resolution applies to HL since it will receive part of the program's counterpart national resources. The resolution has two basic

policy considerations: (i) a level of coverage that requires operating cost recovery and coverage of debt service and rehabilitation and expansion plans; and (ii) a polynomial formula that makes it possible to adjust rates automatically for inflation. The first of these considerations is reproduced in the service concession agreement between the municipalities and HL and the second in a performance contract between the same parties which will govern performance of the concession and the responsibilities of the parties.

- 4.24 The concession agreement establishes that the rate base may be revised once a year on the basis of a cost analysis and investment needs to ensure efficiency and profitability. Once the base is established, the polynomial formula in the performance contract is applied automatically to maintain the rates at real values. This system is adequate except for the following limitations: (i) rate reviews are scheduled on the basis of time (once a year) instead of allowing for adjustments as needed to meet financial indicators or objectives; and (ii) the concession agreement also establishes a consultative process for the rate base review in which the municipal councils and community boards participate. To resolve this situation, HL will ask the Municipalities (mayors and councils) for authorization to review the rate base as often as required by variations that impact on fulfillment of the financial management indicators set out in the performance contract and to implement the revised base after it is approved by the company's board of directors.
- 4.25 During preparation of the program, rates rose from BS 17 in December 1995 to BS 50 in September 1996 (an increase of 190%) and will continue to be increased 10% monthly. Nevertheless, additional increases will be necessary to set the average rate for 1997 at a real level of approximately BS 107. This level should be high enough to cover operating costs and to allow a positive flow of funds after payment of other costs. The studies conducted on willingness to pay during program preparation indicate that it is possible to reach the aforementioned level.

V. PROGRAM FEASIBILITY AND RISKS

A. Technical feasibility

- 5.1 The program being proposed provides a comprehensive and rational solution to: (i) support the modernization and development of the service operator in the state of Lara; (ii) improve and rehabilitate over the short term the existing water supply and sanitation systems, enhancing them substantially and reducing the risks of system flaws and service interruptions; and (iii) prepare studies to plan the future expansion of the services, to make it possible to cover investment needs for a subsequent stage.
- 5.2 The design of the program and actions being proposed are the result of careful studies that centered on the formulation of the most appropriate strategy for reorganizing and reactivating the sector, in light of the current situation and the institutional changes that have occurred over the last few years.
- 5.3 The various program components were designed by HL's and HIDROVEN's project preparation units with support from specialized consultants. The proposed designs and studies are consistent with the technically and financially most appropriate alternatives to resolve the main service deficiencies and to reduce the systems' vulnerability to collapse or service interruption as a result of flaws in the facilities.
- 5.4 The cost estimates were sufficiently detailed and were made on the basis of unit cost analysis and updated price information. Based on the review performed, the program's estimated costs are deemed to be reasonable and appropriate.
- 5.5 The support that this program will provide the government in its reorganization and institutional strengthening of the sector are essential to the establishment and implementation of modern and efficient procedures and standards for sanitation service administration.
- 5.6 The actions to improve the operations of the entity responsible for the services, HIDROLARA, and the rehabilitation of the systems will contribute to making the systems operate as efficiently as possible and to the financial strengthening of the company, which will ultimately lead to more efficient service, with better quality, safety, and reliability.
- 5.7 The programming proposed for construction of works and execution of planned actions has been carefully formulated and is considered suitable.

- 5.8 There are enough construction companies in the country with the experience and capability to execute the program works, which are not very complex, since they involve mostly rehabilitation and improvement of existing facilities. No expansion of the systems is included.
- 5.9 The executing agencies are considered to have sufficient capacity to carry out the program inasmuch as executing units will be set up which will be staffed with consultants in key positions.

B. Institutional and financial feasibility

1. Institutional feasibility

- 5.10 From the institutional perspective, the program seeks to help HL to set itself up as a business on solid commercial foundations. In the past, important factors that prevented such foundations from being laid were weaknesses in management capacity, lack of business autonomy, deficient business systems, and low rates, not to mention an unclear sector framework, all of which resulted in inadequate service in terms of the required investment and operations levels.
- 5.11 The government of the state of Lara and the municipalities have delegated autonomy to HL to operate the water supply and sewer services. Under the program, management capacity is expected to improve through the hiring of a private sector firm with recognized experience, which will be responsible for the integrated management of the company, including the development of appropriate business systems. Rate review, in the context of the Venezuelan municipalities, has often had political overtones. However, a serious attempt to return responsibility for rate adjustment to the operations level has been successful in the state of Lara, where HL has been able to increase its rates 190% and the municipalities have delegated to HL, through the performance contract, responsibility for implementing rates to recover service costs. These approach and policy changes in the management of the services in the state of Lara reflect its commitment to making the program institutionally feasible.
- 5.12 From the standpoint of executing the investments included in the program, most of which will be carried out by contract with the private sector, the required capacity is that related to supervision and coordination of contractors. The program provides for the strengthening of this capacity by organizing HIDROVEN and HL executing units with the necessary consultants.

2. Financial feasibility

- 5.13 The financial projections (see Annex V-1) show that, based on the assumptions agreed upon with company officials, to be reflected in the performance contract's financial indicators, HL's financial situation will improve gradually from 1996 to 2002. Beginning in

1997, revenues are expected to cover operating costs, with depreciation increasing from 21% in 1997 to 44% in 2002. Aside from program investments, the absolute value of depreciation is based on the estimated value of assets transferred from HIDROCCIDENTAL to HL, which might well be overstated given their condition and age. The program therefore includes a technical valuation of the assets in order to adjust their value and introduce a financial rate of return indicator.

- 5.14 At the projected operation levels, an increasing level of internal resources will be generated (from US\$4.4 million in 1997 to US\$9.5 million in 2002), which will cover the entire debt service that begins in 2002 and will make additional funds in the amount of US\$7.5 million available at the end of the program in 1999. In principle, these funds will be used by HL to make additional investments or could be used as a basis for a second stage of the program. These results notwithstanding, a condition of the proposed loan will require that, without the Bank's approval, HL not make additional investments - financed with internally-generated resources - to those in the program during its execution period that involve amounts on the order of US\$100,000 in 1997 and US\$500,000 in the remaining years of execution.
- 5.15 A basic assumption of the projections is the review of the annual average rate that would be more than doubled in 1997 (in the projections, from US\$0.08 per m³ in 1996 to US\$0.19 per m³ in 1997). At the rate of the monthly increases being applied at HL currently, the higher projected level would be reached in April or May 1997. Nevertheless, HL will submit to the Bank, together with the performance contract and as a condition precedent to the first disbursement, a review of its rate base the application of which will prove, to the Bank's satisfaction, that the financial indicators mentioned in the performance contract will be reached. The review of the rate base will basically seek to justify estimated consumption levels used currently in the invoicing of consumers, review the cross subsidization system currently used by HL, and draw up a rate plan that will make it possible to cover marginal costs. The study will be conducted by consultants, under terms of reference agreed upon with the Bank.
- 5.16 **Working capital for 1996.** While the program will begin in 1997, a cash shortfall of US\$1.7 million is projected for 1996 that could slow the company's plans if it occurs. In principle, this shortfall could be covered with short-term loans from commercial banks, to be repaid with surpluses in subsequent years. However, given the importance of working capital to the company's operation, HL submitted a plan in January 1997, acceptable to the Bank, for the provision of this capital for the first six months of 1997.

C. Environmental feasibility

- 5.17 In general, the program will have a positive environmental impact through the rehabilitation of HL's water supply and sanitation systems. However, its implementation could have some localized, short-term negative impact. As a result, during the program's preparation phase, environmental impact assessments were conducted for the rehabilitation works and control actions were prepared for the works to be financed. In addition, the program will include a component to heighten public awareness of the use of water resources. For these reasons, the program is considered feasible from the environmental standpoint.

D. Socioeconomic analysis

- 5.18 The economic feasibility of the component involving minor rehabilitation works on HL's water supply and sanitation works was only studied for projects that generate direct, quantifiable benefits. The execution of the component is essential to increase the available supply of water in the company's service area. In this way, the benefits from the rehabilitation works on the water supply system are estimated on the basis of the rate as a proxy for willingness to pay (WTP) when an increase in the availability of water is generated or existing rationing is able to be reduced. The benefits derived from operation and maintenance cost savings resulting from the systems' rehabilitation are also included.
- 5.19 For the sanitary sewer rehabilitation projects, the benefits are estimated on the basis of the WTP obtained in a socioeconomic survey conducted in Barquisimeto. For the unmetered water reduction projects, the benefits are estimated on the basis of the savings resulting from more efficient water consumption, appraised on the basis of the long-term marginal cost.
- 5.20 In view of the above, the evaluation, from the economic standpoint, fully covers the direct costs of the rehabilitation works program. For the cost-benefit analysis, the financial costs of the projects were corrected to reflect the actual opportunity costs for the economy. For this purpose, conversion factors from the wastewater treatment system project in the Lake Valencia basin, financed by the Bank, were used. Table V-1 shows the incremental gross benefits, the investment costs, the present value of incremental operating and maintenance costs, and the economic internal rate of return (EIRR).

TABLE V-1. INVESTMENT AND ECONOMIC RETURN

(Present value in US\$ 000s)

Project	Investment		Operation and Maintenance		Benefits		Net present value	EIRR (%)
	Finan.	Econ.	Finan.	Econ.	Cost reduction	In-creased flow		
Macuto system rehabilitation	817	503	1,707	2,279		3,909	1,127	43.3
Barquisimeto pumping stations	269	159	60	38		717	520	57.2
Tank improvements - Barquisimeto	663	420	147	94		1,010	496	29.0
Tank improvements - Cabudare	108	68	24	15		252	169	46.4
Tank improvements - Quibor	45	28	10	6		95	61	41.8
Tank improvements - Carora	82	52	18	12		126	62	29.4
Sectoring Barquisimeto networks	216	166	49	31	199	86	88	19.9
El Tocuyo pumping station	193	125	124	143	27	663	422	58.7
Sewerage rehabilitation	3,250	1,953	620	459		2,688	276	14.2
Villa Rosa system	130	81	108	130		316	105	20.9
Unmetered water	10,510	13,938	2,396	2,036	30,873		14,899	75.2
Total	16,283	17,493	5,263	5,243	31,099	9,862	18,255	48.8

5.21 According to the data obtained, the estimated EIRR for rehabilitation works is approximately 49% with a net present value of US\$21.3 million, which demonstrates the project's feasibility. A sensitivity analysis was conducted to establish how robust the results obtained were. The results indicate that, with the exception of the rehabilitation of the sewer system in the central core of Barquisimeto, significant changes in the benefits and costs would be needed for the projects not to be profitable. The program is therefore considered sound and feasible.

E. Risks of the operation

5.22 The main risks that could negatively affect the operation are:

- a. Lack of interest on the part of international firms regarding the integrated management services contract and high bids due to perceived risk. To make participation more attractive to such firms and decrease the perception of risk, the program will use Bank resources to finance the fixed component of the payment to the firm for the first three years of the contract.

- b. Counterpart resources are not transferred on a timely basis. This risk is minimized by the support that has been received from the regional and municipal governments in the process of setting up the company; by reducing the country's financial restriction associated with recovery of fiscal accounts and resources of the World Bank financing and allocation of counterpart resources in 1997 from the treasury's ordinary resources.
- c. Lack of consensus on the sector profile by the various institutions involved in service delivery. To reduce this risk, technical assistance will be included and a series of special workshops will be held to provide an opportunity to discuss the details of the proposals submitted and the consequences on the future development of the sector.
- d. Absence of political support at the highest levels for adoption of the legislation needed to implement the regulatory framework. To ensure that sector reform will have the support required for the necessary changes, the National Commission for Water and Sanitation Sector Development will be set up with representatives from the various institutions involved in the sector. This commission's functions will include considering and approving the various sector restructuring proposals and fostering political support for approval of the new regulatory legislation.
- e. Insufficient interest on the part of the regional and local governments in the service decentralization and transfer process. To mitigate this risk, HIDROVEN has established a Decentralization Committee in charge, among other things, of informing local governments about the decentralization process. In addition, to participate in the program, local authorities shall undertake to set up an autonomous enterprise that will be in charge of delivering the service and to grant working capital for the necessary studies.

LOGICAL FRAMEWORK

WATER SUPPLY AND SANITATION SECTOR PROGRAM IN VENEZUELA
VE-0056

OBJECTIVE	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
GOAL: Improve the quality of life of the Venezuelan people			
PURPOSE: Deliver quality water supply and sanitation services under a long-term, self-sustaining institutional arrangement			
PROJECTS: P1. Implementation of the regulatory framework and decentralization of the service	<ul style="list-style-type: none"> Legal framework designed and implemented. January 1999 Institutional framework designed and in the process of being set up. January 1999 Decentralization program designed and in the process of being executed 	Official Gazette of the Republic Reports of the National Commission for Water and Sanitation Sector Development	
P2. Institutional modernization of HIDROLARA	Integrated management services company (IMSC) hired Performance contract signed Water supply and sanitation systems rehabilitated	Annual reports of the project executing unit submitted to the IDB	
<p align="center">Project 1 Implementation of the sector regulatory framework and decentralization of the service</p>			
GOAL: Delivery of quality water supply and sanitation service under a long-term, self-sustaining institutional arrangement			
PURPOSE: Establishment of a sector structure for self-regulation and services delivered efficiently by decentralized companies	Service coverage ratios throughout country Unmetered water ratios Rates Customer service	MARNR reports	Regulatory agency operating successfully

OBJECTIVE	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
COMPONENTS:			
C1. Regulatory agency designed and in operation	Stage I: - Supervision and control mechanisms in place: July 1997 Stage II: - Regulatory agency operating: January 1999	Official Gazette of the Republic	
C2. Planning, technical assistance, and financing function designed and in operation	Function designed with agency to which it will be attached, level of organization and profiles of staff that carries it out. October 1997	Official Gazette of the Republic	
C3. Interinstitutional mechanisms for the operation of the sector designed and running	Stage I: July 1997 Stage II: January 1999	Reports of the CNDAPS	
C4. Regulations that govern behavior of sector operators and users designed and in effect.	Stage I: July 1997 Stage II: January 1999	Official Gazette of the Republic	
C5. Proposals for decentralization and transfer of service designed and implemented	Investment project submitted to multilateral banks	Public-sector borrowing act	Projects approved by multilateral banks
C6. Institutional development projects for companies to be decentralized	Implementation of institutional development plan and rehabilitation of companies' physical systems		
Project 2 Institutional modernization of HIDROLARA			
GOAL: Delivery of quality water supply and sanitation service under a long-term, self-sustaining institutional arrangement in the state of Lara	1. Reliable service 2. Potable water supplied is within the minimum WHO water quality parameters (color, turbidity, bacterial count, hardness)	Ministry of Health and Social Welfare. State and municipal governments' records of claims. Reports of regulatory agency	

OBJECTIVE	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
PURPOSE: Modernization of HIDROLARA and rehabilitation of physical water supply and sanitation systems in state of Lara	<ol style="list-style-type: none"> 1. Financial: Operating margin Improvement of 61.2% and coverage of 100% of operating expenses Accounts receivable equivalent to no more than three months of billing Rates and billing 33.5% coverage of depreciation of assets transferred to HL Billing of 84% of users Debt coverage ratio of 4:1 and investment coverage ratio of 3.3:1 2. Physical: Days of rationing: six Reduction of unmetered water to 41.3% Incorporation of 81,000 unregistered hook-ups into the business system Improvement of service conditions for 331,000 users 	<p>HL's financial statements</p> <p>PEU's annual reports to the IDB</p>	Regulatory agency operating efficiently
COMPONENTS: C1. IMSC contract	IMSC hired by December 1997 Signature of performance contract by December 1996.	Signed contracts	
C2. Rehabilitation of water supply and sanitation systems includes: 2.1 Well project — Macuto 2.2 Improvements — pumping stations 2.3 Improvements — storage tanks 2.4 Barquisimeto network broken down into sectors 2.5 Supply system — Villa Rosa 2.6 El Tocuyo — pumping station 2.7 Collectors in central core of Barquisimeto 2.8 Alto Tocuyo system 2.9 Carora system 2.10 Network rehabilitation	<p>Wells rehabilitated by December 1997</p> <p>December 1997</p> <p>December 1997</p> <p>A1: 60%; A2: 40%</p> <p>December 1997</p> <p>A1: 20%; A2: 40%; A3: 40%</p> <p>A1: 10%; A2: 50%; A3: 40%</p> <p>A1: 10%; A2: 50%; A3: 40%</p> <p>A1: 10%; A2: 50%; A3: 40%</p> <p>A1: 50%; A2: 50%</p>	Records of HIDROLARA PEU	

OBJECTIVE	INDICATORS	MEANS OF VERIFICATION	ASSUMPTIONS
<p>C3. Technical assistance includes:</p> <p>3.1 Review and implementation of organization, procedures, and accounting systems</p> <p>3.2 Legal regularization of assets</p> <p>3.3 Valuation of assets</p> <p>3.4 Development and training</p> <p>3.5 Dissemination and community awareness</p> <p>3.6 Program to introduce and provide service to smaller communities</p>	<p>Systems and procedures in place by December 1998</p> <p>A1: 50%; A2: 50%</p> <p>Valuation completed in December 1998</p> <p>A1: 20%; A2: 80%</p> <p>A1: 33%; A2: 33%; A3: 33%</p> <p>A1: 17%; A2: 50%; A3: 33%</p>	<p>Records of HIDROLARA PEU</p>	<p>State and municipal governments committed to HIDROLARA project</p>
<p>C4. Studies include:</p> <p>4.1 Water supply and sewerage master plan for state of Lara</p> <p>4.2 Studies to make energy consumption efficient</p> <p>4.3 Plan to optimize drinking water plants</p>	<p>Master plan completed in December 1998</p> <p>Studies completed in December 1997</p> <p>Plan completed in December 1997</p>	<p>Records of HIDROLARA PEU</p>	<p>Availability of IDB resources to begin project in January 1997</p>

POLICY GUIDELINES

WATER AND SANITATION SECTOR REFORM PROGRAM

Since 1990 the Venezuelan government has been endeavoring to restructure water supply and sanitation services with a view to transferring the provision of these services to local governments and to making the companies set up to that end financially self-supporting, in an initial stage, in terms of maintenance and operating costs. Unfortunately, the financial and political difficulties that the country has had to weather in the last few years have delayed the advancement of this process.

In 1994, a sector adjustment program was drawn up establishing the basic components of the strategy for the sector: redouble efforts to decentralize services, optimize the raising of funds by borrowing for the sector and the use of such funds, and strengthen the institutional capacity of the agencies involved. A fundamental device for ensuring the quality and efficiency with which services will be provided after their transfer to local government is the creation of a national regulatory body which, as a means of exercising control over the services, has the power to act as an independent policy-making agency with the capacity to enforce regulations. To that end, the following guidelines for action were established:

- Implement a legal and institutional framework that specifies the roles of the sector's competent authorities, by separating the planning, financing, technical assistance, and regulatory functions from service delivery functions and establishing clear and transparent regulatory mechanisms.
- Transfer service delivery to the municipal level, through operationally efficient administrative management models based on business management principles.
- Support the regional water companies [Empresas Hidrológicas Regionales] (EHRs) and the new decentralized agencies to streamline the service transfer process.
- Promote the sector's financial self-sufficiency.
- Encourage private-sector participation so as to increase investment capacity and promote efficient service delivery.

Institutional and legal framework

The design of the institutional framework and establishment of regulatory mechanisms for the sector will be accomplished in two stages. The first stage will require a decree to be issued that will allow the initial

actions in this area to be implemented. The second stage consists of adoption and implementation of a Water Supply and Sanitation Services Delivery Act.

In December 1996, a decree was issued with the basic objective of promoting the sector reform program and the Water Supply and Sanitation Services Delivery Act, the main actions of which are to transfer the services to the municipalities, separate the regulatory functions from the service delivery functions, and advance the process of transferring service delivery to the local governments in an orderly fashion.

For the purposed of fulfilling the decree's objectives, the National Commission for the Development of the Water Supply and Sanitation Sector would be set up, with an advisory capacity for the Executive Branch, consisting of the Minister of Environment and Renewable Natural Resources, who chairs it, the Ministers of Health and Social Welfare, Development, and for the Central Coordination and Planning Office of the Office of the President, and a representative from the National Council of Mayors. The President of HIDROVEN will act as the commission's permanent General Secretariat. The setup of this commission is expected to ensure the development of sector policies through close coordination among the entities involved in service delivery.

As to the separation of regulatory and operating functions, the aforementioned decree provides for the design and implementation of a regulatory agency responsible for guaranteeing supervision of the service delivery companies - whether centralized or decentralized - during the transitional period until the Water Supply and Sanitation Services Delivery Act is adopted. Once it is, the above-mentioned regulatory agency will be consolidated.

Most of the studies and consulting services needed for the National Commission for the Development of the Water Supply and Sanitation Sector to carry out the functions entrusted to it under the decree will be financed under the national components of the World Bank and IDB programs, as provided for in the projects for the states of Monagas and Lara, respectively.

Transfer of service delivery to the municipal level

To meet the objective of these services being delivered efficiently by the municipalities, with the possible participation of the state governments, the goal proposed is that service delivery of at least half of the EHRs be transferred by the year 2000. To ensure that this process is carried out in the shortest possible time, a specific analysis of each entity's sociopolitical conditions will be conducted for the transfer.

Preferably, the institutional service delivery arrangements to be adopted will be those established in the Municipal Services Act.

- a. State-owned enterprises, the shareholders of which are the local and regional governments. Such enterprises must be operating under contracts with the respective municipalities. These enterprises, in turn, will be authorized to subcontract with third parties for some aspects of service delivery (service contracts).
- b. Private companies required to obtain a concession granted by a municipality or group of municipalities.
- c. Decentralized municipal agencies (e.g. autonomous entities) commissioned by the municipalities. Again, these agencies will be empowered to enter into contracts with third parties for specific parts of the services they provide (service contracts).
- d. Semi-public enterprises whose shareholders will be local and regional governments and the private sector. These enterprises must be operating under contracts with the respective municipalities.

The following features are considered essential requirements for the decentralized management of the services:

- use of economies of scale
- separation of service management and municipal administration accounts
- autonomy in the operations of the service providers
- institutional and financial viability
- linking of municipalities and establishment of associations of municipalities where systems are shared. The association will be set up as an entity to support, assist, control, and regulate certain aspects of service delivery that will be stipulated in the service delivery contracts.
- all service providers will operate under concessions, permits, or delegation of authority from the respective municipalities
- private sector participation
- where fully justified, based essentially on financial criteria, the central government will participate temporarily in service delivery while the physical rehabilitation of the systems is under way.

To date, the following proposals have started to take shape:

- State-owned enterprises, whose shareholders will be state governments and, for the most part, the respective municipalities, in the states of Mérida, Trujillo, Barinas, Aragua, Anzoátegui, Sucre, Portuguesa, Yarcuy, Cojedes, Táchira, and Carabobo. In the case of the municipalities in the Caracas metropolitan area, a service delivery contract will be signed with HIDROCAPITAL.
- Decentralized municipal entities in the Fajardo and Barlovento systems in the state of Miranda; associations will be formed since each system covers several municipalities. For the municipalities of Biruaca, Achaguas, Guadualito and Muñoz (state of Apure), direct municipal management through municipal agencies was proposed.
- Concession, for which competitive bidding will be conducted, in the state of Nueva Esparta, where an association is expected to be created.

These proposals for decentralization of water and sanitation services will be studied in greater detail to ensure that they are financially and institutionally viable, using resources allocated under the national components of the Monagas water project and the HIDROLARA project, the supervision and technical assistance loan (PSAT - financed by the Inter-American Development Bank and the World Bank), and the budgets of the EHRs and HIDROVEN.

To coordinate promotion and implementation of programs aimed at decentralizing the sector and transferring services, HIDROVEN has formed a Decentralization Committee comprised of HIDROVEN's own managers, who will assess the physical and economic viability of the proposals presented.

Technical support for the EHRs and the new decentralized agencies for transfer of services

With regard to the technical support that will be required to prepare the EHRs and the new decentralized agencies for the transfer of services, actions will be aimed primarily at reorganizing their financial, administrative, and legal features:

- Transfer payments from the central government will be reduced to a minimum and made contingent upon the EHRs' efforts. These resources will be earmarked for projects that are completely drawn up and place primary emphasis on systems rehabilitation and improved operations management.
- The employee benefit liabilities arising from the transfer processes will be assumed by the national government. HIDROVEN will work to set up social security benefit trust funds in 1997 for the employees of EHRs that have yet to do so. The estimated total required to complete the transfer process in the rest of the

country is on the order of 37 billion bolívares (US\$7.8 million). Of this amount, some 1.2 billion bolívares have so far been amassed in bank trust funds.

- Meanwhile the government is taking the following steps to pay off liabilities with the electric power sector and is developing a strategy to pay electricity costs in the future:
 - Government bonds will be issued in the amount of 128 billion bolívares (US\$252 million) to pay off the debt all EHRs through 1996.
 - Agreements will be concluded between the public electric power companies and the EHRs, establishing the basic criteria for calculation and payment of electric bills over the period 1997-2001.

Drive toward financial self-sufficiency in the sector

This objective will be achieved in two stages:

(i) Over the short term, all service delivery companies at the central or regional and local levels will be required to cover operation and maintenance costs through internal cash generation; and (ii) over the medium term, all service delivery companies will be required to cover operation, maintenance, and investment costs through own resources. To achieve these goals, the following steps will be taken:

Support for local governments to stimulate the service transfer process:

- Provide technical and financial assistance to local governments to implement an institutional development and rehabilitation program for the systems they manage.
- Extend the electricity rate conditions that currently apply to the EHRs to the decentralized companies.
- Implement the necessary legal arrangements so that the central government is replaced in terms of the rights and obligations of the systems that do not have a service transfer program in place in 1998.

Measures aimed at achieving financial self-sufficiency:

- HIDROVEN will apply the rate regulations in force in order to incorporate the asset and investment replacement components, among others, in the setting of rate levels.

- For those systems that cover operation and maintenance costs, the national government will establish a direct subsidy program for low-income communities, in which subsidized activities and the source of funds are clearly identified.

Rehabilitation of the physical infrastructure and institutional strengthening are expected to be completed during the 1997-2000 period in at least the following states: Monagas, Lara, Mérida, Barinas, Trujillo, and parts of Miranda and the Federal District. By then, rehabilitation projects will have begun in at least eight other states as well. These projects will be financed jointly by the Inter-American Development Bank and the World Bank.

The total investment required for infrastructure rehabilitation throughout the country (except systems administered by CVG) is BS 355 billion (US\$745 million). These investments are to be financed through allocations from the central, state and municipal governments, plus internal cash generation by service providers. The participation and financing of each agency will be carefully analyzed and is to be based on the analyses of financial viability of service providers, the ability of local governments to fund their share, and the socioeconomic conditions of the beneficiary population. In addition, it is hoped that the multilateral lending agencies will finance these investments in rehabilitation and expansion of the systems. The means being devised for effecting transfers from agencies of the central and local governments will ensure transparency in the management and allocation of resources.

Promotion of private-sector participation

This strategy will enable a change in service management over the short term, by increasing investment capacity and the efficiency of service delivery.

The following mechanisms have been proposed: establish other management mechanisms for private-sector participation in addition to those provided for under the Municipal Services Act; establish guidelines on the capacity of future private providers; and establish a transparent system of providers' rights.

PROCUREMENT PLAN

MAIN PROCUREMENTS	FINANCING (US\$000)		METHOD	PREQUAL.	PUBLIC. OF SPN MO/YEAR
	IDB	LOCAL			
Consulting services					
Study on transitional plan and drafting of bill	700		ICB	Yes	02/97
Identification of inv. and economic evaluation	2,980		ICB	Yes	06/97
Institutional support for design of new companies' business systems	1,020		ICB	Yes	02/97
Design of regulatory agency's organizational structure	250		ICB	Yes	06/97
Implementation of sector information system	240		ICB	Yes	06/98
Implementation of rate structures and subsidies	250		ICB	Yes	01/98
Development and implementation of general policies for rural systems		60	LCB	No	09/97
User awareness campaign	800		ICB	Yes	03/97
Engineering designs	290		ICB	Yes	02/97
Hiring of management company	3,770		ICB	Yes	01/96
HL investment plan	1,450	1,060	ICB	Yes	06/97
Civil works					
Potable water rehabilitation works	2,515	5,012	ICB	Yes	02/97
Division of Barquisimeto network	210	380	ICB	Yes	02/97
Sewerage works	1,420	2,320	ICB	Yes	02/97
Goods					
Equipment	740		ICB	Yes	01/97
Individual meters	4,165	3,033	ICB	Yes	01/97
Master meters	410	1,935	ICB	Yes	01/97

ICB = International Competitive Bidding

LCB = Local Competitive Bidding

SPN = Special Procurement Notice

**PROGRAM OF SUPPORT FOR THE MODERNIZATION AND REHABILITATION
OF THE WATER SUPPLY AND SANITATION SECTOR
FINANCIAL PROJECTIONS FOR HIDROLARA (HL)**

A. Performance and general considerations

1. The projections for July-December 1996 and 1997-2002, expressed in constant December 1995 U.S. dollars, appearing at the end of the present annex, were prepared in cooperation with HL personnel in September 1996 using the Bank's SPMOD model. These will be reviewed with HL executives and shareholders during the negotiations as part of the agreement on performance-contract indicators.
2. The figures show that under the assumptions agreed to with its officers, the company's financial position will improve during the 1996-2002 period. Beginning in 1997, revenues will cover all operating costs and a portion of depreciation, and a significant cash surplus will be generated at the conclusion of the program.
3. Following are a number of assumptions and considerations pertaining to the three financial statement projections.

B. Income statement. Revenues

4. Projection of demand. Demand for service was projected on the basis of various studies conducted by HL, plus some limited metering to determine levels of consumption in the different consumer categories. Also taken into account are the effects of reclassification including conversion from subsidized to residential clients, implementation of HL's plans for registering persons with illicit hook-ups (see paragraph 8), and a natural growth factor of 2.2% reflecting the historic rate of increase in the population of Lara. The projection assumes that the number of registered consumers will increase from the total of 157,600 recorded in September 1996, to 311,000 in 2002. This would bring the percentage of registered clients up from the 55% level in late 1996, to 90% of actual users by 2002. Looked at another way, this will thin the ranks of illicit users by an estimated 117,000 between 1997 and 2002, representing a reduction of 19,500 per year. Given the improvement in operations that will result from HL's hiring of the integrated management services company (IMSC), and the fact that HL managed on its own to register a total of 11,000 such users in a seven-month period in 1996, these figures appear doable. Based on this increase in the number of registered consumers, and keeping the level of consumption per user constant over this period, billings are projected to rise from 86 million cubic meters in 1996, to 138 million in the year 2002.

5. The program does not contain forecasts for expansion of new sources of production. Rather, the production needed to meet demand is based primarily on reduction of unmetered water and recovery of the production of some 380 LPS from the Macuto wells in 1997. As of that year, production is likewise kept constant at 210,900 cubic meters per year for purposes of the projections.
6. Rates. The Municipal Regulations Act makes municipalities responsible for approving rates on the basis of policies established at the national level. For the system of water companies belonging to HIDROVEN, and for State-owned enterprises funded by the national government, the rate policy is laid down in joint Resolution 304 issued by the Ministry of Development and the Ministry of the Environment and Natural Resources. Since part of the counterpart received by HL under the program will be in the form of national resources, it too will be subject to this resolution. The resolution has two fundamental characteristics: (i) a level of coverage that allows for recovering operating costs and coverage of debt service and rehabilitation and expansion plans; and (ii) a polynomial formula that permits rates to be adjusted automatically for inflation. The first of these aspects is reproduced in the concession agreements between the municipalities and HL and the second in the performance contract to be signed between these same parties governing performance under the concession and the responsibilities of the parties.
7. The concession agreement establishes that the rate structure may be reviewed once each year on the basis of a cost analysis and investments needed to ensure efficiency and financial viability. Once the structure has been established, the polynomial formula in the performance contract is applied automatically to maintain the rates at real values. This system works well except for the following two drawbacks: (i) rate reviews are scheduled on the basis of time (annually) rather than allowing adjustments as needed (not necessarily once per year) to suit financial indicators and objectives; and (ii) the concession agreement also establishes a rate structure review process involving consultations with municipal councils and community boards. This process can be cumbersome and time-consuming. To avoid this, HL will ask the municipalities (mayors and councils) for authorization to review the rate structure as often as required by changes that threaten to prevent it from achieving the indicators of sound financial management set out in the performance contract, and to make the necessary changes to rates upon approval by the company's board of directors.
8. The rate structure set out in the above-mentioned resolution and being used at HL is complex. It classifies clients as residential, subsidized (low-income housing), commercial, industrial, and governmental. The first five categories, in turn, have six baseline rate types that the EHRs can employ, depending on the

characteristics of the system. For government offices, either residential, commercial, or industrial rates can be applied depending on the type of service they provide. Since there is very little metered service, the great majority of users are billed on the basis of estimated consumption. Conservative estimates plus disproportionately large numbers of users classified as subsidized clients, meant that HL was receiving an average rate for its services equivalent to US\$0.06, which covered just 58.4% of operating costs and zero depreciation.

9. During preparation of the program, HL reclassified 50,200 subsidized users as residential clients, registered an additional 11,000 new residential users (who formerly had illicit hook-ups), revised estimated consumption levels, increased its baseline rate and completed the register of its 58,000 users. As a result, its average rate has risen steadily, reaching US\$0.11 in September 1996. Monthly increases of 10% will continue to be made on rates billed in bolívares to offset the effect of inflation.
10. A fundamental assumption for purposes of the projections is that average annual rates will have to slightly more than double in the course of the program - rising from US\$0.08 per cubic meter in 1996, to US\$0.19 per cubic meter in 1997 - and then remain at this level until the end of the period. If the current monthly increases being applied by HL continue without change, this target figure will be achieved by April or May 1997. Nevertheless, the Bank will provide the company with consulting services to further evaluate its rate structures and costs, including the marginal cost of its services, and review its rates and structure as they affect achievement of the financial indicators. Following this, HL will submit a revised rate schedule to the Bank as one of the conditions for the first disbursement.

C. Income statement. Operating expenses

11. Production and distribution. These are the principal categories under operating expenses in the projections, and together account for 74% of total operating costs less depreciation. In turn, the main headings under these categories are the costs for energy, chemicals, and the firms responsible for operation and maintenance of the systems. The first two of these headings are forecast on the basis of the most recent purchases by HL, using predicted future volumes for water production and distribution. The operation and maintenance operator system was established by HIDROCCIDENTAL and has continued under HL. Under this arrangement, HL hires private-sector companies - generally with personnel from the former INOS - to operate and maintain the system. While contract forms and procedures are currently under review, contracts now in use are not based on performance standards. Rather, they require provision of a certain number of workers and volume of equipment at pre-set unit costs, with no responsibility for results

related to cost controls or performance indicators. One of the first tasks for the IMSC will be to redraft and renegotiate operation and maintenance contracts with HL's local operators. The projections assume that, costs for operators will at first represent the same ratio of operating and maintenance to total costs, increasing thereafter as the number of users rises.

12. Depreciation of fixed assets in use. From 1996 on, this includes depreciation of assets of the production and distribution systems transferred to HL and, beginning in 1997, the depreciation of assets generated by the program. The estimated value of the assets transferred to HL is a sizeable figure – US\$973 million as of the start of 1996 – which, at the rate of depreciation used at HL (2.1% per annum), leads to depreciation of around US\$20 million per year, producing net losses throughout the period covered by the projections. It is entirely possible that these assets have been over-valued, given their age and state of deterioration due to inadequate maintenance, not to mention the possibility of errors in the accounting records. Consequently, another of the IMSC's tasks will be to conduct a study to reappraise these assets with a view to adjusting their value and, at that point, introducing an indicator of financial return.
13. Delinquent accounts. These represent from 3% to 5% of sales. See bases under the heading of "Accounts receivable, consumers" in the section entitled "Balance sheet".
14. Marketing. Up to 1997, the figure under this heading represents the cost of the contract with the local operator who is responsible for marketing tasks, plus that of HL's own marketing staff. The operator takes care of meter-reading in the few cases of metered service, distributes invoices, maintains an inventory of disconnected hook-ups, and runs the entire billing and collection system, including supplying software and part of the necessary hardware. HL is responsible for collections and administrative functions for the system. Beginning in 1998 when the IMSC will take over all systems for billing and collections, the costs under this heading represent an estimate of the personnel costs incurred by the IMSC in hiring staff to replace the local operator's personnel, plus the HL staff (about 36 employees) needed to administer the system and oversee collections.
15. Overhead and administration. HL manages eight urban water systems. The figure entered under this heading represents personnel costs for the staff currently assigned to these systems (around 38 individuals), together with costs for office supplies and equipment.
16. General management. This heading includes personnel costs for headquarters support staff (administration, finance and accounting,

planning, etc. - 34 individuals in all), as well as office supplies and equipment.

17. The ratio of HL staff members (including the three foregoing headings) to clients is currently 0.7 per 1,000 connections. If the personnel employed by the operator are included, this figure swells to 3.7 per 1,000 connections. Under both the performance contract and the concession agreement, HL - and therefore the IMSC - will have complete autonomy in decisions concerning the hiring of personnel. HL in fact has a relatively small staff, and the IMSC can request that it hire additional personnel in light of the increase in operations. For this reason, the projections make allowance for 5% per year growth in real terms.
18. Long-term financing costs. HL is beginning operations without any long-term debts. The financing costs under this heading beginning in the year 2000 represent expenditures related to the subloan it will receive from the federal government from resources provided by the Bank. With respect to projected investments, the debt coverage ratio (3.5 to 4) has plenty of slack built in. Limitations and conditions on levels of additional indebtedness will be agreed upon during the negotiations.

D. Balance sheets

19. Accounts receivable, consumers. The balance sheets are projected on the basis of goals set during preparation of the program and agreed with HL. These goals, which include gradually reducing accounts receivable from six months in 1995 to three months in 1999 and subsequent years, and keeping the level of delinquent accounts to between 3% and 5% of sales, are based on the improvements already introduced by HL in billing, the experiences of similar, well-managed firms, and the improvements in operations that will be required from the IMSC. Under the IMSC's contract, part of its payment will be conditional upon accomplishing or exceeding these goals.

E. Source and application of funds

20. Internal cash generation. Under the assumptions used here, and except for the year 1996, internal cash generation is projected to grow from US\$4.4 million in 1997, to US\$9.5 million in the year 2002. The amount generated will be sufficient to service the subloan made with the Bank's resources, contribute a portion of the counterpart funding to the program, pay for the installation of meters with its own funds beginning in 1999, and generate ready cash with a cumulative value of US\$7.5 million by the end of the program. This surplus, in principle, will either be used by HL for additional investment or accumulated for a second stage of the program.

21. Counterpart contributions. The projections include counterpart funding for a total of US\$9.5 million from the national government, and US\$7.5 million from state and municipal governments.
22. Investments. In addition to the investments under the program, which total US\$38 million and end in 1999, the projections include continuation beyond that year of the component for installation of meters worth some US\$6.4 million to be financed out of internal cash generation.
23. Working capital for 1996. Given the short time HL will be in operation in 1996 (just six months) and the attention that the company has had to give to organizing its tasks, the projection is for a cash deficit of US\$1.7 million at the close of 1996 - a figure which could interfere with the company's plans. In principle, this deficit could be met with a short-term loan with a commercial bank, to be repaid with the surpluses in subsequent years. However, given the importance of working capital to the company's operations, HL will submit a plan for approval during negotiations for this capital to be provided for 1996 and the first six months of 1997.

HIDROLARA PROYECCION-ESTADO DE RESULTADOS (MILES/THOUSANDS)								
	1996	1997	1998	1999	2000	2001	2002	TOTAL

135								
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236		HIDROLARA							
237		PROYECCION-ORIGEN Y APLICACION DE FONDOS							
238		(MILES/THOUSANDS)							
239		1996	1997	1998	1999	2000	2001	2002	TOTAL
240		-----	-----	-----	-----	-----	-----	-----	-----
241	FUENTES								
243	FUENTES INTERNAS								
244	-----								
245	INGRESO NETO EXPLOTACION	-12014	-16104	-14936	-14596	-13501	-12736	-11989	-95876
247	DEPREC.Y AMORT.DIFERIDOS	10432	20562	20661	20929	21253	21434	21472	136742
250		-----	-----	-----	-----	-----	-----	-----	-----
251	TOTAL FUENTES INTERNAS	-1583	4458	5725	6333	7752	8698	9483	40866
252		-----	-----	-----	-----	-----	-----	-----	-----
253	FUENTES EXTERNAS								
254	-----								
255	COBRANZAS HIDROCCIDENTAL	1632	600	0	0	0	0	0	2232
256	APORTE LOCAL GOBIERNO NACI	0	2245	4131	3124	0	0	0	9500
257	APORTE GOBIERNO DEL ESTADC	0	2245	3131	2124	0	0	0	7500
261	PTMO(S).BID PROPUESTO(S)	0	4970	7800	6230	0	0	0	19000
273		-----	-----	-----	-----	-----	-----	-----	-----
274	TOTAL FUENTES EXTERNAS	1632	10060	15062	11478	0	0	0	38232
275		-----	-----	-----	-----	-----	-----	-----	-----
276	TOTAL FUENTES	49	14518	20787	17811	7752	8698	9483	79098
277		=====	=====	=====	=====	=====	=====	=====	=====
278	APLICACIONES								
279	-----								
280	SERVICIO DEUDAS								
281	-----								
283	GTS.FIN.L/P.PROY.PTMO.BID	0	0	0	0	1330	1270	1189	3788
288	AMORTIZACION PTMO(S) BID	0	0	0	0	576	1152	1152	6333
294		-----	-----	-----	-----	-----	-----	-----	-----
295	TOTAL SERVICIO DEUDA	0	0	0	0	1906	2421	2340	10122
296		-----	-----	-----	-----	-----	-----	-----	-----
297	COSTOS CONSTRUCCION								
298	-----								
299	PROYECTO BID PROPUESTO	0	9397	15999	12414	0	0	0	37810
300	GASTOS FINANC.PTMO.BID	0	63	63	63	0	0	0	190
303	INSTALACION MEDIDORES DOMI	0	0	0	2348	2350	1271	477	6446
307		-----	-----	-----	-----	-----	-----	-----	-----
308	TOT.COSTO CONSTRUCCION	0	9460	16062	14825	2350	1271	477	44446
309		-----	-----	-----	-----	-----	-----	-----	-----
310	OTRAS APLICACIONES								
311	-----								
315	INCREM(DISMIN)CAP.TRAB.	1774	4537	396	-1439	325	282	254	-37
325		-----	-----	-----	-----	-----	-----	-----	-----
326	TOT.OTRAS APLICACIONES	1774	4537	396	-1439	325	282	254	-37
327		-----	-----	-----	-----	-----	-----	-----	-----
328	TOTAL APLICACIONES	1774	13997	16459	13387	4581	3974	3071	54531
329		=====	=====	=====	=====	=====	=====	=====	=====
330									
331	SUPERAVIT(DEFICIT)ANUAL	-1725	521	4328	4425	3172	4724	6411	
332	SUPERAVIT(DEFICIT)ACUM.	-1725	-1204	3124	7548	10720	15444	21855	
333		=====	=====	=====	=====	=====	=====	=====	=====

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345	ACTIVO FIJO GENERAL BRUTO	1353	1353	1353	1353	1353	1353
346	MENOS: DEPREC.GRAL.ACUM.	136	272	407	542	678	948
347							
348	ACTIVO FIJO GENERAL NETO	1217	1081	946	811	676	405
349							
350	ACTIVO FIJO EN SERV.BRUTO	972686	972686	982146	998209	1013034	1016655
351	MENOS:DEPREC.SERV.ACUM.	414966	435393	455918	476712	497830	519129
352							
353	ACTIVO FIJO EN SERV.NETO	557720	537293	526228	521497	515204	496255
354	ACTIVO FIJO EN CONSTRUC.	0	9460	16062	14825	2350	1271
355							
356	ACTIVO FIJO TOTAL NETO	558936	547835	543236	537133	518229	498067
357							
358	ACTIVO CORRIENTE						
359							
360	CAJA Y BANCOS	499	502	504	506	507	509
361	INVERSION FACIL REALIZAR	0	0	0	0	0	0
362	CUENTAS A COBRAR CONSUM.	1369	6344	6757	5316	5640	5919
363	INVENTARIOS	75	312	313	313	313	313
364							
365	TOTAL ACTIVO CORRIENTE	1943	7158	7574	6135	6460	6741
366							
367							
368							
369	TOTAL ACTIVO CORRIENTE	1943	7158	7574	6135	6460	6741
370							
371	OTROS ACTIVOS						
372							
373	OTRAS DISPONIBILIDADES	0	0	3124	7548	10720	15444
374	CARGOS DIFERIDOS	0	0	0	0	0	0
375							
376	TOTAL OTROS ACTIVOS	0	0	3124	7548	10720	15444
377							
378	TOTAL ACTIVO	560880	554993	553934	550816	535409	520252
379							
380							
381							
382	PATRIMONIO Y PASIVO						
383							
384							
385	PATRIMONIO						
386							
387							
388	CAPITAL	3088	8178	15440	20688	20688	20688
389	CAPITALILACION OBRAS	567933	567933	567933	567933	567933	567933
390	UTILIDAD(PERDIDA)RETENIDA	-11998	-28102	-43038	-57634	-72465	-86471
391							
392	TOTAL PATRIMONIO	559023	548009	540335	530987	516156	502150
393							
394							
395							
396	PASIVO LARGO PLAZO						
397							
398							
399	DEUDA LARGO PLAZO - BID	0	4970	12770	18424	17273	16121
400							
401	TOTAL PASIVO LARGO PLZO.	0	4970	12770	18424	17273	16121
402							
403							
404	PASIVO CORRIENTE						
405							
406	PRESTAMO TRANSITORIO	1725	1204	0	0	0	0
407	PORCION CTE.LARGO PLAZO	0	0	0	576	1152	1152
408	CUENTAS A PAGAR	132	810	829	829	829	829
409							
410	TOTAL PASIVO CORRIENTE	1857	2014	829	1405	1981	1981
411							
412	TOTAL PASIVO	1857	6984	13599	19829	19253	18102
413							
414	TOTAL PATRIMONIO Y PASIVO	560880	554993	553934	550816	535409	520252
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PROPOSED RESOLUTION

VENEZUELA. LOAN ____/OC-VE TO THE GOVERNMENT OF THE REPUBLIC OF VENEZUELA
(Program to Assist in the Modernization and Rehabilitation
of the Drinking Water and Sewage Sector)

The Board of Executive Directors

RESOLVES:

That the President of the Bank, or such representative as he shall designate, is authorized, in the name and on behalf of the Bank, to enter into such contract or contracts as may be necessary with the Republic of Venezuela, as Borrower, for the purpose of granting it financing to cooperate in the execution of a Program to Assist in the Modernization and Rehabilitation of the Drinking Water and Sewage Sector. Such financing will be for the amount of up to Thirty Million United States of America dollars (US\$30,000,000), from the Single Currency Facility of the Ordinary Capital resources of the Bank, and will be subject to the "Special Contractual Conditions" and the "Terms and Financial Conditions" of the Executive Summary of the Loan Proposal.