

PORT MODERNIZATION PROGRAM

(AR-0126)

EXECUTIVE SUMMARY

BORROWER: The Argentine Nation

EXECUTING AGENCY: The borrower, through the Ports and Long-haul Transportation Branch (SSPyTLD) of the Ministry of Economic Affairs and Public Works and Services, with the participation of the provinces and of independent public agencies in charge of ports administration.

AMOUNT AND SOURCE:

IDB:	US\$104 million (OC)
Local counterpart funding:	
- National government	US\$ 25.2 million
- Provinces	US\$ 10.8 million
- Private sector	<u>US\$ 68.0 million</u>
Total:	US\$208.0 million

TERMS AND CONDITIONS:

Amortization period:	20 years
Disbursement period:	4 years
Interest rate:	variable
Inspection and supervision:	1%
Credit fee:	0.75%
Deadline for start of works:	2 years

OBJECTIVES:

The aim of the program is to help bring down transportation costs in foreign trade. Its purpose is to make the ports sector operate more efficiently, in line with modern transportation conditions and logistics, improving safety and protecting the environment in and around ports.

The program consists of two main components. The aim of the **port improvement subprogram**, with a direct cost of US\$150 million, is to shorten ship queuing and loading and unloading times at key ports in the system, so as to expedite the entry and egress of cargo. The **safety and environmental protection subprogram** (US\$16 million) seeks to curb pollution caused by maritime and inland waterway traffic by strengthening accident management capacity in port facilities, including measures to combat fires and spills.

The package of actions devised under these sub-programs will (i) rehabilitate berths and increase mooring capacity, improve shelter and fendering

structures, and upgrade cargo transfer systems at key Argentine ports; and (ii) acquire and institute systems for ship-generated waste reception and accident management equipment.

DESCRIPTION:

The proposed operation is a multiple-works program. In the first year, equipment would be purchased and construction work done at the New Port of Buenos Aires (PNBA) and the harbors in Concepción del Uruguay, Puerto Deseado, and Puerto Madryn. In the second year, the program could take in the PNBA intermodal terminal and work at some additional ports. Provision also is being made for the purchase of spill and accident management equipment, and for other activities to safeguard the environment.

The Bank's loan will primarily fund the aforementioned works and equipment, plus studies and technical assistance. The Argentine government will supply counterpart funds for some components that are national in scope and for a number of specific ports, among them the PNBA. Participating provincial governments or provincial autonomous agencies will finance 12% of the cost of their respective specific projects; and, in keeping with the strategy of inducing private investors to fund and operate publicly owned port terminals, the private sector would participate through its financing of structures and equipment it is upgrading for its operations in the PNBA and other ports covered by the program. A further element of the program is institution-strengthening in environmental areas and for the projects mentioned, to further the administrative streamlining process under way in the country.

At present, virtually all cargo that passes through Argentine ports is handled by private operators. The program proposed herein, which is built around the "landlord model" of port management, focuses on port infrastructure and facilities shared with the private sector, and those which could not be upgraded with private funds under competitively acceptable conditions. Private grain and oil terminals are explicitly excluded, as typical private-sector ventures.

**ENVIRONMENTAL
CLASSIFICATION:**

The Environment Committee, at its meeting of January 10, 1995, classified this as a Category III operation. The environmental evaluation for the program, containing environmental impact assessments (EIAs) for projects slated to begin in the first year, was released for public review in late November 1995. Comments were received from a number

of individuals and organizations interested in environmental affairs; these were taken into account when drafting the environmental report, which was approved by the Environment Committee on September 3, 1996, and forwarded to the Public Information Center on September 6, 1996. EIAs for projects to be included subsequently in the program will be made available to the public following similar procedures.

BENEFITS:

Endowing Argentina with a modern port infrastructure will bring down a key element of the cost of international trade, benefiting Argentine consumers and strengthening the competitive position of Argentine exporters of agricultural products and manufactured goods. This is pivotal to the broader strategy to modernize the nation's economy. Once wharves and piers have been rebuilt and new berths constructed at currently congested ports, freight costs will come down and cargo transfer times will be shortened. Restored and upgraded breakwaters, land accesses and cargo transfer stations will help make for synergy in the development of an efficient logistical chain, reducing the risk of accidents and delays and lowering the cost of water transport and cargo transfer to and from ports.

The program works will go some way toward alleviating pollution in harbors and their environs. The environmental component likewise will bolster ports' capacity to manage accidents and spills. Aside from helping to preserve the environment and marine life, this can pave the way for an expansion of the national cruise industry and ecotourism, which are built around the country's impressive natural beauty and marine fauna.

RISKS:

The provincial port authorities, created only recently, have been working efficiently, but there could be problems with interagency coordination for the program, particularly in the port safety and environmental protection component. To counter this risk, the Bank and the SSPyTLD have worked out forms of agreement and have met with the parties concerned to expedite preliminary agreements and come up with definitions that can be used to draw up a new regulatory framework for maritime and inland waterway safety and navigation. The responsibilities of the various agencies working in this sector would be spelled out in such a framework (paragraphs 3.24, 3.25, and 3.26).

Factors external to the program, such as further fiscal readjustment plans, macroeconomic changes, and

shifts in production and trade patterns, could have a significant effect on projects to be carried through by provincial port administrations, and on the demand for import and export cargo. Any such negative impact is expected to be limited in scope and time; if anything, completion of some individual project might be held up (paragraphs 5.27 and 5.28).

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

The Bank's strategy in Argentina pursues three basic aims: (i) **reduce poverty** and raise the standard of living by expanding the job supply and making social services more widely available; (ii) **boost productivity** and make the tradable-goods sectors more competitive; and (iii) continue with **reform of the State** and decentralization to the provinces and municipalities.

The operation proposed here would concentrate on the second of those areas, and to a lesser extent on the third, as regards complementary administrative reform initiatives in the ports sector, including environmental protection activities.

**POVERTY-TARGETING
AND SOCIAL
CONSIDERATIONS:**

According to the Eighth Replenishment document (AB-1704), the proposed program would not qualify as poverty-targeted, either geographically or from the standpoint of prospective beneficiaries; nor is it specifically targeted to women (paragraph 5.20).

**PROCUREMENT AND
CONTRACTING FOR
GOODS, CONSTRUCTION
WORK, AND
CONSULTING
SERVICES:**

The Bank's current procurement policy is to be adhered to in procuring goods and contracting for construction work and consulting services which are to be funded under the program. For purposes of items to be funded by the Bank's loan, the thresholds above which international competitive bidding will be required for procurement for the program will be US\$350,000 for goods, US\$5 million for construction work, and US\$200,000 for consulting services (paragraphs 3.30 and 3.31).

**SPECIAL
CONTRACTUAL
CONDITIONS:**

The following would be conditions precedent to the first disbursement, to be performed to the Bank's satisfaction: setup, staffing, and equipping of the Program Coordination Unit (PCU) and hiring of a consulting firm to work with that unit (paragraphs 3.3 and 3.4); adoption of the program's Operating Regulations (paragraphs 3.9 and 3.10); drafting of a proposed new regulatory framework for port and maritime and inland navigation safety (paragraph 3.24); and formal execution of the framework agreement required between the SPPyTLD and

the Argentine Naval Command to carry through the program's environmental component (paragraph 3.24).

Before funds will be disbursed for a port project being carried out by a province, the province must have executed a formal agreement with the SPPyTLD (paragraphs 3.6, 3.35, and 3.37); for the rail yard and intermodal terminal, operating agreements must be in place with the railways in question and the Office of the Mayor of Buenos Aires.

The loan contract is also to contain provisions for ensuring the enactment of a new regulatory framework governing port safety, maritime, river, and lake navigation safety, and performance of the other environmental commitments under the program (paragraphs 3.25 and 3.26).

Other covenants in the loan contract will ensure adequate monitoring and evaluation of the program (paragraphs 3.7 to 3.19 and 3.44), recognition of expenditures against the local counterpart (paragraphs 3.42 and 3.43), reimbursement of funds disbursed under Project Preparation Facility operations 895-OC/AR and 762/OC-AR (paragraph 2.10), the submittal of audited financial statements (paragraph 4.30), and adherence to Bank procedures in the procurement of goods and hiring of consultants (paragraphs 3.30 and 3.31).

I. FRAME OF REFERENCE

A. The Argentine economy and the ports sector

- 1.1 Argentina's ports have been a key element in the drive to reconfigure the public sector and boost economic growth. The country has 64 publicly run harbors; the 30 that are customs ports handle fully 85%, by volume, of the nation's foreign trade. The balance is carried by oil and gas pipelines (5%), truck (9%), rail (0.5%), and air (0.2%). Between 1989 and 1995, the value of Argentina's foreign trade nearly tripled, from US\$14 billion to US\$41 billion, with 1995 figures of US\$20 billion posted for imports and US\$21 billion for exports. Imports in 1993, including capital goods required to renew the nation's industrial plant, were up 20% over 1990 levels, which helped push up exports of manufactures by 62% between 1993 and 1995.
- 1.2 In 1995, the external sector accounted for 15% of GDP. There is ample room to boost these figures, because Argentina has a relatively small population (34 million), a limited share of world commerce (except for trade in grains), and a solid manufacturing base and wealth of raw materials. If the country is to realize its potential, it will need efficient modes of transport and rapid, reliable, inexpensive port transfer systems, as links in a larger logistical chain of support. Port performance is likewise important in efforts to balance the nation's external accounts, this being a requisite for the macroeconomic model to succeed in the context of the MERCOSUR treaty and global competition.

B. Problems of the ports sector

- 1.3 In the late 1980s, the services offered by Argentina's ports, in terms of quality and cost, did not answer the needs of a modern economy. All the country's ports were managed and operated by the National Port Authority (AGP), under a rigidly centralized scheme. The AGP administered a complex set of archaic regulations that hampered port operations and pushed up their costs. The system was based on cross-subsidies that benefited most Argentine ports thanks to surpluses produced by very high tariffs at some ports, notably the New Port of Buenos Aires, 1/ which handles virtually all container traffic.
- 1.4 Though cargo was handled by private firms, excessive State intervention carried with it overstaffing and labor practices that restricted hours of service to vessels. In this centralized, State-run system, neither technology, administrative structures, or port infrastructure were upgraded, in an era of constantly evolving

1/ The "New Port" dates back to the turn of the century, when it replaced the historic port.

demand on the part of international port users, and the Argentine economy at large suffered accordingly. Congestion became a serious problem in a number of ports, with a shortage of berths and modern cranes, and essential jetties and fender systems were left in disrepair. These factors jeopardized navigation safety, damaged vessels and port structures, forced ports to close when it rained, and drove up freight costs.

C. Reform of the State, the government's strategy, and the role of the IDB

- 1.5 In August 1989, Argentina enacted Law 23,696 (the State Reform Act), thereby launching a process of political, economic, and financial transformation that included reform of the ports sector. Measures taken thereafter diminished State control, both direct and indirect, over economic activities, opened the way for privatization of State enterprises, lowered barriers to international trade, and otherwise facilitated commerce, as provided in the treaty creating the Southern Common Market (MERCOSUR). Simultaneously, the government brought inflation down from over 1,000% in the 1980s to 1.6% in 1995. The ensuing economic growth cycle was interrupted in the second half of 1994 by the Mexican financial crisis and rising unemployment. This prompted a restructuring of Argentina's financial sector and measures to narrow the fiscal deficit.
- 1.6 From the outset, the IDB supported the government's ports strategy through its investment sector program (733-OC/AR), a joint operation with the World Bank. The focus of the strategy was to further the government's fiscal adjustment efforts by reducing spending and making the ports sector more efficient, instilling the so-called "landlord" management model (paragraph 1.13). This approach opened the door to private investment, where feasible and efficient; a number of port operations were to be deregulated, and management of at least three of the four largest ports was to be handed over to autonomous authorities, with private-sector involvement in at least two of them.
- 1.7 The State Reform Act laid the groundwork for the fiscal adjustment process and for port and navigation reform by expediting privatization and concession arrangements and helping to streamline administrative procedures. The law expressly authorized the sale of, or operating concessions for, Empresa Líneas Marítimas Argentinas (ELMA), National Grain Board elevators, and AGP and naval shipyard facilities.
- 1.8 Law 24,093 (the Port Operations Act) enacted in June of 1992, and regulations thereunder in Decrees 817/92 and 1092/92, provided for the following: (i) dissolution of the AGP and creation of the Ports and Navigable Waterways Branch (recently changed to the Ports and Long-haul Transportation Branch, SSPyTLD) in the Ministry of Economic Affairs and Public Works and Services (MEyOSP), to set policy for and regulate port activities, but not operate harbors;

(ii) cancellation of all labor agreements that were lowering productivity; (iii) regularization of the legal status of privately-run terminals, affecting primarily the private grain-exporting terminals that had taken shape when the National Grain Board came to be virtually nonoperational; (iv) restructuring and conferral of autonomous status on the New Port of Buenos Aires (PNBA), the Buenos Aires South Dock, and the ports of Bahía Blanca, Quequén, Rosario, Santa Fe, and Ushuaia; (v) transfer of all other ports to provincial governments; (vi) institution of terminal-concession arrangements, operating contracts, and other modes of private participation in maintenance operations; and (vii) reorganization of the National Port Works and Navigable Waterways Directorate (DNCPVN).

- 1.9 Subsequently, private enterprises were authorized to offer coast-wise shipping services along Argentina's Atlantic coast, so shipping could compete better with trucks for long-haul transport. ELMA was liquidated, and by the end of the first quarter of 1996 was down to the residuum. The government's decision as to the navy yards was to (i) transfer the productive elements of the Santiago River shipyards to the Province of Buenos Aires and wind up the State enterprise that had been running them, and (ii) privatize the North Dock navy yard.
- 1.10 The Port Operations Act and program 733-OC/AR have both yielded impressive results. Port administration has truly been decentralized, and users now are assured a say on the main port boards, so those with the most to gain from well-run ports are in each case able to apply their expertise and energies to that end. Autonomous port authorities have been created in Bahía Blanca, Rosario, Santa Fe, and Quequén; advisory boards have been set up and statutes, regulations, and certificates of delivery have been formalized. A concession contract was signed for the South Dock, and all other national ports except the New Port of Buenos Aires are now in provincial hands.
- 1.11 Decentralization measures are likewise proceeding at the provincial level. The province of Entre Ríos, for one, took over 16 ports, turned three of them into autonomous authorities and passed the other 13 on to the respective municipalities. Most of them are now being used for recreation or activities of interest to the local community, such as extraction of sand and gravel for construction.

D. Tie-in between loan 733-OC/AR and the proposed operation

- 1.12 Measures brought in pursuant to the Port Operations Act and under the operation funded with loan 733-OC/AR have remedied the most serious institutional problems that had been hampering port performance for half a century. These initiatives likewise improved port management and attracted some measure of private investment, though they did not furnish funds for investments typically falling to the public sector (paragraphs 1.5, 1.6, and

1.15), and did not provide for environmental protection studies, laws and standards, or equipment. The operation proposed herein complements the aforementioned loan and legislation by supplying funding needed to recondition structures and facilities currently in very poor repair, add berthing sites and expand handling capacity at key ports in the system, upgrade accesses and cargo transfer plant, and bring in safety procedures and equipment and environmental protection measures.

E. The "landlord" port management model, and role of the public and private sectors in the proposed operation

- 1.13 Since the decision was made to wind up the AGP, ports have been operating under an administrative arrangement called, generically, the "landlord model". This approach has been adopted by nearly every country which is equipped with modern, efficient ports, with two exceptions: the port of Singapore, which is directly managed by the State, and the port of Hong Kong, which is privately owned and operated.
- 1.14 Under the landlord model, the private sector is encouraged to take a part in port administration, but facilities are made available to users to share, and the model seeks to curb monopolies as to affording access to harbor facilities and cargo handling. A public authority, usually with a small staff, owns the land, accesses, and shared equipment. The port authority (i) commissions from the private sector, through tendering or other transparent procedures, physical facilities and services needed to make sound use of the publicly owned property, and makes certain that the site continues to be used for port operations and that prospective users have access to the port; (ii) leaves vessel operators free to select stevedores and others required to move cargo between ships and off-port conveyances; and (iii) concessions out available sites, for fixed periods, to private companies which build and operate terminals.
- 1.15 The program proposed herein, in the context described above, will be promoting public and private investment in publicly used terminals, terminals that are unattractive to private enterprise, and terminals that could be run more efficiently under the landlord system than by private-sector operators. This includes cases with monopolistic features. The public investments - those slated to be executed in concert with the private sector and those needed to attract complementary private funds - include (i) shared facilities such as fishing wharves and (with exceptions) new terminals for containers and other general-cargo facilities; (ii) building or upgrading of road and rail accesses; (iii) navigation safety measures such as new fendering systems, building and repair of breakwaters, and removal of sunken vessels; and (iv) environmental protection equipment, and vessels and services to combat fires and spills.

- 1.16 Revenues raised in ports operated under the landlord management model include fees, tariffs, rent, and other charges to users and licensees. The model does not preclude the possibility of public funding for structures or equipment that are in the State's interest. The port authority can concession off areas or terminals to firms or groups that wish to build their own facilities and move their own cargo or that of third parties, setting up private terminals in publicly owned ports. At present, Argentina has private terminals that handle (i) agricultural grains (owned by farm co-ops or large grain-marketing concerns); (ii) oil and petroleum products; and (iii) iron ore and iron and steel products. Private automobile and wood-chip terminals might also be set up. A system also has been devised in the PNBA whereby concessions to operate publicly owned terminals are awarded to private firms. The port already housed public container terminals; the concession-holders have been installing their cranes and other modern gear and remodeling the facilities.
- 1.17 Most terminal concession-holders, except at the PNBA, handle their own goods, and require specialized facilities for the purpose. These private terminals are typically part of a vertical chain of production, services, and sales. Terminal owners work with a long-range view, and capital outlays for their terminals are modest in comparison with expenditures for land, plants, equipment, and inventories needed to turn out and market their products. Monopolies are not a problem in terminal operation, since terminals are part of a firm's internal workings. An exception would be a grain terminal owned by a large commercial enterprise, and even there, any potential monopolistic power is limited by competition from many other terminals, including those run by producers' associations.
- 1.18 Container-handling facilities are a different question. Container ports usually accommodate many users, in wharves and yards built with public funds. The PNBA, which moves 95% of the nation's containerized traffic, is the only port in the country in which it has proved possible to award container-terminal concessions without raising thorny monopoly problems, because it housed six terminals and there was potential competition from other ports. Concessions for the six PNBA terminals were given to five private consortia (now four, after one went bankrupt), for terms of up to 20 years. The government is paying to repair facilities, while the concessionaires are for the most part buying cranes and other modern gear. The consortia, made up of local and foreign partners with international experience in container handling, are bringing in sound, sophisticated management systems. These innovations have improved service quality and lowered unit container-transfer costs from US\$450 to US\$150. In the best cases, the parallel deregulation of ground transport and privatization of railways has pushed down the total cost of receiving a container at the PNBA and delivering it to a consignee in Mendoza from US\$1,500 to US\$400.

- 1.19 Between 1991 and 1994, container throughput in Argentine harbors more than doubled, from 233,000 to 533,000 twenty-foot equivalent units (TEUs). This attests clearly to the success of policies to open the economy and the government's ports strategy. But this same surge in volume has worsened traffic congestion in the PNBA and in downtown Buenos Aires, as every day more than 1,000 trucks haul containers to and from the port. Though the traffic now would warrant the use of unit-trains to haul containers into the interior of the country, the rail yards and their accesses are not designed for this, and little use can be made of them at present.
- 1.20 In other ports that would be included in the proposed program, among them the harbors at Concepción del Uruguay, Puerto Deseado, Puerto Madryn, and Quequén, the port authority supplies and maintains wharves, accesses, and other facilities. For containers and other forms of general cargo, ship and cargo owners negotiate prices and conditions of service directly with stevedoring companies or cooperatives (a number of such firms being licensed to work at each port). Stevedores can employ their own gear or equipment from the ship or the port.
- 1.21 All of these harbors contract out a variety of works and services, or award them under concessions. In each instance, the concession depends on the physical features of the facilities and port business. The port of Quequén, a very busy operation in the southern part of the province of Buenos Aires, handles general cargo and grain, and offers a number of berths in a grain- and wood-producing region; it has concessioned off a terminal for grain shipments, and is exploring the possibility of awarding another for wood chips. Facilities at Concepción del Uruguay, the dominant Argentine port on the Uruguay River, are fairly spacious but in very poor shape; this port has granted licenses for the use of all of its warehouses, elevators, and storage yards. And Puerto Madryn, one of the most heavily trafficked ports in the country and which handles most general cargo in Patagonia, has only a finger pier to handle aluminum, containers, bulk cargo, and fish, and to accommodate visiting tourist ships. The port authority cannot award a concession for any one portion of the facilities without restricting physical access to other users, and storage must necessarily be outside the port area. Puerto Deseado, another very busy fishing harbor, is starting to move container traffic. This port has awarded concessions only for land, which houses facilities belonging to firms that supply bunker fuel and lubricants.
- 1.22 The fiscal adjustment process and the institution of a "landlord" port management model have been the two main pillars of the government's strategy for the port sector (paragraphs 1.5, 1.6, 1.15, 4.13, 4.14, 4.15, and 4.20). The Bank has lent assistance for both since the early 1990s, specifically in the form of (i) loan 733-OC/AR and (ii) preparation of the program proposed in this document, which began in 1993. These operations support efforts to replace public outlays by private investment wherever

feasible and economically advantageous, reserving public funds for activities that are the purview of the State and in which it is easier, or more fitting, for the public sector to act. In line with that strategy, part of the proposed program (as the local counterpart) would be public and private investments in the PNBA and in privately operated public terminals in other ports encompassed in the program, if they satisfy the Bank's requirements. Most of the planned investment outlays (the PNBA being the salient exception) will be publicly funded, as activities typically falling to the public sector under the landlord model. The local port authority would commission harbor works to be used by both public and private entities, defraying part of their cost with the proceeds of the Bank's loan. Carriers could freely select a private firm to handle their cargo. The public sector will also be responsible for structures, services, and equipment for navigation safety and environmental protection.

F. Safety and environmental protection

- 1.23 Argentina has made major strides since 1970 in setting in place an institutional framework to deal with environmental problems. It is a signatory to the most important international agreements on safety and protection of port and marine environments, among them (i) the International Convention for Safety of Life at Sea (SOLAS 74/78); (ii) the Marine Pollution Monitoring Programme (MARPOL 73/78); (iii) OPRC/92 (management of pollution caused by oil spills); and (iv) ROCRAM and Viña del Mar, recent Latin American accords that consolidate regional marine safety and environmental targets. The issue of ecologically sensitive areas has also been studied, and the authorities are exploring ways of safeguarding the environment - a pressing concern for many reasons, among them the wish to foster ecotourism in the country.
- 1.24 The parties to the aforementioned agreements have pledged to (i) install liquid and solid waste reception facilities; (ii) institute procedures for handling and controlling hazardous cargoes; (iii) adopt vessel inspection and monitoring systems; (iv) devise accident-management contingency plans and build the required technical capacity and organization to respond to emergencies; and (v) adopt suitable supervision, monitoring, training, and coordination arrangements, and organize exchanges between the agencies involved and foreign and Argentine maritime and port authorities.
- 1.25 In practice, however, Argentina's ports sector has not had the resources to carry through these measures. Crumbling jetties and missing fenders in some ports have jeopardized shipping and damaged ships and structural elements of wharves and piers. In a number of ports, sunken vessels are a hazard to ships and complicate their maneuvers. Facilities at some grain terminals are inadequate, as is equipment for moving and storing fuel and chemicals, thereby increasing the danger of fire and spills. More vessels and

equipment are needed to respond to emergencies, as are reception facilities for bilge water and ship garbage, to prevent ship wastes from fouling the water in ocean ports.

- 1.26 It has proved difficult to institute safety and environmental protection measures because the jurisdictions of the agencies concerned are not clearly delimited. While the ongoing modernization process offers hope of remedying institutional problems, it has also brought new stakeholders into the picture, among them provincial governments, autonomous port authorities, and private operators, and a new, modern, and more complete legal and institutional framework is thus a necessity.
- 1.27 The proposed operation would give the agencies involved the funding they need to resolve the most pressing problems, such as shortages of ships, facilities, and equipment, and to pay for studies and technical assistance required to devise institutional measures that the country will need to adopt in the medium term, and to set them in motion.

G. Experience of the Bank and other organizations, and tie-in of the proposed operation with loan 733-OC/AR

- 1.28 Since 1961, the Bank has approved six operations for Argentina's transport sector, for a total of US\$703.5 million (10% of aggregate IDB lending to Argentina). One of the largest of these operations, approved recently, is a national highway corridor program (795-OC/AR for US\$340 million), to improve transportation conditions on national highways, along which most internationally traded goods are hauled. IDB operations directly related to Argentine ports are the investment sector program (733-OC/AR) described earlier (paragraph 1.6); loans 150-OC/AR and 150/SF-AR totaling US\$17.5 million, approved in 1967, for seven works projects for the National Grain Board; and loan 193-OC/AR approved in 1970, which supplied US\$25.5 million for a canal linking Buenos Aires with Paraná de las Palmas River. The first of these operations has not proved to be efficient, though some facilities are still running; indeed, two of the facilities have yet to be put to use, and one has been used only partially. Moreover, the activity would have lent itself better to private operation. The second project readied and buoyed the canal and built wharves at Rosario and San Pedro. That project's objectives were achieved, and it did spur additional public and private investment in Paraná River ports. However, when the AGP and associated agencies failed to maintain adequate fender systems in Rosario, and to do maintenance dredging in the 1980s, the center of the pier collapsed, and at some critical stretches the canal, which initially accommodated 32-foot drafts, now can handle only 24 feet.
- 1.29 Two Inter-American Investment Corporation operations have supported private investments in Argentine ports. The first was a 1989 loan for US\$1 million to upgrade facilities at Terminal 6, in northern

- Rosario. The second, in 1992, took the form of a US\$6 million loan and a US\$1 million equity investment for Terminal de Puerto Ramallo S.A., on the Paraná River, 325 kilometers north of Buenos Aires.
- 1.30 The World Bank has granted five loans totaling US\$669.5 million to improve Argentina's highway system, and two loans for US\$122.9 million for rail transportation. In 1987 that organization approved a port sector operation, but it was canceled after US\$8 million had been disbursed, when the Bahía Blanca grain terminal which accounted for 65% of the loan was privatized. As was noted above (paragraph 1.6), a joint World Bank and IDB sector operation afforded support for reform of the State and the port sector.
- 1.31 To sum up: international financial organizations, virtually since their inception, have helped their member countries with major port infrastructure projects, but ineffectual central port administration has weakened the operations' long-term impact. This is particularly the case for grain terminal operation and maintenance. The more recent operations have focused on key components of deregulation, privatization, and investments falling by their nature to the public sector, with impressive results posted on some fronts (paragraph 1.18).
- 1.32 The proposed program is a multiple-works venture. Three port projects, in addition to the PNBA, have been designed and assessed, and can be started in the first year of the program; several PNBA activities are planned or already under way. Other projects that have been identified and have undergone a preliminary appraisal are potential candidates for IDB financing, but time and resources — as yet unavailable — would be needed to continue with their preparation and add them to the program as they become ready and are appraised following Bank procedures. The program also would fund studies, technical assistance, and training to bolster port management and environmental protection capabilities.
- 1.33 A preliminary selection was made among proposed port upgrading projects, before the Bank's specific technical, economic, financial, legal, and environmental criteria were applied (chapter V) to ascertain whether the projects would qualify for financing. The preselection criteria were as follows: (i) the port must handle general cargo (containerized or other) of considerable importance regionally or nationally, in terms of tonnage or value; (ii) the port must have adequate ground connections; (iii) there must be sufficient demand for the port's services, or it must be sufficiently congested, to warrant an expansion of capacity; and (iv) the project has to be an economic priority, as ascertained by a prefeasibility appraisal. For a project that has passed the preselection stage to become part of the program, (i) a feasibility study must have been produced for it using the same methodology used to appraise projects for year 1 of the program, and that study must demonstrate that the proposed

technical features are the best, from an engineering and economic standpoint, and that the project's economic internal rate of return will be at least 12%; (ii) its final engineering designs and all other elements of the bid documents must be complete; and (iii) it must include measures to alleviate any negative environmental impacts specifically identified in the environmental studies, along with general and special specifications for same, which are to be part of the bid documents. Also eligible for support are ocean ports whose ecological features are such as to require assistance under one of the program's environmental components, whether or not the port is otherwise eligible. However, Paraná River ports north of the 34th parallel will not be eligible until environmental studies on the Waterway are complete.

1.34 The preselection screening made it easier to tackle the potentially complex problem of choosing a small number of projects from a total of 64 public ports. Pursuant to the first criterion, harbors servicing only pleasure craft or serving a purely local interest were removed from the list, leaving a total of 30 ports. Grain and oil terminals were eliminated for the same reason. These latter facilities account for most of the 20 private terminals operating out of publicly owned ports; often they are the only major installations there, and they are adequately run by the private sector.

1.35 Priority projects were selected following the above criteria, but a number of projects with promising returns had to be left out of the program. Funding for them would have to come from other sources or a future Bank operation.

H. The Bank's strategy, and rationale for its participation in this program

1.36 In its operations with Argentina, the Bank focuses on three central areas: (i) reducing poverty and raising the standard of living, through initiatives to provide gainful employment, enhance the quality of social and sanitation programs and expand their coverage at the national, provincial, and municipal level; (ii) boosting productivity in the tradable-goods sectors and making those sectors more competitive, using an approach combining regional development with environmental protection concerns, supplying support infrastructure and supplementing private investment; and (iii) continuing with modernization of the State, understood as the stages subsequent to administrative streamlining and reorganization at the central level, to extend the process to the legislative and judicial branches and to provincial and municipal governments.

1.37 The proposed operation would address primarily the second of the above-mentioned areas, seeking as it does to improve Argentina's ports, which handle the bulk of the country's exports; to protect the environment in port areas; and, as a parallel effort, to spur private investment in port operations. The operation would also

contribute to the third area noted above, to the extent that it addresses institutional issues pertaining to environmental protection and complementary administrative reforms in the ports sector.

II. THE PROGRAM

A. Objectives

- 2.1 The program's objective is to help bring down transportation costs in foreign trade. Its purpose is to make the ports sector more efficient, in keeping with modern transportation concepts and logistics, and to improve safety conditions in harbors and protect the environment in and around ports.
- 2.2 The program has been divided into two subprograms. The **port improvement subprogram** will shorten ship queuing and loading and unloading times at some major Argentine ports, and expedite the entry and dispatch of cargo at ports, preventing accidents and smoothing the interface of port and city traffic. The **safety and environmental protection subprogram** will help tighten the control of environmental pollution associated with maritime and river transport, and bolster ports' capacity to deal with fires, spills, and other accidents.

B. Targets

- 2.3 The targets outlined below are to be attained as the various components become operational.

1. Port improvement subprogram

- 2.4 The following are the targets for port projects included in year 1 of the program and the New Port of Buenos Aires (PNBA) intermodal terminal, from December 1995 to December 1999: (i) an increase in throughput capacity at Concepción del Uruguay for wood and like products, under safe conditions, from 0 to 8,000 tons per day (t/d); (ii) equipping the new wharf at Puerto Deseado to handle 300 t/d of chilled fish; (iii) an increase in capacity of the Puerto Madryn fishing wharf from 209 to 300 t/d; and (iv) an increase in PNBA railcar dispatch capacity from the current 75 cars per day to 360 cars per day. Targets for future projects will be set out in the respective Logical Frameworks before the projects are made part of the program.

2. Safety and environmental protection subprogram

- 2.5 Measures planned in this subprogram will equip the Argentine port system to operate in compliance with international accords to which the nation is a signatory. The following are the performance indicators to be attained by December 1999: (i) ports covered by the program will be operating ballast water, bilge water, and ship waste reception facilities and equipment that are up to MARPOL 73/78 standards; (ii) two fire-fighting boats will be operating in the South Dock/La Plata and Bahía Blanca harbors, and spill control

equipment will be in use at Puerto Madryn and Usuhaia; and (iii) contingency plans will be ready for each port and at least three sunken vessels that are navigation hazards will be removed, at priority spots determined by technical studies.

C. Description of program components

1. Engineering and administration (US\$9,608,000)

a. Program Coordination Unit (US\$3.54 million)

2.6 To coordinate and administer the program, the Ports and Long-haul Transportation Branch (SSPyTLD) will set up a Program Coordination Unit (PCU), with the following responsibilities: (i) compliance with all conditions precedent to the first disbursement of the loan; (ii) implementation of the program's global or nationwide components; (iii) drafting, approval, and signature of agreements with the provinces and other agencies that are to carry out specific components of the program, and advisory support for calls for tenders to be conducted by each; (iv) technical, financial, and environmental oversight of works to be executed by provincial institutions and other agencies; (v) commissioning and supervision of studies on the technical, economic, and environmental viability of projects to be added to the program in the second and subsequent years; (vi) hiring and supervision of the planned technical assistance services; (vii) programming and organization of institution-strengthening activities; and (viii) preparation of documentation to process loan disbursements, and any reports requested by the Bank.

2.7 The PCU will report directly to the Office of the Deputy Secretary of the SSPyTLD. Its staff of six will be appointed by that bureau. Advisory support will be furnished by a consulting firm experienced in port project management.

b. Works supervision (US\$5.3 million)

2.8 Consulting firms specializing in port infrastructure projects will be hired for technical and administrative oversight of works to be funded in whole or in part from the loan. Their terms of reference will be to (i) monitor adherence to technical standards and specifications for each project; (ii) analyze changes or adjustments needed in designs, construction methods, or works scheduling; (iii) certify to the quality of construction and plant; and (iv) ascertain each month the progress made on construction and the valuation of work to date.

2.9 The task of certifying to technical and environmental quality and to the cost of works and investment outlays eligible as counterpart contributions will likewise be entrusted to qualified consulting firms or other appropriate autonomous agencies acceptable to the Bank.

c. PPF reimbursement (US\$767,960)

- 2.10 On October 24, 1995, with the approval of loan 895-OC/AR, the Bank authorized the use of up to US\$700,000 in Project Preparation Facility (PPF) funds to produce complementary studies needed for the approval of this operation and to help set up the PCU. Included in this budget item is the reimbursement of US\$67,960 corresponding to the proportional part of loan 762-OC/AR in support of the disbursement eligibility process for Bank-approved operations.

2. Port improvement subprogram (US\$149.7 million)

- 2.11 This item consists of (i) maritime works such as construction of new berths, rehabilitation of existing wharves, strengthening of fenders and repair and extension of jetties; and (ii) other investments in works and equipment to upgrade road or rail access to terminals and expedite cargo handling.
- 2.12 Targeted for the above-mentioned support are a number of ports administered by provincial, municipal, or autonomous agencies which have asked the SSPyTLD to help fund their projects. They have been divided into the following subcategories, by virtue of their features and readiness.

a. Projects for the first year (US\$33.4 million)

- 2.13 Projects that could begin in year 1 of the program have complete technical, economic, environmental, and financial studies in place; the Bank has ascertained that they are viable, and work could start on them as soon as the proceeds of the loan proposed herein were made available. These projects are as follows: (i) in the Concepción del Uruguay harbor (Entre Ríos), construction of a pier at berths 14, 15, and 16, and rehabilitation of berths 3 and 4; (ii) at Puerto Deseado (Santa Cruz), pier construction at berth 10, rehabilitation of fenders at berths 1 and 2, and upgrading of access roads and roadways inside the port confines; and (iii) at Puerto Madryn (Chubut), expansion of berth 3 for general cargo and construction of a secondary finger pier as a new fishing wharf.

b. New Port of Buenos Aires (US\$85.8 million)

- 2.14 Projects in this subcategory are slated for year 1 or year 2 of the project. Chief among them are the following: (i) repair of mooring walls and purchase and erection of new cranes and other container-handling gear in PNBA terminals; and (ii) relocation of yards of the various railways serving the port, setup of a container transfer facility, and reconfiguration of road inter-sections. The studies needed for component (i) are now complete, and much of the construction work and equipment procurement is

under way. A preliminary study done for the terminal for ship-to-rail and rail-to-ship transfer of containers shows this project to be technically feasible, and the scope of the expected externalities indicates that it will be economically viable as well.

c. Other harbor projects (US\$30.5 million)

- 2.15 A preliminary study performed of a list of port projects submitted to the Bank by the SSPyTLD suggests that they would be viable and eligible for the program. More in-depth technical, economic, environmental, and financial studies of the kind required by the Bank to ascertain eligibility for funding would be carried out by the port authorities or using funds from the proposed loan during the first year of the program. If the projects are found to be viable, the construction work would be put out to tender beginning the second year. Projects that would be included in principle are (i) the Rawson fishing port, to mitigate the impact of current small-scale fishing activity on the environment; and (ii) extension of the Quequén breakwater, to cut down on the number of days in which the port is forced to close on account of adverse weather. If any one project fails to satisfy the agreed eligibility requirements or is not ready in time, it could be replaced by another.

3. Safety and environmental protection subprogram (US\$16 million)

- 2.16 This subprogram calls for systems implementation, equipment purchases, and services to improve environmental and safety conditions in Argentine ports and navigable waters.

a. Ship waste reception systems (US\$4.5 million)

- 2.17 Funding would be furnished for the purchase of equipment and installation of plant and systems to receive and dispose of (i) dirty ballast water, at oil ports and offshore moorings; (ii) bilge water and ship garbage, at wharves and in roadsteads of major ports still not equipped with such facilities; and (iii) ship sewage, in ecologically sensitive areas.

b. Fire-extinguishing and accident management equipment
(US\$8.5 million)

- 2.18 Items to be purchased under this component are (i) two fire-fighting boats for the oil ports at South Dock/La Plata and Bahía Blanca, to bolster their fire response capacity; and (ii) containment booms, skimmers, auxiliary vessels and other equipment to prevent and control spills of oil, gas, or hazardous substances, which will serve the area of Buenos Aires, Golfo Nuevo (Puerto Madryn) and environs of the Ushuaia port. This equipment will take the Argentine Naval Command closer to OPRC/92 standards for managing oil spill pollution.

c. Salvage of sunken or abandoned vessels (US\$3 million)

- 2.19 This component calls for systematic action to remove sunken or abandoned ships that are obstructing harbor operations, jeopardizing shipping, and fouling the environment.

4. Associated costs (US\$4.9 million)

- 2.20 Included in this item are studies, specialized advisory services, and training, in support of or complementing other program components, and to build technical and administrative capacity.

a. Studies (US\$2.8 million)

- 2.21 This component includes technical, economic, environmental, and financial feasibility studies of the PNBA intermodal transfer facility; studies of demand and for comprehensive planning of port development; studies on safety and environmental protection (detailed inventory of environmental protection needs; preliminary designs and specifications for waste reception systems; emergency management and contingency planning; pollution in ports and access channels; plan to salvage sunken or abandoned vessels; plan to upgrade navigation aids; environmental institutional study); the La Plata port modernization plan; and an analysis of tariffs and port/customs issues.

b. Technical assistance (US\$1.4 million)

- 2.22 With a view to streamlining a very disparate body of standards and requirements, a compendium of port rules will be drawn up, consolidating laws, regulations, technical standards, procedures manuals and directives governing port ownership, management, construction, maintenance, and operation, and spelling out the responsibilities of the different agencies engaged in those activities. This task will be entrusted to specialized consultants hired by the SSPyTLD.
- 2.23 A necessary adjunct of efforts to decentralize and upgrade Argentina's ports are suitable processes and standardized information systems to provide provincial port managers with accounting and operations information, which would include separate accounting records for the program proposed herein, by individual company or agency and by cost category. With a modern statistics system for harbor operation and an upgraded accounting system, managers will be better equipped to make decisions, once they have the right kind of data available as and when needed to assess port performance. To satisfy this need, consultants would be hired under the program to develop and implement a system of statistical, operating, accounting, and financial information for all ports included in the program. The SSPyTLD would engage consultants for this task.

c. Institution-strengthening (US\$700,000)

- 2.24 A training program would address different features of port planning and operation, contract and tariff management, and environmental protection and port safety. Training events would consist of courses, technical tours, and in-service training for managers, professional staff, and technical supervisors of provincial and autonomous port authorities.

5. Total cost and financing of the program

- 2.25 The estimated total cost of the proposed program is \$208 million. The Bank would fund up to half the total; the remainder would be paid for by local counterpart contributions.

a. The IDB loan

- 2.26 The proposed IDB loan for up to US\$104 million equivalent would be drawn from the ordinary capital, on the following terms: (i) 20-year amortization period; (ii) four-year disbursement period; (iii) variable interest rate, charged on disbursed amounts; (iv) credit fee of 0.75% per annum on undisbursed amounts; and (v) IDB inspection and supervision fee of 1% of the loan amount.

b. Local counterpart

- 2.27 The following could be recognized as local counterpart contributions, to a total of US\$104 million equivalent: (i) monies contributed by the central government and the provinces, equivalent to approximately 12% of the direct costs of port upgrading works; and (ii) capital outlays by private concessionaires of terminals in the PNBA and other ports covered in the program, provided that the works and equipment have been contracted for and executed on conditions acceptable to the Bank and at fair prices, and that they were carried out within the time frames prescribed in the Bank's policies and rules.

c. Cost table

- 2.28 Table II-1 presents the different cost items by program component and anticipated source of funds. The contingency figure shown consists of 6.5% of the value of works that would be partially financed with the proposed loan plus 3% average annual price escalation. Financial costs were computed using the rates set out in the loan conditions.

TABLE II-1 Estimated program cost (in thousands of U.S. dollars)						
Component	Funding source					% of total
	IDB	Counterpart			TOTAL	
		Central govt.	Provincial govt.	Private sector		
1. ENGINEERING AND ADMINISTRATION	7,868	1,740			9,608	4.6
1.1 Program coordination and administration	1,800	1,740			3,540	
1.2 Works supervision	5,300				5,300	
1.3 PPF reimbursement	768				768	
2. PORT IMPROVEMENT	69,612	5,774	6,314	68,000	149,700	72.0
2.1 Projects to begin in year 1	29,388	36	3,976		33,400	
2.1.1 Concepción del Uruguay	3,695	36	469		4,200	
2.1.2 Puerto Deseado	9,765		1,335		11,100	
2.1.3 Puerto Madryn	15,928		2,172		18,100	
2.2 New Port of Buenos Aires	13,384	4,416		68,000	85,800	
2.3 Other harbor projects	26,840	1,322	2,338		30,500	
2.3.1 Rawson	6,160		840		7,000	
2.3.2 Quequén	17,600	1,322	1,078		20,000	
2.3.3 Other works	3,080		420		3,500	
3. SAFETY AND ENVIRONMENTAL PROTECTION	13,000		3,000		16,000	7.7
3.1 Ship waste reception system	4,500				4,500	
3.2 Fire-exting./accident prevention equipment	8,500				8,500	
3.3 Salvage of abandoned ships			3,000		3,000	
4. ASSOCIATED COSTS	4,900				4,900	2.4
4.1 Studies	2,800				2,800	
4.2 Specialized advisory services	1,400				1,400	
4.3 Training	700				700	
5. CONTINGENCIES	7,580	862	1,510		9,952	4.8
5.1 Construction contingency	4,980	489	410		5,879	
5.2 Price escalation	2,600	373	1,100		4,073	
6. FINANCE CHARGES	1,040	16,800			17,840	8.6
6.1 Interest		6,622	8,778		15,400	
6.2 Credit fee		602	798		1,400	
6.3 IDB inspection	1,040				1,040	
TOTAL	104,000	15,600	20,400	68,000	208,000	100.0

III. PROGRAM IMPLEMENTATION

A. Organization

1. Borrower and executing agencies

a. The borrower and the lead executing agency and coordinator

- 3.1 The borrower will be the Argentine Nation, represented by the Ministry of Economic Affairs and Public Works and Services (MEyOSP). That ministry may channel the proceeds of the loan to provincial government agencies, autonomous national or provincial agencies, and other public entities, after prior clearance from the Bank. Responsibility for repayment of the loan principal and payment of interest, the credit fee, and the Bank's inspection and supervision charge will rest solely with the borrower.
- 3.2 The lead executing agency will be the Ports and Long-haul Transportation Branch (SSPyTLD) of the MEyOSP's Public Works and Services Department (SOySP). The SSPyTLD will also be in charge of overall administration of the program, the safety and environmental protection subcomponent, and coordination with provincial agencies and decentralized port authorities for specific harbor projects to be carried through by each agency at its respective port.
- 3.3 As a condition precedent to disbursement of the loan, the SSPyTLD must demonstrate that it has set up the Program Coordination Unit (PCU) described in paragraphs 2.6 and 2.7 and staffed it with professionals with the required experience, as agreed upon in advance with the Bank. Remuneration paid to these employees will be considered a local counterpart contribution, allocated by the government in the SSPyTLD operating budget throughout the life of the program.
- 3.4 The borrower will engage a consulting firm with experience in port project management to advise and assist the PCU in its administrative, technical oversight, economic, and environmental functions for the program, and in preparing supporting documents required by the Bank for disbursements and documentation to monitor execution of the loan. The terms of reference for this firm, and eligibility and selection criteria, will be agreed upon in advance with the Bank, and the consulting contract will be formally executed before authorization will be given for the first disbursement from the loan.

b. Other executing agencies

- 3.5 The governments of the provinces of Buenos Aires, Chubut, Entre Ríos, and Santa Cruz will be responsible for implementing the year 1 projects for which they have sought funding

(paragraph 2.13), unless they delegate that responsibility to the SSPyTLD. Other provinces may join the program later on, on an equal footing, if they satisfy the eligibility conditions in effect for year 1 projects and for those identified for year 2 (paragraphs 1.33 and 1.34). Each province must set up an executing unit to manage the province's project(s), staffed with personnel from provincial or autonomous port authorities for the technical implementation of projects, and from the corresponding areas of units of the Financial Reorganization and Development Program for Argentine Provinces, for administration and accounting. Investments by PNBA terminal concessionaires could also be classed as local counterpart pursuant to the Bank's conditions for the private sector (paragraphs 1.22, 2.27, 3.42, and 3.43).

- 3.6 Each province taking part in the program must sign a specific agreement with the MEyOSP, using a model agreed upon in advance with the Bank, outlining each project and the conditions for transfer and/or repayment of funds; these terms are to be similar to those governing to the Bank's loan to the Nation. Approval of each such agreement by the respective provincial legislature will be a condition precedent to the first disbursement for each project.

2. Program implementation plan

- 3.7 A preliminary implementation plan has been drawn up as a prelude to a definitive version, which is to include an implementation timetable. As a condition precedent to the first disbursement, the SSPyTLD must present the final implementation plan for the program, providing further particulars of the planned year 1 actions, and reaffirming or adjusting the initially proposed dates. This plan will include:
- a. a timetable for tendering and contract awards for construction work, consulting services, and goods procurement;
 - b. physical and financial targets to track the progress of works projects over the period in question;
 - c. a timetable for delivery of reports and findings of studies conducted under the program and plans for implementing their recommendations; and
 - d. anticipated progress on implementing the recommendations.
- 3.8 This plan will be reviewed at twice-yearly meetings during the life of the program, to make any required adjustments and add in the actions planned for the following year.

3. Program Operating Regulations

3.9 The Operating Regulations, a draft of which has already been agreed on with the Bank, must be submitted to the Bank for clearance before the first loan disbursement can be authorized. The final regulations are to contain or describe (i) implementation arrangements; (ii) the PCU; (iii) institutional and financial eligibility criteria for agencies, and technical, environmental, economic, and financial eligibility criteria for projects; (iv) terms and conditions for transfers and repayments of the loan proceeds between the Nation and the provinces; (v) implementation timeframes; and (vi) tendering, contracting, and disbursement procedures.

3.10 The Operating Regulations will also state which program works are to be funded directly from the SSPyTLD and which will be paid for through transfers by that department to qualifying provinces or autonomous agencies, in accordance with procedures prescribed in the Regulations.

a. Implementation tiers

3.11 The program includes projects to be executed by the Nation, the provinces, and the private sector, the aim being to draw on existing infrastructure and capacity in each of these quarters. The SSPyTLD, acting through its PCU, will be the lead executing agency, with responsibility for administering the program. The provinces will execute their projects through their port authorities, answering to provincial executing units.

b. Terms and conditions of transfers

3.12 For provincial investment projects, the national government will transfer the required funds to the provinces, with repayment terms, interest rates and a credit fee similar to those of the Bank's loan to the Nation. A 1% inspection and supervision fee would also be charged on provincial projects. Before a province could take part in the program, its legislature would have to have passed a law authorizing the borrowing and the assignment, as security for the Nation, of its share of federal tax revenues, and it would have to have adopted any other measures necessary to ensure completion of the provincial program and fulfillment of covenants in the contract with the Bank. The Nation may elect to pass administrative costs of the program on to the provinces.

3.13 Program execution will be governed by the operating and financial procedures set out in (i) the loan contract between the Bank and the borrower, (ii) the program's Operating Regulations, and (iii) subsidiary loan agreements between the Nation and the provinces.

c. Eligibility criteria

(i) For provinces

- 3.14 For an investment project to be eligible for the program, there must be in force a provincial borrowing law authorizing the province to enter into the agreement on the conditions agreed upon between the Nation and the Bank, and the province must have executed the subsidiary loan agreement.

(ii) For projects

- 3.15 Projects satisfying Operating Regulations requirements as to feasibility must be (i) financially sustainable: the project must be capable of yielding surpluses high enough to cover at least administration, operation, and maintenance of the works; (ii) environmentally sustainable: the project is to improve and/or protect the biophysical environment and natural resources; (iii) institutionally viable: the provincial technical executing unit must be institutionally and technically equipped to carry through the project; and (iv) economically viable: the project's economic internal rate of return must be at least 12%.

4. Progress monitoring

- 3.16 The program's success in achieving its objectives will be gauged by reference to indicators established to that end (see Logical Framework). Since the planned investments are not divisible, there will be no intermediate benchmarking.

5. Twice-yearly reviews

- 3.17 The SSPyTLD and the Bank will meet every six months to examine the status of the various activities comprising each subprogram and track the implementation of recommendations adopted. These meetings will also be attended by the PCU general coordinator and any officials whose input is considered necessary for the review of the activities in question.
- 3.18 In the course of these meetings the SSPyTLD and the Bank will decide on corrective measures needed to resolve any problems that have arisen and map out a strategy for achieving the program's objectives and targets.
- 3.19 One month before each review meeting, the SSPyTLD will give the Bank a report with information needed to duly assess progress on the program. Specific items to be addressed are as follows:
- a. the status of technical assistance, studies, and the environmental inventory that are part of the program;

- b. recommendations and proposals for policy changes, as a result of the above-mentioned studies, with a plan for their implementation;
- c. procurement and contracting financed under the program;
- d. review and reconciliation of loan disbursements and program expenditures;
- e. adherence to environmental control measures in executing the program works, and coordination between the agencies involved for the environmental protection elements of the program;
- f. changes that need to be made in the program in the wake of an emergency or natural disaster;
- g. annual data to be compiled to track the attainment of targets and for an eventual ex post evaluation;
- h. a revenue and expenditure plan, construction program, and physical targets for each proposed project, including a technical and economic justification, ranking, and information on fulfillment of eligibility conditions; and
- i. studies and designs for projects that are to be started in the subsequent period.

6. Program readiness

a. Port improvement subprogram components

- 3.20 Technical, economic, and environmental studies are now complete for new construction and wharf rehabilitation projects in the harbors at Concepción del Uruguay, Puerto Deseado, and Puerto Madryn, as are the basic designs and bid documents for these facilities.
- 3.21 Studies for improvements to the Rawson port (Chubut) and to extend the south jetty at Quequén (Buenos Aires) will be completed in the first half of 1997. Construction work could be put out to tender once the Bank has approved the studies and environmental permits have been obtained.
- 3.22 Expenditures by PNBA concessionaires to repair piers and purchase new cranes, tractor trucks, and other container-handling gear would be considered part of the counterpart to the loan.
- 3.23 The national railway company (Empresa Nacional de Ferrocarriles) is producing feasibility studies and preliminary designs for the relocation of the access and rail yards, to expedite rail access to PNBA terminals and set up a cargo transfer facility in the port. The final studies and environmental impact assessment will be paid

for with proceeds of the loan; they could be finished during the first year of the program.

b. Safety and environmental protection subprogram

- 3.24 The preliminary configuration and size of the project components was based on a quick study by specialized consultants. Terms of reference have been written for specific studies needed to execute the components and for technical assistance and training to be funded by the loan. Before the first disbursement could be authorized, the borrower would have to demonstrate to the Bank that (i) the ME0ySP had drafted, for approval, a new regulatory framework for port and maritime, river, and lake navigation safety, pursuant to Decrees 817/92 and 673/94, and (ii) that a framework agreement had been signed by the SSPyTLD and the PNA for the actions called for in the program's safety and environmental protection component.
- 3.25 Within one year after signature of the loan contract, the borrower is to submit the following to the Bank: (i) evidence that the new regulatory framework mentioned in the preceding paragraph has been issued, and (ii) plans and final designs for facilities for handling toxic or hazardous cargo, and environmental management plans (contingency plans, monitoring and evaluation plans) for each privately operated PNBA and South Dock container terminal.
- 3.26 Eighteen months after signature of the contract, the borrower would be required to present to the Bank: (i) the findings of studies in the program's environmental component, and copy of agreements signed with the provinces for their effective implementation; and (ii) evidence that facilities for handling hazardous cargo and the environmental management plans have been implemented at privately run PNBA and South Dock container terminals.
- 3.27 In order for a project to be included in the program, it must have undergone an environmental impact assessment (EIA) acceptable to the Bank, and all the environmental approvals and permits required under national and provincial law must have been obtained.

B. Tendering of construction work, procurement of goods, and contracting of services

- 3.28 Before bids can be called for a works project in the program, the executing agency must demonstrate to the Bank that the technical environmental control specifications recommended in the respective EIA have been included in the bid documents for that project, and that all environmental approvals and permits required under national and provincial law have been obtained.
- 3.29 Since the works projects to be funded under this program call for some measure of specialization and experience, as well as suitable

equipment, bidder prequalification is considered to be necessary in each case.

- 3.30 To judge from recent tender calls in Argentina, foreign construction firms rarely bid on harbor works valued below US\$5 million. Since the proposed program works are very scattered and will be in the hands of different executing agencies, it will be impossible to package them into larger and hence more attractive lots. For that reason, it is proposed that the threshold above which international competitive bidding would be required be set at US\$5 million. International public bidding would likewise be required for procurements of goods or services valued at more than US\$350,000. Items or services below that amount that are to be obtained using the loan proceeds would be acquired following procedures that assure unrestricted competition and ensure the quality of the goods and services, which procedures must be consistent with the Bank's policies. The procedures that will govern procurement of goods and contracting for construction work will be set forth in Annex B to the loan contract.
- 3.31 Consultants will be selected and hired following the procedures set out in Annex C to the loan contract. International calls for proposals will be required for any consulting firm contract worth US\$200,000 and up. The procurement plan for the program is appended as Annex III-3.
- 3.32 Each province or autonomous agency will tender out works and hire supervision services for its own projects. Where necessary, it may seek advisory and other support from the PCU to help it organize and conduct calls for bids and award contracts.
- 3.33 The project team has agreed to the publication of the General Procurement Notice for the program and specific notices for a number of works projects. Annex III-3 presents the tentative timetable for hiring consultants (paragraphs 2.21 and 2.22), for construction tendering, and for procurement of goods.

C. Ownership of land on which works projects will be sited

- 3.34 The planned program works will be carried out on nationally or provincially owned land. Pursuant to Bank policies, if any land or facilities owned by private parties is affected, the Bank will not authorize the tendering of works seeking funding under the loan until the borrower or provincial executing agency shows that it has reached an agreement with the owner of the land or facilities as to the monetary or other compensation that owner is to receive, or that the land has been ceded to the borrower or provincial agency.

D. Interagency agreements on facilities or equipment operation

- 3.35 Before the Bank will authorize calls for bids for construction work, services, or procurement of goods using proceeds from the

loan where the works, services, or goods, or entitlement to their use, are to be transferred to the jurisdiction of other agencies or institutions not attached to the SSPyTLD, agreements must have been signed stipulating the obligations assumed by the parties and evidencing the undertaking to allocate funds needed for their operation and maintenance.

- 3.36 One such agreement is to be executed by the SSPyTLD with the Argentine Naval Command for the installation, operation, and monitoring of ship waste disposal systems, measures and devices to prevent and control fires and other accidents, and salvage of abandoned vessels, under the safety and environmental protection subcomponent.
- 3.37 Agreements also will need to be signed with the Belgrano Railroad and concessionaires of the other railroads to operate the railways during and after execution of the program works, and, eventually, with the Office of the Mayor of Buenos Aires, to reconfigure rail yards, build or rebuild roads, and arrange any required land exchanges.

E. Project completion time, and deadline for physical initiation of works

- 3.38 The program is to be carried out over four years, reckoned from the effective date of the loan contract. Physical work on all the port improvement projects is to have begun by the end of year 2 of the program.

F. Maintenance of port facilities

- 3.39 Within six months after the start of construction or procurement of equipment or plant being funded by the loan, the borrower or provincial executing agency must provide the Bank with the maintenance plan for the port in question, stating the funds that will be allocated, frequency of maintenance, and parameters for assessing its effectiveness. Subsequently, as from the completion of each subproject, the borrower or provincial agency must produce a report each year, for 10 years after the date of the last disbursement, containing (i) an account of maintenance activities the preceding year; (ii) a report on resources used; (iii) a detailed assessment of the state of the facilities maintained; and (iv) the proposed maintenance plan for the coming year. In the first quarter of each year the borrower will send the Bank a consolidated report of the reports produced by agencies that executed program-funded construction work or facilities or purchased program-funded equipment.

G. Execution of the technical assistance components

- 3.40 The PCU will engage consultants to perform these components, and will administer their contracts and monitor and inspect their work.

When the provincial agency or other institution is not attached to the SSPyTLD, the PCU will coordinate and produce operating regulations for the technical assistance activities.

H. Advance tendering

- 3.41 The project team gave clearance for works for the secondary viaduct and new Puerto Madryn fishing wharf to be tendered out prior to approval of the proposed loan. The designs, specifications, and bid documents were reviewed and approved by the Bank, and the tender procedures used are concordant with the Bank's procurement policies. These works are valued at about US\$18.1 million equivalent.

I. Recognition of counterpart expenditures

- 3.42 As was indicated earlier, a number of works projects are under way at this time in the PNBA and other ports that will be covered in the program. In order to ascertain the eligibility of these investments, certify to their technical quality, and calculate sums that could be recognized as local counterpart, the SSPyTLD hired an expert with professional qualifications and experience acceptable to the Bank, who presented a report outlining expenditures to be recognized; the same procedure would apply for outlays subsequent to that report. Environmental eligibility was certified by an EIA, which was released for public review and comments. Consequently, the Bank may authorize recognition of investment and other expenditures incurred as local counterpart contributions to that end, to a limit of US\$68 million. This is 10% of aggregate investments and commitments since 1995 by the government and the private sector for ports and navigable waterways, and 29% of the share corresponding to the PNBA. When the PNBA project was designed, these were future expenditures; but with the passage of three years (when the program proposed herein was being prepared) and the successful implementation of the landlord model, they now are actual investment outlays. Accordingly, roughly US\$30 million of the US\$68 million figure mentioned above would correspond to amounts already expended; this will provide a comfortable margin in terms of counterpart support in the first year of the proposed program.
- 3.43 It is proposed that expenditures since April 1995 be recognized as part of the local counterpart when the concessions became effective upon the arrival of the first equipment that would be part of the counterpart.

J. Ex post evaluation

- 3.44 In keeping with Bank policy, the borrower and executing agency were consulted about an ex post evaluation, and the executing agency decided not to have such an evaluation performed as part of the program activities. If the Bank wishes an evaluation done, the required data will be available in the comprehensive port

information system that is to be set in place as part of the program's technical assistance component, creating the respective database (paragraph 2.23). Before any project that is not part of the year 1 sample can be added to the program, the Bank and the executing agency must together work out its Logical Framework.

IV. THE BORROWER AND THE EXECUTING AGENCY

A. The borrower and the executing agency

- 4.1 The borrower will be the Argentine Nation. Responsibility for dispensing and administering the proceeds of the loan and the local counterpart for the program will rest with the Ports and Long-haul Transportation Branch (SSPyTLD) of the Public Works and Services Department (SOySP) in the Ministry of Economic Affairs and Public Works and Service (MEyOSP). The SSPyTLD will work through a Program Coordination Unit (PCU) as executing agency. The provinces will carry through program-funded ports projects through provincial agencies and/or autonomous port authorities (paragraph 3.5).

B. SSPyTLD organization and legal status

1. Organization and functions

- 4.2 The MEyOSP was restructured by Executive Order 866 of December 11, 1995, which created the SSPyTLD. That new branch of the ministry took over the organization, functions, and staff of the former Ports and Navigable Waterways Branch (SSPyVN).
- 4.3 As the national port authority, the SSPyTLD now performs the functions of the former SSPyVN, which itself had replaced the National Port Authority (AGP) in 1992. Specifically, it (i) makes proposals and executes and monitors policies and plans relating to harbor and navigable waterway operations, and discharges all the responsibilities and functions of a national port authority; (ii) develops and proposes policies on deregulation, privatization, and concessioning of ports and services for ports and navigable waterways; and (iii) coordinates studies to update rules and regulations governing operating arrangements, technical suitability of equipment, insurance, and tariff systems.

2. Personnel and material and financial resources

- 4.4 The SSPyVN/SSPyTLD has been working efficiently, with a small group of professionals engaged in activities associated with reform of the ports sector (chapter I). However, the structure of the National Ports Directorate (DNP), which itself had recently absorbed the organization, objectives, and responsibilities of the National Port Works and Navigable Waterways Directorate (DNCPVN) – formerly part of the SSPyVN – with its 1,311 employees, was folded into the SSPyTLD, raising that branch's staff numbers from 165 to 1,476.
- 4.5 When the AGP was dissolved, part of its staff was transferred to other groups and commissions and to the provincial ports. DNCPVN personnel are now doing dredging work. Under the terms of the Port

Operations Act, the DNCPVN was to continue to provide construction, dredging, buoying, and maintenance services until the new operating structure was set in motion (paragraph 4.7).

- 4.6 The first staff reorganization was completed in 1993. At present, steps are being taken to pare staff numbers further, among them the transfer of personnel to the Buenos Aires Port Corporation, once that body is formally established; voluntary retirement incentive programs; and transfers of staff to private outsourcers and to dredging and allied services.
- 4.7 Incentives began to be offered in 1995 for the establishment of microenterprises, partnerships, and consortia that could deliver services to provincial agencies and autonomous port authorities. In the second half of 1996 the MEyOSP plans to forward a proposed new SSPyTLD organizational scheme and the associated downsizing proposal to the Office of the President, as part of the second stage of the State reform process. This will mark the final chapter in the conversion of the DPN/DNCPVN into an oversight body for outsourced dredging work.
- 4.8 Since the SSPyVN had only been in existence for a few years when it was absorbed into the SSPyTLD, there is no relevant budget history available to the SSPyTLD. The budget, consisting largely of funds for payroll and operating costs, will be reduced as the current personnel policy is implemented. For that reason, the SSPyTLD is avoiding hiring permanent staff, and is keeping only essential personnel in the PCU. It will engage a firm to help it perform the many tasks required to administer the proposed program.

3. Financial aspects and sustainability of the program

- 4.9 This section will examine whether the projects in the sample satisfy the Bank's financial criteria, whether the local counterpart is feasible, and whether the amortization and interest repayment scheme is viable. It will be shown that the ports coming in for support will be able to generate revenues sufficient to service the provincial debt, though the provinces may recover these costs directly or indirectly by means other than passing on debt service charges.
- 4.10 Local counterpart funds will come basically from three sources: (i) the Argentine Nation, which will finance part of the planned PNBA repair work (mainly the upgrading of road and rail access), associated costs, and finance charges, plus repair projects at Concepción del Uruguay and Quequén; with the latter outlays, the Nation will be honoring pledges under agreements transferring these ports to autonomous and provincial agencies; (ii) the provinces and ports taking part in the program, which will supply 12% of the investment funding; and (iii) PNBA concession-holders, which are already making investments in the terminals they run and in publicly operated terminals, in line with the strategy pursued by

the government and the Bank under loan 733-OC/AR and during the three years in which the proposed operation has been prepared.

- 4.11 Each participating province will be free to work out arrangements with its ports as to the sharing of liability for repayment of the debt. Some provinces have indicated that, apart from their formal liability to the Nation, they would repay part or all of the debt, for the following reasons: (i) the added port capacity that would come out of the program will boost local output and increase cargo, creating jobs and provincial fee and tax revenues; (ii) their contribution would enable the port authority to pay for other smaller rehabilitation and expansion projects without having to raise tariffs; (iii) as owners of port property and plant, it is incumbent on the provinces to share in capital investments whose useful life exceeds the port administration's planning horizon; a breakwater, for instance, can last 50 to 100 years; (iv) the investments will resolve a problem of negative externalities that is not a concern of the port administration; and (v) the provinces may wish to use funds earmarked for capital investments.
- 4.12 The provinces expect to recoup their investment, but not necessarily by passing the debt on to the respective port administration. Arrangements as to formal responsibility-sharing and each port's contribution will be worked out in negotiations between individual provinces and the respective port authorities.

a. Funds from the Argentine Nation

- 4.13 The Nation's participation in the local counterpart funding has as its backdrop the ongoing process of deregulation, decentralization, and service concessions for all modes of transport in Argentina (chapter I). One salient consideration here is the pressure exerted on State spending by fiscal adjustments and the concomitant need to direct public funds into areas that can spur private-sector activity and investments.
- 4.14 This strategy has succeeded in paring government spending, thereby easing the strain on the national budget even as it has improved service quality in existing infrastructure. To achieve its objectives, the Nation negotiated with provinces, users, and prospective concessionaires, pledging to assist, in the medium term, with the upgrading of transportation infrastructure, to replace obsolete plant and equipment.
- 4.15 Along the same lines as initiatives pursued for highways and railroads, the Nation has worked out arrangements with the provinces and users whereby it will continue to rehabilitate and maintain infrastructure, albeit with smaller allocations than for other modes of transport. In the process, the government has largely done away with subsidies and distortions, and has created conditions for competition between the different modes of freight carriage.

- 4.16 The Nation, without contributions from the other agencies involved, will need to generate funds to repay part of the approximately 20% of the loan for (i) administration of the program, (ii) the bulk of the environmental subprogram, and (iii) its part of shared expenses for studies, technical support, and training.

b. Funds from the benefiting provinces and ports

- 4.17 The balance of the funding will be transferred to the participating provinces and ports. The provinces would furnish, as part of the local counterpart, the equivalent of 12% of their respective investments, and would assume responsibility, pursuant to the above-mentioned agreements, for repaying the portion of the loan corresponding to them. They could recover those costs, in whole or in part, through agreements with the ports being upgraded.
- 4.18 Though most of Argentina's provinces are experiencing budget problems, the nature and scope of the financial obligations that would ensue from the proposed program are such that they would not be cause for concern. Formal security arrangements between the Nation and the provinces pose no problem for this operation, since the Nation could, for each participating province, deduct the amount of each project from monies to which the province would be entitled under federal revenue-sharing legislation. The cost of these projects is very low relative to total provincial budgets. The most expensive venture identified (US\$20 million for the Quequén harbor in year 2) would entail a counterpart equal to a mere 0.01% of current revenues of the Province of Buenos Aires. Estimated outlays for works at Puerto Madryn equal 0.5% of current revenues of the Province of Chubut, and for Concepción del Uruguay, 0.05% of current revenues of the Province of Entre Ríos. In any event, the net fiscal effect of a province's 12% share is nil, since it would be more or less offset by the tax revenues the province would stand to receive on account of the new works.
- 4.19 Since construction projects are to be completed in a relatively short span (about 18 months), debt payments are likely to have less of an effect each year on the budget than will the 12% counterpart. Moreover, the outlays in question are relatively modest, and could be recovered by the provinces in full or in part using existing direct-recovery mechanisms, which include: (i) taxes or other levies, whether *ad valorem* or based on tonnage of port throughput; and (ii) formal agreements for the repayment of these funds. Indirect mechanisms include taxes that will yield higher revenues when exports and imports rise as a result of the projects. In sum, the projects will be financially viable for participating provinces.

c. Private funds

- 4.20 Both the government's and the Bank's port sector strategies advocate investments that will spur private investors to put in

their own capital, in areas where such an approach is viable and efficient, in order to enhance services and cut public spending in the sector. In keeping with these strategies, the program described herein calls for a mix of public and private investment funds, both of which are needed to achieve the outcomes sought. Given the nature of current operations and facilities at the PNBA (chapter I), efforts were made to have private concerns operate container terminals at that port. An estimated US\$68 million in private capital expenditures (incurred to date, under way, or planned) could potentially qualify as local counterpart. Most of these expenditures were for the purchase of cranes and other appliances to handle containers and other unitized cargo; some were for work done by PNBA concessionaires to repair wharves and fender systems, which was reimbursed by the Nation, and for investments in other port terminals (paragraph 3.42).

d. Financial condition of ports in the sample

- 4.21 None of the ports in the sample is receiving operating subsidies or grants. All of these harbors raise revenue through tariffs and port user charges and from lease and other payments received from private concessionaires of terminals or other port facilities. Under the landlord model, capital investments by the State are acceptable when they are in the government's interest. The following paragraphs review the ports' debt-servicing capacity in the event that direct payment schemes were decided upon in their negotiations with the respective provinces.
- 4.22 Many of Argentina's provincial ports have benefited over the years from cross-subsidies, with funds generated through high tariffs levied at the PNBA and a number of other ports (paragraph 1.3). Hence, ports transferred to autonomous or provincial port authorities were inherited by the latter free and clear of debt, and also unburdened by the surplus staff that had been a feature of the previous system. The administrators of provincial ports that make up the program sample have been operating for barely a year or two - the product of port sector reforms (paragraph 1.8). These ports also are part of a group of commercially viable harbors that were carrying the rest of the system, so their managers have been able to cut tariffs by nearly half and still yield surpluses. This is illustrated in Table IV-1, which presents revenues and expenditures for the different components from 1992 to 1995, plus 1996 and 1997 forecasts. All of the ports are profitable; the cumulative surplus in December 1997 will be higher than the 12% local counterpart for their respective projects or annual payments on their share of the debt. Hence, even in the outside scenario that all the provinces' obligations were passed on to the ports, these projects would be financially viable (paragraphs 4.26 and 4.27).

Table IV-1 Revenues and expenditures of ports for which projects are planned in year 1, accumulated reserves and anticipated expenditure (US\$000)								
Port	1992	1993	1994	1995	1996	1997	Accum. reserves 12/97 */	Expenditure with project
Concepción del Uruguay								
Revenue	925	647	985	1,450	1,420	1,448	972	469
Expenditure	680	606	910	1,240	1,240	1,228		
Surplus	245	41	75	210	180	221		
Puerto Deseado								
Revenue	389	1,043	1,052	950	968	975	2,924	1,335
Expenditure	82	273	448	560	550	540		
Surplus	307	770	604	390	418	435		
Puerto Madryn								
Revenue	1,117	2,161	2,658	1,310	1,323	1,365	4,240	2,172
Expenditure	352	1,895	1,377	700	690	680		
Surplus	765	266	1,281	610	633	685		

*/ Aggregate, 1992 to 1997.

- 4.23 In short, port managers will cover their operating, maintenance, and administrative costs from tariff revenues and fees levied for use of the port and other services provided directly to users, and from concession fees.
- 4.24 As a rule, the provincial governments will shoulder the cost of repairing wharves and rebuilding sheltering structures in their respective ports. They will decide, in each case, on cost-recovery policies for the building or expansion of berths and for payments of principal, interest, and other finance charges on the debt.
- 4.25 The central government will assume the cost of the nationwide components (technical assistance, the environmental subprogram, training, etc.), and expenditures that cannot be prorated (administration of the program, credit fee, and inspection and supervision charge).

4. Tariffs

- 4.26 Pursuant to the legislation in force, tariffs, fees, prices, and other levies for services and port use are set by each port manager, which submits a tariff schedule to the competent authority for review and official approval. With the schedules, port managers furnish a rationale for the tariff structure set out

therein, a study of operating and maintenance costs, debt service, and recovery, and of other revenues as prescribed by each competent authority, referenced to competitiveness targets and medium- and long-range objectives.

- 4.27 When there are competing ports and terminals, tariffs in any given facility should be in line with those levied in competitive ports, operating and maintenance costs, technical upgrades of facilities, expansion needs, and efficient superintendence of harbor works using modern management techniques. The ports are free to adjust their tariffs to keep pace with operating, maintenance, and rehabilitation costs. At this writing, port charges range from US\$1.50 to US\$5.00 per ton; stevedoring for some commodities runs about US\$16 per ton, and ships can be charged over US\$10,000 a day in lay-up costs. Port users, which are represented on boards in the larger ports, recognize the importance of keeping infrastructure in good repair, to hold down stevedoring and lay-day costs, and they have supported facilities maintenance and rehabilitation programs, along with tariff policies that assure cost recovery.

5. Budget management

- 4.28 Responsibility for administering the SSPyTLD (accounting, budgeting, procurement, and contracting procedures) rests with the Administration Directorate-Section I (DGA-I) in the MEyOSP Administration Branch, Coordination Department.
- 4.29 On the purchasing and contracts side, DGA-I draws up bid documents, calls for tenders, arranges publicity, issues notices of intended contract awards, and dispenses payments, following government procurement rules and procedures.
- 4.30 The PCU, reporting to DGA-I, will manage accounting, budgeting, and purchasing and contracts for the proposed program, adhering to central government and IDB rules and procedures. The audit agency for the program will be the Office of the Auditor General of Argentina.
- 4.31 The role of the SSPyTLD will be confined to drawing up technical specifications and terms of reference, evaluating bids and proposed contract awards for sizable, technically sophisticated procurements and contracts, and monitoring the technical side of ongoing works projects and service contracts.
- 4.32 Two agencies with legal, operational, administrative, and financial autonomy oversee the workings of the SSPyTLD: (i) the General Oversight Office (SIGEN) in the Office of the President, and (ii) the Office of the Auditor General (AGN), part of the legislative branch. SIGEN is in charge of internal auditing, through internal audit units. In its preaudit work it references organization plans, regulations, and procedures manuals for procurement, cash, budget, and facilities management systems; its

ex post audits look at budgeting, accounting, economic and legal aspects, and financial and systems management. The AGN is empowered to conduct ex post audits of budgeting, corporate operations, economic and legal aspects, and finances, and to audit financial statements.

V. VIABILITY OF THE PROGRAM

A. Technical viability

- 5.1 Calculations in studies for year 1 projects were done using criteria and methods consistent with modern practices and internationally accepted standards. Since all of the planned activities involve rehabilitating or expanding existing port facilities, reliable data are at hand on geotechnical, oceanographic, and hydrometeorological conditions, on the basis of which the main design parameters for the proposed works were adopted.
- 5.2 Though for the most part the project sites are not prone to natural disasters such as earthquakes, severe hurricanes, or extraordinary flooding, data obtained from statistical records have been used to build in protective measures where necessary.
- 5.3 Since very little port construction work has been done in Argentina in the last twenty years, few local construction firms are equipped with state-of-the-art technology or are familiar with new types of materials being used in this field. There are, however, a number of foreign firms engaged in projects of this nature in Argentina at present, and their participation would unquestionably help introduce such modern techniques. To that end, the tender documents will expressly state that, along with offers based on the basic alternative provided for in the bid documents, bidders may propose the use of equivalent technological alternatives, if this would lower construction costs.
- 5.4 The port rehabilitation works being proposed will restore key infrastructure elements that are currently in a critical state of disrepair, owing to a lack of timely maintenance or reconditioning. The decentralization of port management in the country has helped remedy this problem, since local port authorities are committed to conserving their facilities and have the means to do so.

B. Institutional viability

- 5.5 The borrower will hire a specialized consulting firm to provide advisory and other support to the Program Coordination Unit (PCU), as it administers the program and oversees its technical, economic, and environmental elements; to ensure compliance with disbursement procedures, and to monitor program implementation. In order to ensure that the program will be institutionally viable at the central level, the PCU will have to have been set up and the consulting firm engaged before the first disbursement can be authorized.
- 5.6 As a further requirement, an executing unit, duly staffed and equipped, must be set up in each participating provincial agency to

carry out that agency's projects. Before the first disbursement for any provincial project will be authorized, it must be demonstrated to the PCU's satisfaction that the respective executing unit has been set up and properly equipped. This will ensure that, from an institutional standpoint, the operation can proceed smoothly at the provincial level as well. These arrangements can be evaluated at the annual review meetings, so that the Bank can be assured that all requirements are being satisfied.

- 5.7 To ascertain the new port administrations' capacity to operate effectively under the landlord model, the project team visited a total of seven ports and met with their managers or boards. The team's findings were as follows: in the larger ports, users of port facilities are represented and have an active say in harbor operations, through their boards; maintenance and repair measures are being instituted; guidelines are being established and, where necessary, port development projects are being brought in; and efforts are under way to market port services. It thus would appear that the new decentralized port management model is working well, and will be able to discharge its future tasks. In light of these positive developments, the series of measures instituted to date, and the additional actions that will need to be completed before funds for the proposed operation can be disbursed, there are expected to be no institutional problems such as might jeopardize completion of the program or the sustainability of its components over time.

C. Financial viability

1. Port revenues and expenditures

- 5.8 As was explained in chapter IV, counterpart funds are expected to be available as and when needed for project execution, facilities maintenance, and payment of principal and interest on the loan. Private concessionaires operating at the PNBA are making investments in that port as planned, and the portion that satisfies Bank requirements would be recognized as local counterpart.
- 5.9 According to revenue and expenditure projections for ports slated to participate in year 1 of the program, revenues would be high enough to cover costs, including operating and maintenance expenses.

2. Financing of proposed investment projects, and repayment of the loan

- 5.10 Funding for the borrower's planned investment projects would come from national government general revenues and from PNBA concessionaires. Local counterpart funds would be supplied by the provinces (12% of the total, equivalent to the taxes involved), and the Nation would repay the loan. The proposed provincial port investments will be for the account of the respective province, to

be paid for out of general revenues and/or funds earmarked for ports, the latter consisting of levies on revenues of autonomous port authorities.

- 5.11 According to the financial analysis performed, despite the budget problems facing most of Argentina's ports the proposed operation poses no concerns, in terms of its nature or size; the local counterpart and debt service are viable. The same holds true for the port authorities that will take part in future and for investment outlays by PNBA concessionaires. The financial viability of the proposed program thus appears to be assured.

D. Economic feasibility

- 5.12 An economic appraisal was done of projects to be funded with the loan proceeds in year 1 of the program. Their aggregate value of US\$112.4 million is 49% of the total program cost.

1. Methodology

- 5.13 To ascertain the economic feasibility of the above-mentioned projects, a comparison was done of economic costs and benefits in "with project" and "without project" scenarios for specific initiatives.
- 5.14 The economic costs examined for each project were capital outlays, incremental operating and maintenance costs, and residual values.
- 5.15 The chief economic benefits to be expected from upgraded ports are the value of shortened ship queuing times, compared with current or potential congested conditions, and time savings for berthed vessels when cargo-handling productivity is stepped up. It has been ascertained that none of these benefits will accrue to vessel owners, since the ocean freight market associated with the traffic moving through ports covered by the program is one of multiple buyers and sellers, none of them in a position to manipulate prices. The benefits will be shared out in the form of lower production, export, import, and distribution costs of inputs and consumer and capital goods for the Argentine economy. The easing of one macroeconomic constraint, as the country's exports are made more competitive, will boost economic activity generally.
- 5.16 To calculate daily vessel costs, estimates were made, using 1995 data, for each type of vessel and for a range of sizes, of capital replacement cost and operating costs, including personnel, supplies, maintenance, insurance, administration, and fuel.

2. Key data

- 5.17 Economic feasibility studies were done for each upgraded port, looking at elements such as cargo forecasts by commodity, estimated average vessel size and cargo tonnage per vessel, and daily vessel costs. Table V-1 presents cargo forecasts for the three ports slated for year 1 projects and for containerized cargo in the Port of Buenos Aires.

Table V-1 Cargo forecasts, by port (1995-2010) (in thousands of tons)				
Year	Madryn	Deseado	Concepción del Uruguay	Buenos Aires
1995	814	279	1,008	5,095
2000	800	359	1,221	8,466
2005	827	414	1,591	12,439
2010	854	454	1,677	16,646

3. Appraisal findings and sensitivity analysis

- 5.18 Economic internal rates of return (EIRRs) and net present value (NPV) were calculated at 12% real interest for a period to the year 2015. Table V-2 presents the findings.

Table V-2 Findings of economic appraisal PNBA works projects, and year 1 projects in other ports				
Port project	Investment */ (US\$ million)	EIRR (%)	NPV (US\$ million)	+ 10% C - 10% B
Puerto Madryn	18.1	21.7	9.9	18.0
Puerto Deseado	11.1	29.6	23.6	26.5
Concepción del Uruguay	4.2	60.5	14.9	51.1
Buenos Aires	232.7	21.4	145.1	18.0

*/ Costs with taxes.

4. Sensitivity analysis

- 5.19 According to a sensitivity analysis (right-hand column in Table V-2), the project EIRRs would remain high even in a scenario of 10% higher costs and 10% lower benefits.

5. Poverty impact

- 5.20 In accordance with the Eighth Replenishment document (AB-1704), it has been determined that the proposed program does not qualify as poverty-targeted, either geographically or in terms of beneficiary population, and is not specifically targeted to women.

E. Environmental viability

- 5.21 The following were the instruments used to assess the program's environmental feasibility: (i) studies to document environmental and safety conditions in Argentina's main ports, on the basis of which the environmental protection subprogram was configured; (ii) environmental impact assessments (EIAs) for upgrading projects at the three ports in which work would begin in year 1 of the program; and (iii) supplementary EIAs for PNBA works projects. All the studies were produced in accordance with terms of reference agreed upon with the Bank. After the Bank found the EIA reports to be acceptable, they were published in the Buenos Aires press and released for public review in advance of the analysis mission. The EIAs for projects in subsequent years of the program will likewise be made public, following similar procedures. The environmental report was approved by the Bank's Environment Committee at its meeting on September 3, 1996.
- 5.22 Given current institutional constraints in the ports sector, which are only to be expected in a changeover to a new management model, it is recommended that the Bank monitor program operations particularly closely at the early stage, at least until the planned safety and environmental protection studies are completed and final agreements are in place between the SSPyTLD, the provinces, and the Argentine Naval Command for the safety and environmental protection component. This stage is expected to take between 12 and 18 months.
- 5.23 The safety and environmental protection subprogram will greatly improve conditions in Argentina's busiest ports and shipping routes, bringing them up to international environmental standards on a number of fronts. Its impact will go far beyond the mere remedying or mitigation of the effects of construction work done for the port improvement subprogram.
- 5.24 The port upgrading projects planned for year 1 of the program are small in scale, and their impact on the environment will be largely positive, as operating conditions improve in these harbors. Negative impacts would be slight or moderate, would be confined basically to the construction stage and to the work site, would be temporary, and could be mitigated through preventive measures and relatively simple precautions. The EIAs contain specific recommendations as to mitigating measures, the cost of which has been built into construction budgets that would be part of the bid documents. Community reaction to port upgrading plans is largely supportive, and there has been no opposition on the part of environmental organizations.
- 5.25 Port improvement projects brought into the program could pose other types of environmental problems, particularly in oil ports and for the dredging of access channels. The program will provide for

environmental evaluation and monitoring procedures in such cases, to ensure that the Bank's guidelines are adhered to.

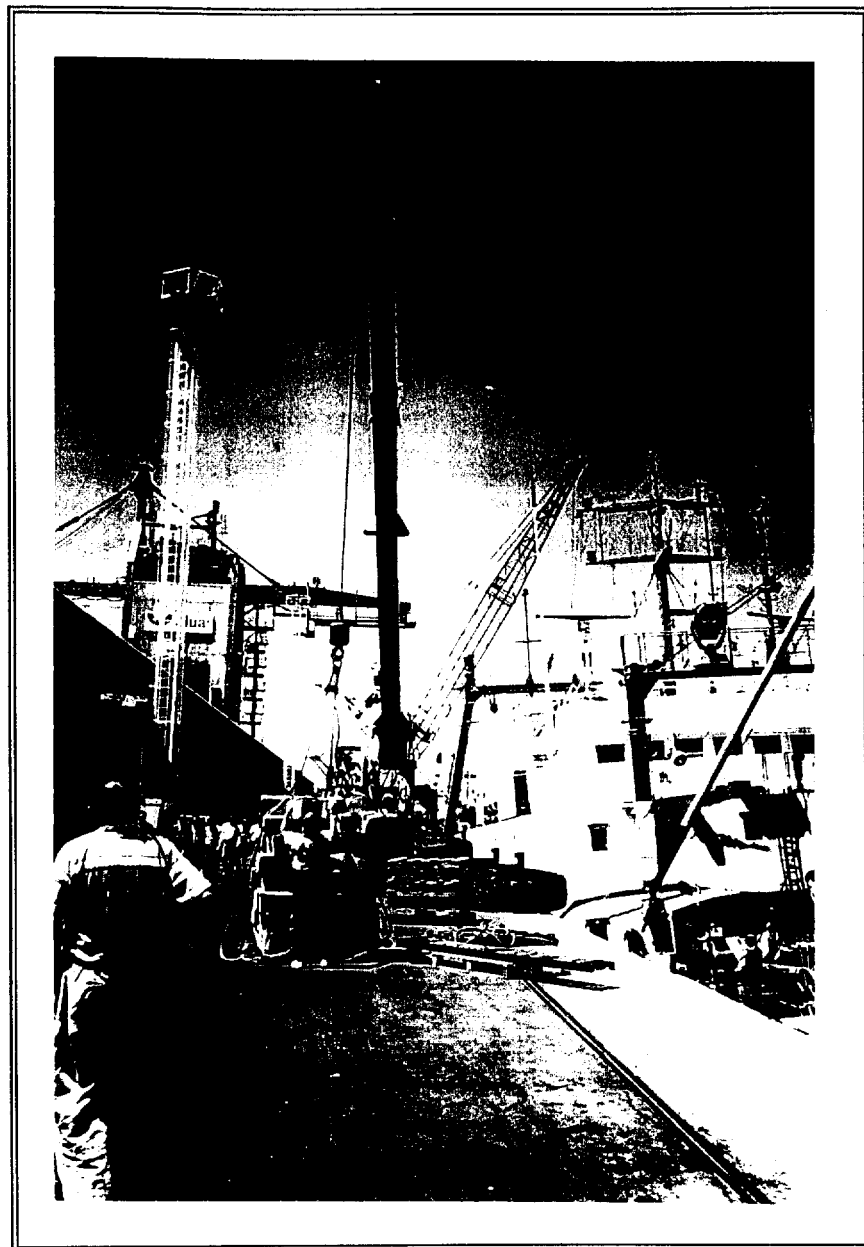
- 5.26 Overall, the program is environmentally viable, with one specific project that would substantially improve environmental conditions, and it has built in mechanisms to see that environmental concerns are duly addressed.

F. Risks

- 5.27 The current provincial port agencies have been operating for a very short time. Though they have been working efficiently, problems with institutional coordination could hamper the program, and particularly the safety and environmental protection component. To counter this risk, the Bank and the SSPyTLD have worked out forms of agreement and have met with interested parties. This has expedited preliminary agreements and definitions that can pave the way for a new regulatory framework for maritime and river navigation and safety, in which the responsibilities of agencies engaged in this sector will be spelled out (paragraphs 3.24, 3.25, and 3.26).
- 5.28 Factors external to the program could have a significant impact on projects executed by provincial port authorities and also on import and export cargo demand. Among such factors are further fiscal adjustment plans, macroeconomic changes, and shifts in patterns of production and trade. Any negative influence in such instances is expected to be confined and temporary; at most, they might delay completion of an individual project.

PHOTOGRAPHS OF PROGRAM COMPONENTS

Figura 1



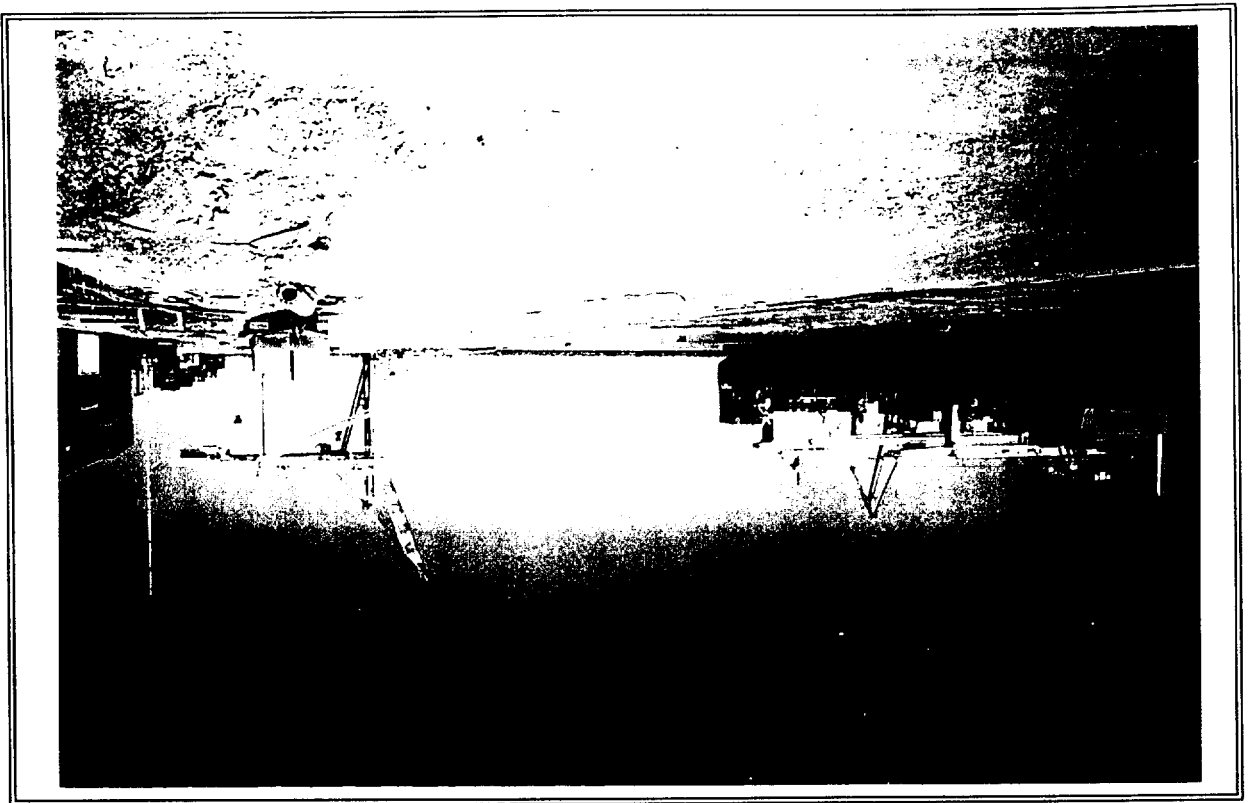
La falta de espacio en el espigón reduce la capacidad de transferencia de cargas en Puerto Madryn.

Figura 2



La Plata presenta numerosas situaciones problemáticas que amenazan el ambiente y las residencias en las inmediaciones del puerto.

Figura 3



Obras de reparación e instalación de grúa moderna en terminal de contenedores en el Puerto Nuevo de Buenos Aires.

Figura 4



El Puerto de Ushuaia moviliza tránsito turístico, pescado y contenedores en un ambiente marítimo peligroso y ecológicamente frágil.

**Port modernization program
(AR-0126)**

Logical Framework

Program	Port improvement subprogram	Safety and environmental protection subprogram
own transportation costs in foreign trade d the environment.		
s sector more efficient, in keeping with ortation approaches and logistics.	Goal Make the ports sector more efficient, in keeping with modern transportation approaches and logistics.	Goal Make the ports sector more efficient, in keeping with modern transportation approaches and logistics.
s: ovement subprogram d environmental protection subprogram	Purpose Shorten ship loading and unloading times at key ports in the system, under safe conditions.	Purpose Alleviate pollution problems caused by ship traffic, and reduce accidents at ports.
	Components 1. Rehabilitation of piers and/or building of new berths at ports in Concepción del Uruguay, Puerto Deseado (including land access), Puerto Madryn, and the New Port of Buenos Aires (PNBA) (including equipment). 2. Intermodal cargo transfer facility, New Port of Buenos Aires. 3. Other works, to be determined.	Components 1. Waste reception facilities. 2. Fire-extinguishing and accident prevention equipment. 3. Salvage of sunken and abandoned ships.

Logical Framework

Port improvement subprogram

Description	Indicators (*)	Means of verification	Main assumptions
<p>...s sector more ...eping with modern ...approaches and</p>			
<p>...loading and ...es at key ports in the ...e conditions, ...rmodal transfer at the ...uenos Aires.</p>	<p>By 12/99 (changes over 12/96):</p> <ol style="list-style-type: none"> 1. Concepción del Uruguay has boosted throughput capacity, under safe conditions, from 0 to 8,000 t/d (for wood or like products). 2. Berth 3 at Puerto Madryn has increased its chilled fish handling capacity from 209 to 300 t/d. 3. New berth 0 at Puerto Deseado has expanded its capacity from 0 to 300 t/d of chilled fish. 4. By 12/98, capacity for dispatch of freight trains from PNBA has increased from 75 to 360 cars/day. 	<ol style="list-style-type: none"> 1. Records of each port manager or authority, or SSPyTLD data compilations. 2. Idem. 3. Idem. 4. National Rail Transport Commission records. 	<p>1-4 (a) Continuing use of landlord management; and</p> <p>(b) no sharp downturn in economy or international trade.</p>
<p>...ation or building of ...ports in Concepción ...uy, Puerto Deseado ...g land access), ...adryn; new struc- ...ines and equipmentrmodal transfer</p>	<ol style="list-style-type: none"> 1. By 12/99 the following are in operation: (a) at Concepción del Uruguay, refurbished berths 3 and 4 and new berths 14, 15, y 16; (b) at Puerto Deseado, new berth 0; y (c) at Puerto Madryn, berth 3 extended by 67 m and new finger pier at sites 5 and 6. 2. By 07/99, new freight railines operating in PNBA, along with 7.5 hectare intermodal transfer facility (if needed, 9.7 hectares). 	<ol style="list-style-type: none"> 1. Certificate of acceptance of the works by the respective port authority. 2. National Rail Transport Commission records. 	

investments are not divisible, there will be no intermediate benchmarking.

Description	Indicators (*)	Means of verification	Main assumptions
<p>bid documents for revise each works</p> <p>Environment Depart- ment approval for environ- ment impact studies by the Nation and the province.</p> <p>enders for works and contracts.</p>	<p>1. See project timetable and itemized budget.</p>	<p>1. Program Coordination Unit (PCU) accounting records.</p>	<p>1. No frivolous protests of bid awards.</p> <p>2. Satisfactory viability studies for Q breakwater and PNBA railyard, tra facility, and road interfaces.</p> <p>3. No developments on the macroeco foreign trade front that hinder pro execution or compromise viability</p>

investments are not divisible, there will be no intermediate benchmarking.

Logical Framework

Safety and environmental protection subprogram

Description	Indicators(*)	Means of verification	Main assumptions
Transportation sector more efficient, in modern transportation and logistics.			
Reduction of navigation problems caused by pollution and reduce accidents in navigable waterways.	The country is in compliance, in critical areas, with MARPOL 73/78 and OPRC/92.	Records of port authorities, consolidated by the SSPyTLD; MARPOL list of countries in compliance with international standards.	
Navigation facilities	1. By 12/99, the following are in operation: ballast water, bilge water, and waste reception facilities and equipment in the ports of Bahía Blanca, Buenos Aires, Comodoro Rivadavia, La Plata, Puerto Madryn and Ushuaia, in conformity with MARPOL 73/78.	1. Certificate of acceptance of works and equipment.	Interagency agreements executed between SSPyTLD, provinces, and Naval Command (PNA) for safety and environmental management elements.
Spill management equipment	2. By 12/99, two firefighting boats in operation (South Dock/La Plata and Bahía Blanca) and spill management equipment operating on Buenos Aires riverfront and in Puerto Madryn and Ushuaia harbors; contingency plans ready in each.	2. Idem.	
Removal of sunken ships	3. By 12/99, at least three sunken hulls that are a navigation hazard have been raised and removed.	3. Certificate of services performed to satisfaction.	

Since investments are not divisible, there will be no intermediate benchmarking.

Description	Indicators(*)	Means of verification	Main assumptions
<p>consulting firm for the study n, produce the study, ve the action plan.</p> <p>e its implementation with nd the provinces.</p> <p>alls for bids for each ect and equipment ent.</p> <p>quired environmental s.</p> <p>ds and award contracts.</p> <p>rating PNA equipment.</p> <p>d documents for services, equipment, services; call for bids and tracts.</p>	<p>See itemized subprogram budget.</p>	<p>PCU accounting records.</p>	<p>No frivolous protests of bid awards.</p>

investments are not divisible, there will be no intermediate benchmarking.

ARGENTINA
PORT MODERNIZATION PROGRAM
Procurement plan

Item	Amount (US\$000)	Funding source	Tendering method	Prequalif. Yes/No	Date of notice
CONSULTING CONTRACTS					
Advisory support and supervision					
- Advisory and other support to Program Coordination Unit	1,800	IDB	ICP	Yes	3rd quarter 96
- Supervision of port works	5,300	IDB	ICP	Yes	3rd quarter 96
Studies					
- Transfer facility studies	550	IDB	ICP	Yes	4th quarter 96
- Demand and comprehensive planning studies	450	IDB	ICP	Yes	1st quarter 97
- Safety and environmental protection studies	1,700	IDB	ICP	Yes	4th quarter 96
- La Plata port upgrading program	500	IDB	ICP	Yes	1st quarter 97
- Study of port/customs issues	100	IDB	LCP	No	1st quarter 97
Technical assistance					
- Compilation of port rules and standards	200	IDB	LCP	No	2nd quarter 97
- Comprehensive information system (incl. equipment)	600	IDB	ICP	Yes	3rd quarter 97
- Accounting/financial system standardization	100	IDB	LCP	No	2nd quarter 97
PORT IMPROVEMENT WORKS					
- Pier construction and rehabilitation, Concepción del Uruguay	4,200	IDB/PG	ICB	Yes	1st quarter 97
- Expansion of piers and access roads, Puerto Deseado	11,100	IDB/PG	ICB	Yes	1st quarter 97
- Building and expansion of wharves, Puerto Madryn	18,100	IDB/PG	ICB	Yes	2nd quarter 96
- Pier upgrading and repairs, Rawson port	7,000	IDB/PG	ICB	Yes	3rd quarter 97
- Rebuilding and extension of Quequén breakwater	20,000	IDB/PG	ICB	Yes	3rd quarter 97
- Other works	3,500	IDB/PG	ICB	Yes	1st quarter 97
OTHER WORKS AND SERVICES					
- Relocation of rail yard (PNBA)	6,300	IDB/PG	ICB	Yes	1st quarter 97
- Intermodal freight transfer facility (PNBA)	5,500	IDB/PG	ICB	Yes	2nd quarter 97
- Remodeling of road interfaces (PNBA)	6,000	IDB/PG	ICB	Yes	2nd quarter 97
- Salvage of abandoned ships (*)	3,000	PG	LCB	No	1st quarter 97
FACILITIES AND EQUIPMENT					
- Ship waste reception systems	4,500	IDB	ICB	No	1st quarter 98
- Fire-extinguishing and accident prevention equipment	8,500	IDB	ICB	No	1st quarter 98
PG provincial government	ICB international competitive bidding				
PNBA New Port of Buenos Aires	LCB local competitive bidding				
(*) several contracts	ICP international call for proposals				
	LCP local call for proposals				

PROPOSED RESOLUTION

ARGENTINA. LOAN /OC-AR TO THE REPUBLIC OF ARGENTINA
PORT MODERNIZATION PROGRAM

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 Argentina, as Borrower, for the purpose of granting it a financing to cooperate in the execution of a Port Modernization Program. Such financing shall be for the amount of up to US\$104,000,000, or its equivalent in other currencies, except that of Argentina, which are part 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.