

ASIAN DEVELOPMENT BANK

PCR: VIE 25094

PROJECT COMPLETION REPORT

ON THE

**SAIGON PORT PROJECT
(Loan 1354-VIE[SF])**

IN

VIET NAM

September 2001

CURRENCY EQUIVALENTS

Currency Unit – Dong (D)

	At Appraisal (January 1995)	At Project Completion (June 2000)
D10,000 =	\$ 0.90	\$0.71
\$1.00 =	D11,003	D14,000

ABBREVIATIONS

ADB	-	Asian Development Bank
EA	-	Executing Agency
EIRR	-	economic internal rate of return
FIRR	-	financial internal rate of return
GRT	-	gross registered ton
HCMC	-	Ho Chi Minh City
ICB	-	international competitive bidding
IS	-	international shopping
LCB	-	local competitive bidding
MIS	-	management information system
MOF	-	Ministry of Finance
MOT	-	Ministry of Transport
MPI	-	Ministry of Planning and Investment
PCR	-	project completion review
PMU	-	project management unit
RTG	-	rubber-tired gantry crane
SDR	-	special drawing rights
SPA	-	Saigon Port Authority
TA	-	technical assistance
TEU	-	twenty-foot equivalent unit
ton	-	metric ton

NOTE

- (i) The fiscal year of Saigon Port Authority ends on 31 March.
- (ii) In this report, "\$" refers to US dollars.

CONTENTS

	Page
BASIC DATA	ii
MAPS	vi
I. PROJECT DESCRIPTION	1
II. EVALUATION OF IMPLEMENTATION	2
A. Project Components	2
B. Implementation Arrangements	2
C. Project Costs and Financing Plan	3
D. Project Schedule	4
E. Engagement of Consultants and Procurement of Goods and Services	5
F. Performance of Consultants, Contractors, and Suppliers	7
G. Conditions and Covenants	8
H. Disbursements	8
I. Environmental and Social Impact	8
J. Performance of the Borrower and the Executing Agency	9
K. Performance of the Asian Development Bank	9
III. EVALUATION OF INITIAL PERFORMANCE AND BENEFITS	10
A. Financial Performance	10
B. Economic Performance	10
C. Attainment of Benefits	11
IV. TECHNICAL ASSISTANCE	12
V. CONCLUSIONS AND RECOMMENDATIONS	12
A. Conclusions	12
B. Lessons Learned	13
C. Recommendations	13
APPENDIXES	15

I. PROJECT DESCRIPTION

1. The main objectives of the Project were to improve (i) the capacity of the existing facilities in Saigon Port by rehabilitating and modernizing them; (ii) the present port operations by rationalizing and streamlining the activities; and (iii) the performance of Saigon Port by introducing a management information system (MIS). Advisory technical assistance (TA), which accompanied the Project, assisted in strengthening the institutional capacity of the Saigon Port Authority (SPA), the Executing Agency (EA) for the Project. The TA aimed to design the MIS, which was procured under the Project.

2. The Project was the Asian Development Bank's (ADB) first involvement in the ports subsector in Viet Nam. The Project was based on ADB's interim operational strategy in Viet Nam, which was designed to overcome the key constraints facing the country through financial support for a program of intensive infrastructure rehabilitation, upgrading, and development of the country's physical infrastructure to support economic growth. It was recognized that without urgent remedial measures to rehabilitate the existing facilities in Saigon Port and to streamline and rationalize the port operations, the existing low capacity of the port was likely to decline further and in turn adversely affect Viet Nam's trade and economic growth. While there also was an urgent need for new investments to expand capacity and modernize the existing facilities in the ports subsector, it was believed that those investments should wait until the Government adopted a clearly defined development strategy and priorities for the subsector, based on long-term plans for economic resurgence.

3. ADB fielded a mission equivalent to project appraisal in late 1990, but further processing was deferred pending resumption of ADB operations in Viet Nam. After operations were resumed, a Reappraisal Mission visited Viet Nam in September 1993. However, after lengthy discussions between the Government and ADB on the relending rate to SPA, the loan was approved only in March 1995. The Government initially insisted on a concessional interest rate of 1 percent, whereas ADB's position was that the relending rate to SPA as a revenue-earning commercial entity should be at the rate applicable to loans from ADB's ordinary capital resources; and as SPA earned foreign exchange and was allowed to retain it, SPA should bear the foreign exchange risk. The Government finally accepted ADB's position and the loan was approved 17 months after the reappraisal.

4. As envisaged at appraisal, the Project comprised the following components:

- (i) civil works relating to rehabilitation of several sections of the quay structures including new fendering, paving of cargo-handling areas, demolishing/rehabilitating old cargo sheds, constructing a new cargo shed and a workshop, replacing area lighting, constructing a new jetty, and providing mooring buoys;
- (ii) providing modern cargo-handling equipment suitable for the multipurpose cargo operations in Saigon Port;
- (iii) providing two new tugboats;
- (iv) providing communications and computer hardware and software for implementing MIS in Saigon Port; and
- (v) consulting services for reviewing the detailed designs prepared by SPA and for backstopping assistance to SPA in project implementation, including preparation of tender documents and evaluation of tenders.

II. EVALUATION OF IMPLEMENTATION

A. Project Components

5. Appendix 1 presents the chronology of the main events during project implementation. The physical components of the Project were largely implemented as appraised, with some modifications. The main reason for the modifications was the long interval between reappraisal of the Project in September 1993 and loan effectiveness in July 1995. During this period SPA had to undertake urgent repairs such as paving some yard areas and procuring some equipment. Further, based on the detailed design of the project components, some modifications were required in civil works and the procurement of equipment. The modifications on civil works included deleting the mooring buoy berths, which had been provided by SPA prior to loan effectiveness, and a small jetty for harbor craft. Ho Chi Minh City (HCMC) authorities did not allow the jetty to be built, as it was too close to a bridge on a main road, which could be damaged by vessels. Some minor dredging works in front of the quays were added to the Project.

6. The main changes in procurement of equipment were the inclusion of two mobile cranes with 30-ton capacity and two rubber-tired gantry cranes (RTGs) to replace two large forklift trucks, and two container yard superstackers. SPA also bought some urgently required equipment, such as container yard chassis, paper clamps for forklifts, and communications equipment between reappraisal and loan effectiveness. Other minor changes in procurement were based on an update of the operational requirements of the port and aimed to enhance the efficiency of port operations. The MIS component was implemented as originally envisaged. Two tugboats were procured as provided during appraisal. Details are in Appendix 2.

7. In 1997, a general economic slowdown decreased the cargo throughput in Saigon Port. SPA stated that this also was a result of locational disadvantages and increased competition from other ports. Therefore, SPA requested the Ministry of Transport (MOT) to drastically reduce the project scope. SPA also delayed the award of outstanding contract packages. In September 1997, however, MOT instructed SPA to proceed with the Project as planned.

8. At appraisal, the terms of reference did not require full-time supervision of the construction works by international consultants, as the task had been assigned to the domestic consultants. During the early stages of project implementation, however, it became apparent that there was a need to extend the services of the international consultants to include full-time supervision; the consultants' contracts were amended accordingly. Supervision by the experienced international consultants ensured satisfactory quality of the works.

B. Implementation Arrangements

9. The implementation arrangements were as envisaged at appraisal. The Borrower was the Socialist Republic of Viet Nam and the EA was SPA. The organization structure of SPA is shown in Appendix 3. SPA operated the Viet Nam National Maritime Corporation (Vinamarine) port facilities in HCMC. Vinamarine is a state enterprise under MOT. A project management unit (PMU)¹ established in SPA was headed by a project director (Director of Engineering), and included a deputy director and a chief accountant. The PMU had 12 professional staff during the project implementation period.

¹ Named as project implementation unit (PIU) in the Loan Agreement.

10. SPA assigned seven engineers from PMU to work with the international consultants as soon as the consultants were appointed. This was beneficial for project implementation and for transfer of skills to SPA staff.

C. Project Costs and Financing Plan

1. Project Costs

11. The total project cost at appraisal was estimated at \$40 million equivalent, with a foreign exchange cost of \$25 million (63 percent of total cost) and a local currency cost of \$15 million equivalent (37 percent). The actual project cost estimated by the Project Completion Review (PCR) Mission was \$34.2 million equivalent, with a foreign exchange cost of \$23.6 million (69 percent) and a local currency cost of \$10.6 million equivalent (31 percent). ADB financed \$3.9 million equivalent of the local currency cost. The overall decrease in the total project cost was \$5.8 million, approximately 16 percent of the appraisal cost estimate. The breakdown of the estimated costs at appraisal and the actual costs are shown in Table 1.

Table 1: Comparison of Appraisal Cost Estimates and Actual Costs
(\$ million)

Component	Appraisal Estimates			Actual Costs ^a		
	Foreign Exchange	Local Currency	Total Cost	Foreign Exchange	Local Currency ^b	Total Cost
1. Civil Works	4.3	12.0	16.3	3.9	10.5	14.3
2. Cargo-Handling Equipment	10.5	0	10.5	13.7	0.1	13.9
3. Tugboats	4.1	0	4.1	3.4	0	3.4
4. MIS Implementation	0.7	0.2	0.9	0.5	0.1	0.5
5. Consulting Services	0.8	0.3	1.1	1.6	0	1.6
6. Contingencies				0	0	0
a. Physical ^c	2.0	1.3	3.3	0	0	0
b. Price Escalation ^d	2.0	1.2	3.2	0	0	0
7. Service Charge During Construction	0.6	0	0.6	0.5	0	0.5
Total	25.0	15.0	40.0	23.6	10.6^e	34.2

MIS = Management Information System.

^a Total amount does not always match the summation of each component due to rounding.

^b Based on the average exchange rates (D/\$) for the years 1995 to 2000 as given in ADB's Country Economic Review Report.

^c At 10 percent of base cost.

^d At 3.1 percent per annum.

^e The Report and Recommendation of the President (RRP) stated that the Government had exempted all Project-related goods and services from taxes and duties. However, Saigon Port Authority (SPA) actually paid taxes amounting to \$158,000 equivalent and these taxes were included in the actual amount of local currency.

12. The reduced cost for civil works is explained partly by the reduction in scope in para. 5 and partly by the transfer of the procurement of fenders and bollards, which were the main items to be imported, from the civil works component to the equipment component. The costs of the two items amounted to approximately \$1.2 million. The increase in costs for cargo-handling equipment is also partly explained by the inclusion of the more expensive RTGs rather than the forklifts originally included for handling of

containers, and the procurement of two 30-ton mobile cranes and two additional container yard superstackers.

13. The actual costs of the two tugboats decreased compared with the appraisal estimates, despite an increase in horsepower output from the engines. The MIS equipment was procured as originally envisaged, but at a lower cost. The cost of the MIS at appraisal was overestimated. The cost of consulting services increased because the services were extended during the prolonged project implementation period and included full-time supervision of the contracts.

2. Financing Plan

14. ADB approved a loan of \$30 million equivalent (75 percent of the total project cost) from its Special Funds resources. The loan was to meet the total foreign exchange cost (\$25 million) and part (\$5 million equivalent) of the local currency cost. All remaining local currency costs (\$10 million equivalent) were to be financed by the Government from its own resources.

15. Actual costs financed by ADB amounted to \$27.5 million, or 92 percent of the appraisal estimate. The actual amount financed by the Government was \$6.7 million or 67 percent of appraisal estimate. The main reason for the significant decrease in Government financing and the much lower decrease in ADB financing is that the cost of civil works decreased, for which ADB financed only 57 percent, whereas the cost of equipment, with 100 percent ADB financing, increased. Details of the financing plan at appraisal and the actual distribution of financing are summarized in Table 2.

Table 2: Financing Plan at Appraisal and Actual
(\$ million)

Source	Appraisal Estimate			Actual		
	Foreign Exchange	Local Currency	Total	Foreign Exchange	Local Currency	Total
Asian Development Bank	25.0	5.0	30.0	23.6	3.9	27.5
Government	0.0	10.0	10.0	0.0	6.7	6.7
Total	25.0	15.0	40.0	23.6	10.6	34.2

16. During project implementation, the special drawing rights (SDR) depreciated against the dollar. When the loan was negotiated, SDR1 was worth \$1.46, but at loan account closing on 1 November 2000 it had fallen to \$1.28. This was a depreciation of approximately 12.3 percent over the implementation period. Because the loan was denominated in SDRs, the depreciation reduced the loan amount available in dollar terms. The loan was reduced to \$28.2 million. The actual cancellation from the loan amount was thus only \$0.7 million.

D. Project Schedule

17. At appraisal it was estimated that the Project would be implemented over three years and be completed by 30 June 1998. The Project was actually completed in April 2000, with a delay of about one year and nine months. The ADB Board approved the loan on 2 March 1995. The loan was signed on 24 March 1995 and became effective on 21 July 1995. The loan was extended once from the original closing date of 31

December 1998 to 30 June 2000 because of delays in implementation. The actual and revised implementation schedules are compared in Appendix 4.

18. The major causes of the delays follow:
- (i) Although advance action for recruiting consultants was approved, it was not utilized and the consultancy contract was signed only in mid-February 1996. As the consultants had to review the design of project facilities and assist in preparing tender documents, their late appointment caused an initial delay of six months in project implementation.
 - (ii) Civil works were to be tendered under local competitive bidding (LCB) procedures. SPA did not initially understand the LCB procedures given in ADB's guidelines (explanation in para. 21), and this delayed the issuance of tender documents.
 - (iii) The bid evaluation process within the Government took much longer than expected due to cumbersome internal procedures (para. 22).
 - (iv) SPA's reluctance in 1997 to continue implementing the original project scope due to the economic slowdown delayed contract awards (para. 7).
 - (v) SPA's unfamiliarity working with international consultants acting as engineer, in accordance with the provisions of ADB's standard bidding documents, at times caused some conflicts that had some negative impact on implementation.
 - (vi) Bidding for MIS hardware and software was delayed due to lengthy discussions on the system design between SPA, the TA consultants, and ADB (para. 56).
 - (vii) The works were carried out under difficult conditions as the port operations were ongoing during the whole construction period.

E. Engagement of Consultants and Procurement of Goods and Services

1. Consultants

19. The Project did not utilize advance action for recruiting consultants that ADB had approved. In January 1994, upon the request of SPA, ADB sent a long list of qualified consulting firms to SPA. However, SPA started preparing the shortlist of firms and draft invitation documents only in early 1995. Due to unfamiliarity with ADB requirements, in late July 1995 SPA submitted complete documentation for ADB approval, and the invitations were issued in mid-August 1995. Proposals were received in mid-October 1995 and ADB's approval of the evaluation and draft negotiated contract was given in early January 1996. The contract was signed in mid-February 1996. As noted (para. 8), the consultancy contract was expanded in December 1996 to include full-time supervision of the contracts. In November 1998 the contract was further amended to include extension of services until the extended completion date of the Project (end-March 2000).

2. Civil Works

20. There is a discrepancy between the Report and Recommendation of the President (RRP) and the Loan Agreement in the provisions for implementing the civil works component. According to the RRP, ADB would finance contracts for importing materials for civil and marine works, whereas SPA would finance the execution of the civil and marine works. However, the Loan Agreement stated that the contracts for civil works with the foreign exchange cost and part of the local cost would be financed by ADB. Contractors were then responsible for procuring all materials required for the

works. This arrangement is better to avoid claims and contractual disputes. Actual implementation followed the provisions in the Loan Agreement.

21. The Project comprised seven civil and marine works contracts, including one contract for electrical works. Five of the contracts were procured following LCB procedures and two were directly negotiated as approved by ADB. As noted in para. 18(ii), SPA did initially not agree to follow ADB's procedures for procurement under LCB and it took a long time before this issue was resolved. SPA insisted that LCB procurement should be limited to Vietnamese companies and that only bidders from a nominated shortlist should be invited. ADB clarified that the bidding should be open to all prequalified bidders, local as well as foreign, who wanted to participate. This issue was brought up SPA in early 1996 and despite several clarifications from the concerned division in ADB, SPA insisted in following the procedure it proposed. The Vice Minister of MOT wrote a letter directly to ADB's Vice President (West) in September 1996, insisting that the procedures proposed by SPA be followed. The VP (West) replied, in a letter dated 30 September 1996, stating that ADB's LCB procedures must be followed. SPA finally accepted this and the civil works tenders could be issued.

22. The bid evaluation process in Viet Nam is complicated and generally takes a very long time. After SPA/PMU has evaluated the bids, the evaluation must be submitted to MOT for approval. If the construction contract value exceeds \$4 million (the corresponding amount was \$0.8 million for consultancy contracts), MOT further has to submit the evaluation to the Ministry of Planning and Investment (MPI), which, after review, has to submit the evaluation to the Prime Minister for final approval. The delays occurred mostly after SPA had submitted the evaluation reports to MOT. One typical example is the contract for package 4. It took nearly one year from the date the bidding documents were issued (24 December 1996) until the contract was signed. Financial bids (two-envelope bidding) were opened on 7 April 1997. SPA submitted the evaluation report to MOT on 31 May, but MOT approval was obtained only on 18 October 1997. The contract was then signed on 5 December 1997.

23. Two directly negotiated contracts were implemented under the Project.

- (i) Rehabilitation of M3K0 backup area (package 1). Although the cost of this package was estimated at about \$500,000, ADB agreed in July 1996 to a directly negotiated contract for the following reasons:
 - (a) the works, which were mainly piling and concrete works, were urgently required as the area was virtually unusable for normal ongoing port operations;
 - (b) it was necessary to carry out the repair of the backup area so as not to delay other construction works under the Project, which were going to start soon; and
 - (c) the contractor, a state-owned enterprise, had earlier carried out works in Saigon Port and had equipment available to immediately start the works.
- (ii) Dredging works (package 14). These were minor dredging works with a total cost of about \$150,000. Getting a foreign contractor to bring a dredger to Viet Nam for such a small contract was out of the question, ADB agreed to a directly negotiated contract with the only dredging contractor in Viet Nam.

3. Equipment and Tugboats

24. The Project comprised six contracts for procuring equipment and tugboats. For five, the tenders were invited based on international competitive bidding (ICB) procedures, for the sixth, international shopping (IS) procedure was adopted. There were delays in evaluating the tenders and getting approvals from line agencies/ministries in Hanoi. The award of the contract for package 7 – supply of mobile cranes – was considerably delayed. One supplier had indicated the total bid price using an incorrect exchange rate. This ambiguity in the bid led to extended discussions between MOT, SPA, and ADB and it took a long time before the issue could be resolved and the contract awarded. Appendix 5 presents milestones in implementing the consultancy contract, the seven civil works contracts, and the six contracts for procurement of equipment and tugboats.

F. Performance of Consultants, Contractors, and Suppliers

25. The consultants' first major task was to review engineering designs prepared by domestic consultants and prepare tender documents. The consultants' proposal for significant changes to the designs, initially created some tension between the consultants and Government authorities, as the designs and cost estimates had already been submitted and approved by various Government ministries and departments. However, the Government authorities later acknowledged that the proposed changes were beneficial to the Project and adopted them.

26. After the main construction works started, the consultants were assigned as engineers to take full responsibility for supervising the works. SPA, however, tended to administer the contracts following traditional Vietnamese Government procedures which were different from those set out in the contract documents. Some tension occurred between SPA and the consultants;² however, the problems were overcome and the consultants worked effectively.

27. The overall performance of the consultants during both the design and construction phases is considered satisfactory. The consultants' project manager was changed in early 1998, but no problem was created as the new person was familiar with the Project, and experienced.

28. All civil works contractors were Vietnamese. In general, their performance was satisfactory and the quality of the completed works is of an acceptable standard. Certain delays in implementing the contracts, were mostly outside the control of the contractors: interruptions from the ongoing port operations and delays in payment. The building contractor was weak; the initial quality of the completed works was unacceptable and the contractor did considerable amounts of works to rectify the defects. The finally completed works were of acceptable quality.

29. All suppliers were foreigners, except that those who supplied and installed the MIS were Vietnamese. The supply of goods and equipment was delayed, mainly due to delays in opening letters of credit and in making advance payment. In the contract for supply of goods-handling equipment, there were some delays in the supply of spare parts in accordance with the provisions of the contract and in carrying out warranty services. Nonetheless, the overall performance of the suppliers is considered satisfactory and the quality of goods and equipment supplied is good.

² SPA sometimes bypassed the consultants and gave instructions directly to the contractors, which caused confusion.

G. Conditions and Covenants

30. Loan conditions and covenants were generally complied with (Appendix 6). However, there were some exceptions.

31. With regard to submission of audited accounts (section 2.09, Project Agreement), audited Project accounts were generally submitted as required, whereas audited accounts for SPA's overall operations were submitted late. Audited Project and SPA accounts for the year 2000 will be submitted before the end of September 2001.

32. SPA will implement by 31 December 1995 a port operations action plan (section 2.15, Project Agreement). Due to the delay in overall project implementation, it was necessary to implement the plan in stages, and all measures included in the plan have now been taken.

33. Debt service ratio each year after the start of the Project was at least 1.2; hence, section 2.16 of the Project Agreement was complied with. Accounts receivable in each year were maintained at a level equal to not more than three months billing for port operation services (section 2.17, Project Agreement). The financial statements of SPA showing debt service ratios and accounts receivable are in Appendix 7.

34. SPA will monitor and evaluate the benefits of the Project by collecting and analyzing port traffic data (schedule 6, para. 2, Loan Agreement). This has not been done on a regular basis, and ADB review missions did not adequately follow up on this issue during project implementation. The PCR Mission obtained data for the years 1995, 1998, and 2000.

35. In a letter dated 20 November 1995, Ministry of Finance (MOF) allowed SPA to add interest to the principal on the subsidiary loan re-lent to SPA until 1 November 2001. As ADB was not informed in advance of this amendment of the subsidiary loan agreement, Section 4.07 (b) of the Loan Agreement was not complied with. However, this operation is understood as just a deferment of repayment of interest for four years and does not create major issues.

H. Disbursements

36. Disbursements of loan proceeds were slower than expected because of the delays in project implementation. Details of the projected and actual disbursements are shown in Appendix 8. The original loan closing date of 31 December 1998 was extended to 30 June 2000. The ceiling of the imprest account was \$700,000 and the turnover ratio was 3.02, which exceeded ADB's accepted average.

37. As a result of cost savings, total disbursements were less than those estimated at appraisal. Total disbursements amounted to \$27.5 million equivalent, \$2.5 million less than the \$30 million equivalent provided under the loan. However, only \$0.7 million was actually cancelled, because the loan amount was reduced to \$28.2 million equivalent due to SDR depreciation.

I. Environmental and Social Impact

38. The civil works component involved repairing and strengthening old and deteriorating facilities. Paving of the wharf backup area reduced dust emission. Earlier, surface drainage water had been discharged directly into the river. The rehabilitation works included construction of a system for collecting surface drainage water. Replacing old equipment with modern cargo-handling equipment and providing a

workshop reduced oil leaks, noise, and emission levels and allowed SPA to maintain engines and equipment in a better condition. Consequently, the impact of the Project on the physical environment has been positive. The negative impacts were limited to the construction phase and were related to noise, dust, and emissions from the construction equipment. However, these impacts were insignificant as there are no settlements close to the construction site. As there were no settlers in the project area, no relocation of people was necessary. Working conditions in the port have improved (para. 53) as a result of the Project.

J. Performance of the Borrower and the Executing Agency

39. The performance of the Government (the Borrower), represented by MOF, MOT, and MPI during project implementation is considered satisfactory, although the concerned ministries caused serious delays before approving bid evaluations and contract variations. Due to unfamiliarity with ADB's procurement guidelines, the concerned ministries on occasion requested negotiations with the lowest bidder and reduction in unit prices after contracts had been signed.

40. Due to the inexperience of SPA's staff in implementing projects financed by international institutions, there were other unanticipated delays. SPA was reluctant to communicate regularly and early with ADB and to keep ADB informed about project implementation and problems that arose. SPA was also hindered by interventions from the ministries, which sometimes were in conflict with the Loan Agreement and ADB's guidelines. However, taking into account SPA's initial unfamiliarity with ADB's procedures and guidelines and the problems that SPA faced during implementation, it is considered an achievement that the Project was successfully completed within the allocated budget. The overall performance of SPA is considered generally satisfactory.

K. Performance of the Asian Development Bank

41. At appraisal, it was estimated that the total time required for evaluating bids and obtaining Government and ADB approvals would only be about two months for each contract. This was not a realistic estimate, taking into account the Government's time-consuming approval procedures.

42. The number of review missions dispatched during implementation was less than adequate. From loan approval in March 1995 until loan closing in June 2000, only eight missions visited Viet Nam to review the Project. This average of 1.6 missions per year with an average field time of 4.5 days and a total of 56 person-days cannot be considered adequate, considering the poor capacity of SPA in implementing internationally-funded projects. For this reason, the Inception Mission recommended that at least three ADB missions per year should be considered during the initial phase of project implementation. No midterm review was undertaken as provided for in the Loan Agreement (schedule 6, para. 2). Such a mission could have been useful in undertaking an in-depth review of the Project and finding solutions to the problems that hampered implementation.³

43. SPA's overall financial performance and compliance with financial covenants were not reviewed by any ADB review missions. The inclusion of a financial analyst in

³ The Review Mission from 24 to 28 August 1998 was originally classified as a midterm review, but after its return to Manila it was reclassified as a regular Review Mission as it did not fulfill the requirements for a midterm review.

some of these missions would have been useful and could have revealed SPA's nonpayment of interest on the disbursed loan funds.

44. However, from Manila concerned ADB staff were in regular contact with SPA/PMU and provided advice on various issues. The overall performance of ADB is considered partly satisfactory.

III. EVALUATION OF INITIAL PERFORMANCE AND BENEFITS

A. Financial Performance

45. The financial reevaluation used a methodology similar to that used at appraisal, i.e., comparing the with-project and without-project situations to determine the financial impact of the project on SPA. In calculating the financial internal rate of return (FIRR), the financial benefits of the Project comprised the incremental revenues that SPA would capture as a result of the increase in effective capacity of the alongside berths. The costs in the FIRR calculation comprised the initial capital costs of the Project and provision for replacing equipment after 10 years. A 20-year useful life was assumed. All costs and benefits in the analysis were based on constant 2000 prices.

46. The reevaluated FIRR is estimated at 12.4 percent compared with 10.7 percent calculated at appraisal. The FIRR exceeds SPA's weighted average cost of capital of 9.3 percent, compared with 3.7 percent calculated at appraisal. Several tests were carried out to determine the sensitivity of the FIRR to changes in the initial assumptions. The results show that the FIRR is sensitive to changes in the real unit price (Appendix 9).

B. Economic Performance

47. The PCR adopted essentially the same methodology used at appraisal for the economic reevaluation, i. e., comparing the with-project and without-project situations to determine the project impact. The assumptions used at appraisal were examined and updated as necessary. In estimating the economic internal rate of return (EIRR), the economic benefits of the Project comprised savings in ship service time for existing traffic and for generated traffic related to the overall berth capacity increase. The benefits were calculated for a 20-year period. The costs in the EIRR evaluation comprise the financial costs converted to economic costs by applying a standard conversion factor of 0.9 to the nontraded cost components and by deducting all taxes and duties. All costs and benefits in the analyses were based on constant 2000 prices. The actual implementation period was used as the basis for allocating annual capital costs. Cargo-handling equipment was assumed to be replaced after 10 years of operation.

48. The reevaluation shows that the EIRR has improved considerably. The EIRR at appraisal was estimated at 18.1 percent, while the PCR estimated 33.3 percent. The main reasons for the increase are that (i) cargo throughput increased above the appraisal projections, whereas capital costs were reduced; (ii) cargo-handling efficiencies exceeded the appraisal estimates due to the additional mobile cranes; (iii) as a result of (ii), overall berth capacity increased; and (iv) savings in daily operating costs of vessels increased considerably due to an increase in the average size of vessels using the port. Details of the economic reevaluation are in Appendix 10.

C. Attainment of Benefits

49. The principal objective of the Project was to rehabilitate the deteriorating facilities at Saigon Port and increase port capacity by providing modern goods-handling equipment, and streamlining and rationalizing port activities. The objective has been fully achieved. At appraisal it was estimated that the practical capacity at the wharves would rise to 6.5 million tons per year.⁴ Based on the observed actual cargo throughput at the wharves in 2000, the practical capacity was estimated at 6.7 million tons per year. The increase is due to the additional mobile cranes and the increase in size of vessels utilizing the port. In addition, it was estimated that the buoy berths could handle up to 2.5 million tons per year, or together 9.2 million tons per year in 2000. To handle any further increase in traffic, the Than Thuan II Terminal was constructed in 1998-1999, close to the existing port. This new terminal handled 0.5 million tons in 2000.

50. The number of vessels calling at the port has considerably increased. There were 1,130 calls in 1995 and 1,830 in 2000. The average size of vessels was 5,900 gross registered ton (GRT) in 1995, and 7,100 GRT in 2000.

51. The cargo throughput in Saigon Port increased by 35 percent from 1995 to 2000 and the throughput in 2000 was 9.7 million tons. The throughput forecast for 2000 made at appraisal was 9.3 million tons. The increase in containerization has also exceeded the appraisal estimates. The delay in project implementation and the general economic slowdown in 1997 initially resulted in a slower-than-expected traffic increase, but after the Project was substantially completed in 1999, cargo throughput increased considerably. The details of the cargo throughput are in Appendix 11.

52. Port users have benefited from the modern cargo-handling equipment with high capacity and the streamlined port operations that reduced the time required for loading/unloading of vessels. The old and unreliable equipment earlier used for handling goods and the dilapidated wharf apron were the main reasons for drop and damage to cargo. Such incidents are now less frequent. Port users have also benefited from a new access road to the port completed in 1996, which is bypassing the center of HCMC.

53. As a result of the Project, working conditions in the port have improved and more workers have been employed. Saigon Port presently employs 4,400 workers, which is an increase of about 25 percent since 1995. Representatives of the port workers' labor union said that the main causes of injuries to workers were cargo drop and traffic accidents. With the modern and more reliable equipment and better organized flow of traffic in the port area, implemented under the Project through the port operations action plan, the number of accidents has been reduced although the number of port workers has increased. The completed Project has had a positive impact on the environment (para. 38).

54. One benefit from the MIS is that billing time has been reduced by about 10 days. The MIS has also improved the operational efficiency of SPA in a number of other areas, including berth allocation, yard operation, and management of facilities. SPA is now able to process important operational and financial information and make commercially oriented decisions based on the actual needs of users.

⁴ This excludes cargo handled at the buoy berths.

IV. TECHNICAL ASSISTANCE

55. The consultants for the advisory TA⁵ commenced work in March 1996. The TA was expected to be completed in 18 months. However, due to the complexity of the technical specifications and exceptionally long review periods by SPA, the services were completed only on 31 August 2000. The TA was intended to design a computerized MIS and assist SPA to procure one tailored to the specific needs of Saigon Port. The consulting services comprised three phases: phase I: diagnostic review, including systems design/specifications, tendering; phase II: implementation and training; and phase III: implementation review/follow-up.

56. The consultants' final design report was submitted in September 1996. After SPA reviewed the final design report, the PMU insisted that two more modules (accounts payable/receivable, and cargo and ship billing system) be incorporated as part of the primary development. The consultants, initially supported by ADB missions, opposed PMU's idea and argued that there was a risk of specifying a complex MIS, which would prove difficult to implement. The consultants preferred to specify a simpler, yet fully flexible system to which numerous additional modules could be added in the future as Saigon Port's operational and administrative departments were prepared for automation. However, the wishes of PMU prevailed; the technical specifications were amended accordingly and the tender documents were finally issued in May 1999. In September 1999 the contract was awarded and delivery and installation were completed by the end of December 1999. Thereafter the consultants assisted in implementing and monitoring the MIS. The supplier carried out an extensive training program for Saigon Port staff.

57. The MIS as installed had seven modules: (i) billing system, (ii) accounts payable and receivable, (iii) general ledger, (iv) operation systems, (v) preventive maintenance system, (vi) Vietnamese accounting system, and (vii) management monitoring system. Installed computer hardware included 6 net servers, 52 terminals, and 38 printers. The MIS is operating satisfactorily.

58. The consultants were competent in their field of expertise and their performance was satisfactory. SPA is satisfied with the MIS, which has considerably improved the operational efficiency of the port. Saigon Port is the only port in Viet Nam that has installed an MIS. On hindsight, the accounts payable and receivable system and billing system proposed by SPA were useful. The usefulness of the MIS could be further enhanced by integrating it with other systems used by customs authorities and shipping lines. The TA, which is rated as highly successful, was a highly relevant complement to the Project to ensure efficient operation of the new and rehabilitated facilities.

V. CONCLUSIONS AND RECOMMENDATIONS

A. Conclusions

59. The Project was implemented as appraised, with some modifications based on an update of the operational requirements of the port. Though the Project experienced implementation delays, it was successfully completed and without cost overruns. The construction quality of the rehabilitated facilities is satisfactory. The structures in the port as well as the equipment provided under the Project are well maintained, and the port operations are planned and conducted in an orderly manner.

⁵ TA 2305-VIE: *Computerized MIS for Saigon Port*, for \$500,000, approved on 2 March 1995.

60. The Project fully achieved the intended objective. Although initially the traffic increase was lower than expected, mainly because of the delay in implementation and a general economic slowdown in 1997, the cargo throughput in Saigon Port after major components of the Project were completed exceeded the appraisal forecast. The increase in containerization also exceeded the appraisal estimate. Implementation of the port operations action plan has contributed to the improved productivity of Saigon Port.

61. Port users have benefited from the savings in time required for loading/unloading of vessels, improved user services, and the reduction in damage to goods. Working conditions in the port have improved and the number of accidents in the port area has been reduced. The Project has increased the employment opportunities for port workers and has had a positive impact on the environment. The MIS improved the operational efficiency of SPA. The overall weighted average of the Project has been calculated at 2.2 and the Project is rated as successful according to the guidelines for preparing project performance audit reports.

62. Although a new terminal close to the existing port was completed in 1999, it is envisaged that within a few years further development of port facilities in the HCMC area will be needed to cater to the rapidly increasing traffic.

B. Lessons Learned

63. The project implementation schedule set up at appraisal was too optimistic. The Project was one of the first ADB projects to be implemented in Viet Nam and the first in the port sector. ADB appraisal was inadequate in assessing the capacities of MOT and SPA for implementing projects, and in examining the procedures in Viet Nam for approving bid evaluations and contract variations.

64. For projects with inexperienced EAs, frequent ADB review missions, at least two per year, would have allowed more in-depth reviews than those conducted by the project review missions and would have solved the problems that hampered implementation.

65. ADB should regularly follow up on compliance with loan covenants. For this Project, in particular, submission of audited financial statements on SPA's overall operations and compliance with other covenants should have been followed up more intensively both from Manila and through the review missions visiting Viet Nam.

C. Recommendations

1. Project-Related

66. **Operation and Maintenance of Project Facilities.** At the time of the PCR Mission, the warranty period for the works and equipment supplied still had not expired. Thus, for 2001 SPA was not required to allocate any substantial amount for regular maintenance. In the future, however, sufficient budget allocations must be made for maintenance requirements. It is recommended that ADB follow up so that SPA would allocate sufficient funds in the future for the maintenance requirements. For the next few years, SPA should continue to annually submit to ADB data on cargo throughput.

67. **Subsidiary Loan Agreement.** Interest payable in accordance with the subsidiary loan agreement is not being paid until 1 November 2001. This amendment of the subsidiary loan agreement was made without ADB's prior concurrence. ADB should in the future monitor that SPA is paying the deferred interest from 1995 to 2001

and the principal and the interest due in the coming years in accordance with the terms and conditions of the subsidiary loan agreement.

68. **Integration of MIS.** The introduction of MIS has considerably improved the operational efficiency of Saigon Port. The usefulness of the system could be further enhanced by integrating it with systems used by customs authorities and shipping lines. This could be done with assistance from bilateral financing sources.

69. **Project Performance Audit Report.** A project performance audit report may be scheduled for the second half of 2002. By that time, all project facilities will have been in use for more than two years.

2. General

70. **Implementation Schedule.** A realistic implementation schedule should be made during project preparation, taking into account the experience of the EA in implementing internationally-funded projects and the existing approval procedures in the country.

71. **Delegation of Authority to EAs.** The streamlining of internal government review and approval procedures will greatly benefit project implementation in Viet Nam. MPI informed the PCR Mission that a time frame has now been set for various Government agencies for review and making decisions. However, more delegation of approval authority to EAs will facilitate project implementation. ADB's country programming or appraisal missions could follow up on this issue.

72. **ADB Supervision of Implementation.** For a project with inexperienced EAs, ADB should schedule more frequent missions, at least two per year. Compliance with loan covenants should be reviewed regularly.

APPENDIXES

No.	Title	Page	Cited on (page, para.)
1	Chronology of Main Events	16	2, 5
2	Project Details	20	2, 6
3	Saigon Port Authority Organization Chart	22	2, 9
4	Implementation Schedule	23	4, 17
5	Contract Details	24	7, 24
6	Compliance with Covenants	25	8, 30
7	Financial Statements of Saigon Port Authority	29	8, 33
8	Disbursements	32	8, 36
9	Financial Reevaluation	33	10, 46
10	Economic Reevaluation	36	10, 48
11	Cargo Throughput	39	11, 51

CHRONOLOGY OF MAIN EVENTS

Date	Event
1989	
26 Nov–5 Dec	Port Sector Review Mission
1990	
6–16 Mar	Follow-Up Mission
21 Aug–7 Sep	Follow-Up Mission
25 Sep–2 Oct	Fact-Finding Mission
13 Nov–1 Dec	Appraisal Equivalent Mission
1991	
2–9 Mar	Follow-Up Mission
9–20 Jul	Follow-Up Mission
1993	
23 Aug–9 Sep	Reappraisal of the Project
1994	
25 Jan	SRC meeting
3 Dec	Minutes of loan negotiations discussions approved
1995	
2 Mar	ADB approved the loan.
24 Mar	Loan Agreement was signed.
16–18 May	Project-Specific Consultation Mission
20 Jun	ADB approved extension of loan effectiveness date.
21 Jul	ADB declared loan effectiveness.
21 Jul	ADB approved establishment of imprest account.
20 Aug–2 Sep	Inception Mission fielded

Date	Event
1996	
16 Feb	Signing of consultancy agreement
16 Jul	ADB approved award of contract for civil works, package 1.
22–27 Jul	Review Mission
30 Sep	ADB rejected the Executing Agency's (EA's) proposal for restricted local competitive bidding for civil works contracts.
22 Oct	ADB approved award of contract for tugboats, package 9.
11–16 Nov	Review Mission
31 Dec	ADB approved award of contract for package 12 (piling).
1997	
25 Feb–1 Mar	Review Mission
13 Mar	ADB approved award of contract for civil works, package 2.
24 Mar	ADB approved award of contract for supply of marine fenders (package 6) and mooring bollards (package 11).
8 Jul	ADB raised its concern to the Borrower on the lack of counterpart funds for the Project for 1997.
15 Jul	ADB approved EA's evaluation of contract award for civil works, package 3.
9–16 Aug	Review Mission
25 Jul	ADB approved award of contract for packages 7 & 8 (goods handling equipment).
30 Sep–2 Oct	Review Mission
6 Nov	ADB approved award of contract for civil works, package 5.
26 Nov	ADB approved award of contract for minor dredging works, package 14.
26 Nov	ADB approved award of contract for civil works, package 14.

Date	Event
1998	
7 Jan	ADB received representation from a bidder regarding award of contract for supply of mobile cranes.
8 Jan	ADB sent its comments to the EA regarding the above.
16 Mar	ADB approved reallocation of loan proceeds between loan categories.
19 Jun	ADB received EA's advice that the request for extension of loan closing date had been sent to the Ministry of Planning and Investment, Ministry of Finance, and Ministry of Transport.
24–28 Aug	Review Mission
1999	
8 Jan	ADB received a copy of the consultant's notice terminating the consultancy agreement.
14 Jan	ADB received notification from the consultant that the taxation problem had been resolved, that normal payment had resumed, and that the termination notice had been withdrawn.
23 Apr	ADB received consultant's report on the poor performance of contractor for package 4.
14 May	Tender documents for MIS issued
2–9 Jun	Review Mission
9 Sep	ADB expressed concern about delay in submitting financial statements for fiscal year 1998 for project accounts and SPA accounts.
16 Sep	ADB approved contract award for supply of MIS equipment, package 10.
19 Oct	ADB approved reallocation of loan proceeds from unallocated to cargo-handling equipment category.
29 Nov	ADB received English version of the audited project accounts for fiscal year 1998.

Date	Event
2000	
3 Feb	ADB received EA's request for procurement of two additional reach stackers to meet the increasing needs for handling containers.
23 Feb	ADB received invitation from the EA for an ADB representative to attend the inauguration of the project, RR, VRM attended.
2 Mar	ADB approved utilization of loan savings for procurement of additional reach stackers using repeat order.
7 Mar	ADB received request from EA for procurement of two forklifts and two two-way dozers using estimated loan savings.
13 Mar	ADB rejected EA's request for procurement of above equipment on account of very little loan proceeds available.
17 Mar	ADB received advice on the termination of consultancy contract by end of March 2000, instead of June 2000.
27 Mar	ADB approved the termination of consultancy contract by end of March 2000, with the understanding that the EA will assume responsibility for remaining administrative matters from 1 April 2000.
30 Mar	The EA requested ADB's reconsideration on its decision to reject procurement of additional two forklifts and two two-way dozers with the assurance that they will shoulder any cost overrun in case loan proceeds are not sufficient.
13 Apr	ADB approved EA's request for procurement of above equipment using repeat order.
19 Jul	ADB received Borrower's project completion report.
1 Nov	Loan account was closed.

PROJECT DETAILS

Table A2.1: Civil Works

Type of Work	Unit	Nha Rong Division		Khanh Hoi Division		Central Workshop and Store and Others	
		Appraisal	Actual	Appraisal	Actual	Appraisal	Actual
1. Wharf strengthening							
M1 - M3	m	350.6	577.1 ^a	-	-	-	-
K1 - K4	m	-	-	480	460	-	-
K5 - K9	m	-	-	550	573.15	-	-
K10	m	-	-	140	139.4	-	-
2. Yard Paving	m ²	7,240	17,691	61,850	69,536	-	-
3. Transit Shed (rehabilitation)	m ²	4,900	-	22,348	33,020	-	-
4. Demolishing Shed	m ²	-	3,935	6,366	6,216	-	-
5. New Shed for CFS	m ²	-	-	4,133	-	-	-
6. New Shed	m ²	-	6,480	-	-	-	-
7. Shed Verandha	m ²	-	-	-	10,206	-	-
8. Central Workshop	m ²	-	-	-	-	3,024	2,592
9. Lighting	set	204	130	1,224	677	-	-
10. Electrical Substation	no.	-	1	-	3	-	-
11. Fender	no.	-	60	(854 m)	104	-	-
12. Mooring Bollard	no.	-	20	-	44	-	-
12. Jetty	m	-	-	-	-	90	-
14. Mooring Buoy	no.	-	-	-	-	10	-
15. Dredging Work	m ³	-	12,491	-	20,417	-	-

CFS = Complementary Financing Scheme, m = meter, m² = square meter, m³ = cubic meter, no. = number.

^a Including K0.

Table A2.2: Equipment

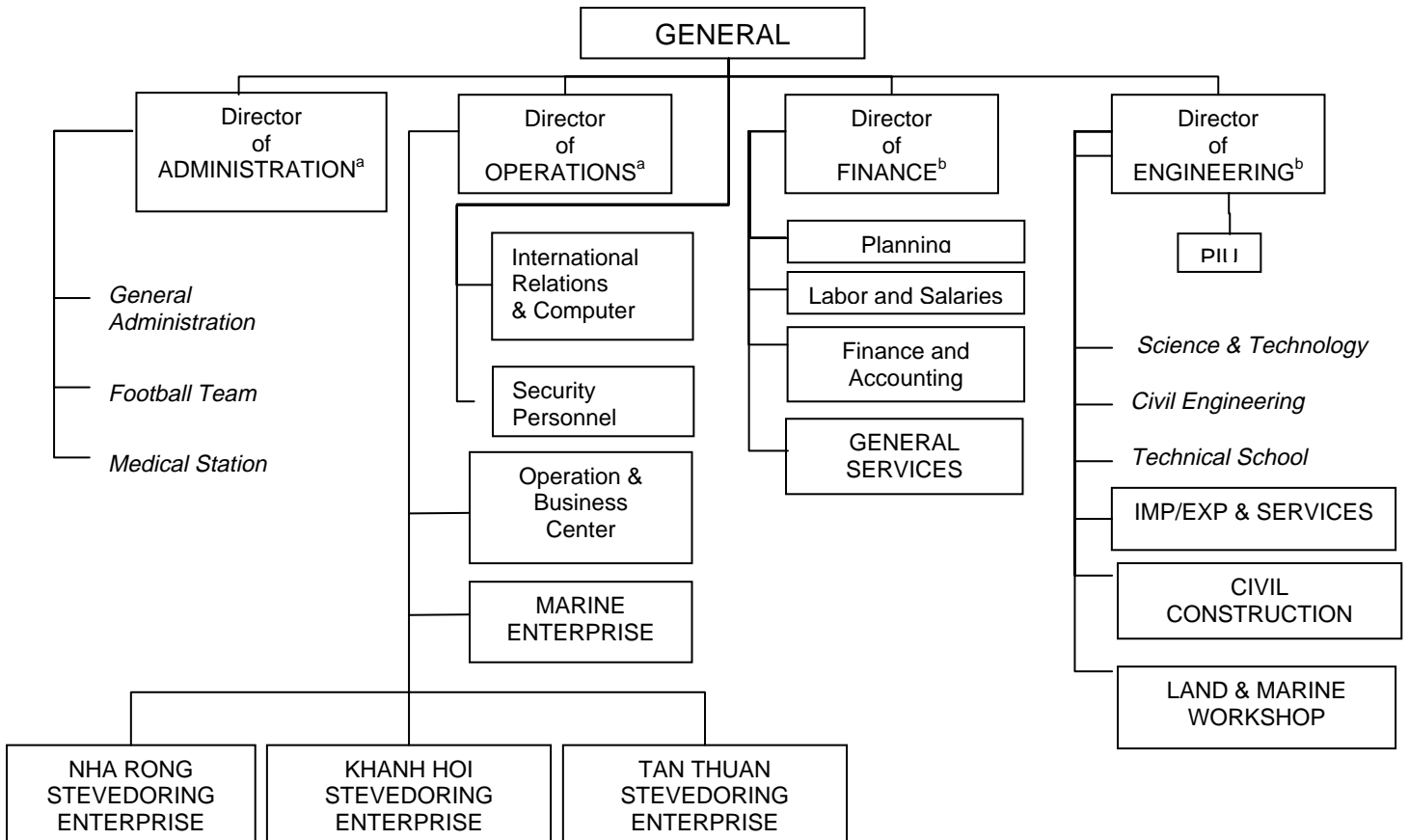
Type of Equipment	Nha Rong Division		Khanh Hoi Division	
	Appraisal	Actual	Appraisal	Actual
1. Cargo-Handling Equipment				
A. Fork Lifts				
2.5 T	-	2	-	4
3 T	-	5	10	5
5 T	4	1	3	2
7 T	-	2	3	1
10 T	1	1	-	2
12 T	-	-	1	-
25 T	1	-	-	-
B. Miscellaneous Gear				
Mobile Multipurpose Crane (30T)	-	2	-	-
Mobile Multipurpose Crane (80T)	-	-	2	2
Rubber-Tired Gantry Crane	-	-	-	2
Container Yard Superstacker	-	-	4	6
Light Truck/work Vehicle	1	-	4	-
Light Tractor/Yard Hustler	-	1	11	4
Manual Spreader 40 Frame	-	-	1	-
Semiautomatic Spreader	-	-	-	2
Container Yard Chassis	-	-	20	-
Paper Clamps for Forklift	-	-	12	-
Bulldozer/Trimmers 2 T	-	-	2	-
Two-Way dozers	-	1	-	3
Hoppers W. Automatic Scale	-	-	2	-
Grabs 3.5 m3 - 4 string	-	-	2	2
2.4 m3 - 2 string	-	-	2	-
2. Communications Equipment				
Radio Handset	22	-	-	-
Base Station	1	-	-	-
Charger/antenna/duplex (set)	2	-	-	-
One additional station for main office	1	-	-	-
3. Tugboats	Appraisal		Actual	
Tugboats (2X1,000 HP) with Firefigthing and environmental protection Equipment ^a	2		2	
4. Computer Hardware and Software for MIS^b				
Net Server			6	
Terminal			52	
Printer			38	

T = ton.

^a Upgraded to 1,500 HP.

^b No number was identified at appraisal since it would be decided during the implementation of TA 2305-VIE: *Management Information System for Saigon Port*, for \$500,000, approved on 2 March 1995.

SAIGON PORT AUTHORITY ORGANIZATION CHART



^a Merged into one position in October 1999.

^b Merged into one position in August 2000.

Notes:

- Departments : in lower case letters
- Special units : in italic letters
- Enterprises : all capital letters

CONTRACT DETAILS

Package no.	Description	Mode of Procurement	Date ADB Approved Draft Tender Documents	Date Bids Invited	Deadline for Submission of Bids	Date EA Completed Evaluation Report	Date ADB Approved Award of Contract	Date of Signing of Contract	Amount of Contract in \$ Equiv. (mn)	Original Completion Date	Actual Completion Date
	Consultancy Contract	Invited Proposals	11-Aug-95	15-Aug-95	15-Oct-95	21-Dec-95	9-Jan-96	15-Feb-96	0.72	30-Jun-98	31-Mar-00
1	M3K0 backup area	Direct Negotiation	-	-	-	-	16-Jul-96	16-Jul-96	0.539	5-Dec-96	5-Dec-96
2	Wharves, pavements and services of Nha Rong Division	LCB	2-Dec-96	17-Dec-96	17-Jan-97	13-Feb-97	13-Mar-97	17-Mar-97	2.208	2-Feb-99	6-Dec-99
3	Wharves, pavements and services of Nha Rong Division	LCB	2-Dec-96	24-Dec-96	27-Jan-97	31-Mar-97	15-Jul-97	19-Nov-97	4.699	27-Nov-99	20-Jan-00
4	Building works	LCB	2-Dec-96	24-Dec-96	27-Jan-97	31-May-97	26-Nov-97	5-Dec-97	1.831	18-Nov-99	7-Dec-99
5	Electrical works	LCB	19-Dec-96	24-Dec-96	27-Jan-97	27-Jun-97	16-Nov-97	3-Dec-97	1.367	27-Nov-99	25-Feb-00
6	Fenders	ICB	6-Nov-96	11-Nov-96	10-Jan-97	6-Mar-97	24-Mar-97	26-Mar-97	1.026	15-Oct-97	11-Jan-00
7	Crane equipment	ICB	28-Nov-96	6-Dec-96	14-Feb-97	31-May-97	27-Jul-97	16-Jun-98	6.435	23-Mar-99	31-Mar-99
8	Handling equipment	ICB	28-Nov-96	6-Dec-96	11-Feb-97	31-May-97	25-Jul-97	16-Jun-98	6.735	20-Apr-99	19-May-99
9	Tugboats	ICB	21-Dec-95	15-Jan-96	15-Mar-96	24-Sep-96	22-Oct-96	30-Oct-96	3.36	Dec-97	7-Feb-98
10	MIS	ICB	27-Apr-99	12-May-99	14-Jul-99	10-Aug-99	16-Sep-99	29-Sep-99	0.485	30-Apr-00	30-Jun-00
11	Mooring bollards	IS		13-Jan-97	13-Feb-97	22-Mar-97	24-Mar-97	27-Mar-97	0.088	5-Aug-97	11-Jan-00
12	Reinforced concrete piles	LCB	15-Oct-96	11-Nov-96	5-Dec-96	30-Dec-96	31-Dec-96	31-Dec-96	2.02	May-98	Dec-99
14	Dredging works	Direct Negotiation	-	-	-	-	5-Jul-99	30-Sep-98	0.163	15-Oct-99	15-Oct-99

ADB = Asian Development Bank, EA = Executing Agency, ICB = international competitive bidding, IS = international shopping, LCB = local competitive bidding, MIS = Management Information System.

COMPLIANCE WITH COVENANTS

Loan Agreement

Covenants	Remarks
<p>Section 3.01 (a). The Borrower shall relend the proceeds of the Loan to SPA under a Subsidiary Loan Agreement upon terms and conditions satisfactory to ADB. Except as the Borrower and ADB shall otherwise agree, the terms for relending the Loan proceeds to SPA shall include interest at the same variable rate applicable to loans from ADB's ordinary capital resources and a repayment period of 20 years including a grace period of 4 years. SPA shall bear the foreign exchange risk.</p>	<p>Not complied with. Terms and conditions of subsidiary loan agreement were changed without informing ADB.</p>
<p>Section 4.02. The Borrower shall make available to SPA, promptly as needed, and on terms and conditions acceptable to ADB, the funds, facilities, services, land, and other resources required, in addition to the proceeds of the Loan, for carrying out the Project.</p>	<p>Complied with</p>
<p>Section 4.03. The Borrower shall ensure that the activities of its departments and agencies with respect to carrying out the Project and operation of the Project facilities are conducted and coordinated in accordance with sound administrative policies and procedures.</p>	<p>Complied with</p>
<p>Section 4.07. (a) The Borrower shall exercise its rights under the Subsidiary Loan Agreement in such a manner as to protect the interests of the Borrower and ADB and to accomplish the purposes of the Loan.</p> <p>(b) No rights or obligations under the Subsidiary Loan Agreement shall be assigned, amended, abrogated, or waived without the prior concurrence of ADB.</p>	<p>Complied with</p> <p>Not complied with ADB was not informed of the amended terms for payment of interest.</p>

<p>Schedule 6</p> <p>Para.1 (a) SPA's director general shall be in charge of the overall monitoring of project implementation.</p> <p>(b) SPA shall establish a Project Implementation Unit (PIU), which shall be responsible for the day-to-day administration of the Project. The PIU shall be headed by the director (engineering) of SPA and shall be staffed with an adequate number of competent technical personnel.</p>	<p>Complied with</p> <p>Complied with</p>
<p>Para. 2. The Borrower shall ensure that SPA monitors and evaluates the benefits of the Project by collecting and analyzing port traffic data, particularly data related to ship waiting and ship service times and cargo-handling performance, to ensure that the project facilities are properly managed and that project benefits are maximized. For this purpose, SPA shall organize, through its planning department, the necessary data collection surveys and analyses in accordance with a methodology to be agreed upon with ADB. The findings and data supporting such Project benefit monitoring and evaluation activities shall be incorporated in the project completion report.</p>	<p>Partly complied with. Reports were not submitted regularly.</p>

Project Agreement

<p>Section 2.01 (a) SPA shall carry out the Project with due diligence. and efficiency, and in conformity with sound administrative, financial, engineering, environmental, and port management Practices.</p> <p>(b) In carrying out the Project and operating the project facilities, SPA shall perform all obligations set forth in Schedule 6 of the Loan Agreement to the extent that they are applicable to SPA.</p>	<p>Complied with</p> <p>Complied with</p>
<p>Section 2.02. SPA shall make, promptly as needed, the funds, facilities, services, equipment, land, and other resources required, in addition to the proceeds of the Loan, for carrying out the Project.</p>	<p>Complied with</p>

<p>Section 2.05. (a) SPA shall take out and maintain with responsible insurers, or make out other arrangements satisfactory to ADB for, insurance of the project facilities to such extent and against such risks and in such amounts as shall be consistent with sound practice.</p> <p>(b) Without limiting the generality of the foregoing, SPA undertakes to insure, or cause to be insured, the goods to be imported for the Project and to be financed out of the proceeds of the Loan against hazards incident to the acquisition, transportation, and delivery thereof to the place of use or installation, and for such insurance any indemnity shall be payable in a currency freely usable to replace or repair such goods.</p>	<p>Complied with</p> <p>Complied with</p>
<p>Section 2.06. SPA shall maintain, or cause to be maintained, records and amounts adequate to identify the goods and services and other items of expenditure financed out of the proceeds of the Loan.</p>	<p>Complied with</p>
<p>Section 2.07 (b) SPA shall promptly inform ADB of any condition which interferes with, or threatens to interfere with, the progress of the Project, the performance of its obligations under this Project Agreement or the Subsidiary Loan Agreement, or the accomplishment of the purposes of the Loan.</p>	<p>Not complied with</p>
<p>Section 2.08 (b) SPA shall furnish to ADB quarterly reports of the execution of the Project and the operation and management of the project facilities. Such reports shall be submitted in such form and in such detail and within such a period as ADB shall reasonably request, and shall indicate, among other things, progress made, and problems encountered during the quarter under review, steps taken or proposed to be taken to remedy these problems, and proposed program of activities and expected progress during the following quarter.</p> <p>(c) Promptly after physical completion of the Project, but in any event not later than three months thereafter or such later date as ADB may agree to for this purpose, SPA shall prepare and furnish to ADB a report, on request, on the execution and initial operation of the Project, including its costs, the performance by SPA of its obligations under this Project Agreement, and the accomplishment of the purposes of the Loan.</p>	<p>Complied with</p> <p>Complied with</p>

<p>Section 2.09. (a) SPA shall: (i) maintain separate accounts for the Project and for its overall operations; (ii) have such account and related financial statements (balance sheet, statement of income and expenses, and related statements) audited annually, in accordance with sound auditing standards by independent auditors acceptable to ADB; and (iii) furnish to ADB, promptly after their preparation but in any event not later than nine months after the close of the fiscal year to which they relate, certified copies of such audited accounts and financial statements and report of the auditors relating thereto, all in the English language. SPA shall furnish to ADB such further information concerning such accounts and financial statements and the audit thereof as ADB shall from time to time reasonably requests.</p>	<p>Complied with as regards project accounts. Late compliance with regard to audited accounts for SPA's overall operations</p>
<p>Section 2.14. Except as ADB may otherwise agree, SPA shall duly perform all its obligations under the Subsidiary Loan Agreement, and shall not take, or concur in, any action which would have the effect of assigning, amending, abrogating, or waiving any rights or obligations of the parties under the Subsidiary Loan Agreement.</p>	<p>Not complied with. Terms and conditions of the Subsidiary Loan Agreement have been changed without informing ADB.</p>
<p>Section 2.15. SPA shall implement by 3 December 1995 a Port Operations Action Plan as agreed upon with ADB.</p>	<p>Complied with in stages, with delays</p>
<p>Section 2.16. (a) Except as ADB may otherwise agree, SPA shall take such action as shall be necessary to maintain at all times a debt service ratio of at least 1.2.</p>	<p>Complied with</p>
<p>Section 2.17. SPA shall maintain its average accounts receivable at a level equal to but not more than three months billing for its port operation services.</p>	<p>Complied with</p>

ADB = Asian Development Bank, SPA = Saigon Port Authority.

FINANCIAL STATEMENTS OF SAIGON PORT AUTHORITY

**Table A7.1: Income Statement - Saigon Port Authority
Year Ending 31 March (D million)**

Item	1994	1995	1996	1997	1998	1999	2000
Operating Revenue	269,291	321,105	391,530	357,665	402,921	376,292	414,587
Operating Expense							
Personnel	71,883	113,430	132,407	119,500	127,009	127,775	137,806
Repair and Maintenance	28,737	17,207	15,313	10,275	13,806	12,335	17,458
Operating and Administration	112,453	87,457	127,440	115,631	155,464	140,648	162,667
Depreciation	27,064	24,897	38,987	57,666	61,021	58,065	64,876
Total Operating Expense	240,137	242,991	314,147	303,072	357,300	338,823	382,807
Operating Income (Loss)	29,154	78,114	77,383	54,593	45,621	37,469	31,780
Nonoperating Income	915	595	3,297	6,197	15,132	2,367	2,604
Interest Expense	3,278	2,476	201	386	6,895	15,666	10,669
Net Income Before Income Tax	26,791	76,233	80,479	60,404	53,858	24,170	23,715
Income Tax	7,059	20,020	20,281	15,180	13,648	5,931	6,111
Net Income After Income Tax	19,732	56,213	60,198	45,224	40,210	18,239	17,604
Operating Ratio (%)	89	76	80	85	89	90	92

Table A7.2: Balance Sheet - Saigon Port Authority
Year Ending 31 March (D million)

Item	1994	1995	1996	1997	1998	1999	2000
ASSETS							
Current Assets							
Cash & Bank	10,200	20,773	28,788	46,391	39,042	25,455	51,617
Accounts Receivable	48,713	48,299	61,390	59,985	53,325	52,083	42,770
Inventory and Other Current Assets	13,752	18,374	20,302	36,223	26,085	32,268	36,560
Total Current Assets+B83	72,665	87,446	110,480	142,599	118,452	109,806	130,947
Fixed Assets							
Revalued Cost	342,699	358,989	466,847	527,128	611,580	930,136	1,153,145
Less: Accumulated Depreciation	137,531	160,941	231,766	284,436	337,922	392,777	456,776
Net Revalued cost	205,168	198,048	235,081	242,692	273,658	537,359	696,369
Capital Work in Progress	1,863	8,150	55,280	87,851	233,421	217,434	128,074
Total Fixed Assets	207,031	206,198	290,361	330,543	507,079	754,793	824,443
Total Assets	279,696	293,644	400,841	473,142	625,531	864,599	955,390
LIABILITIES							
Current Liabilities	64,931	34,295	38,703	37,377	33,440	61,742	58,159
Long-Term Debt	44,512	31,501	11,052	40,181	169,267	341,107	404,540
Total Liabilities	109,443	65,796	49,755	77,558	202,707	402,849	462,699
EQUITY							
Government Contribution	156,566	172,632	328,573	361,325	389,928	444,439	481,339
Capital Reserve		529	1,811	3,951	2,308	5,460	7,563
Retained Earnings	13,686	54,687	20,702	30,308	30,588	11,852	3,789
Total Equity	170,252	227,848	351,086	395,584	422,824	461,751	492,691
Total Liabilities and Equity	279,695	293,644	400,841	473,142	625,531	864,600	955,390
Debt/Equity Ratio (%)	39	22	12	16	32	47	48
Current Ratio (%)	112	255	285	382	354	178	225
Accounts Receivable	2.17	1.80	1.88	2.01	1.59	1.66	1.24

Table A7.3: Statement of Sources and Applications of Funds - Saigon Port Authority
Year Ending 31 March (D million)

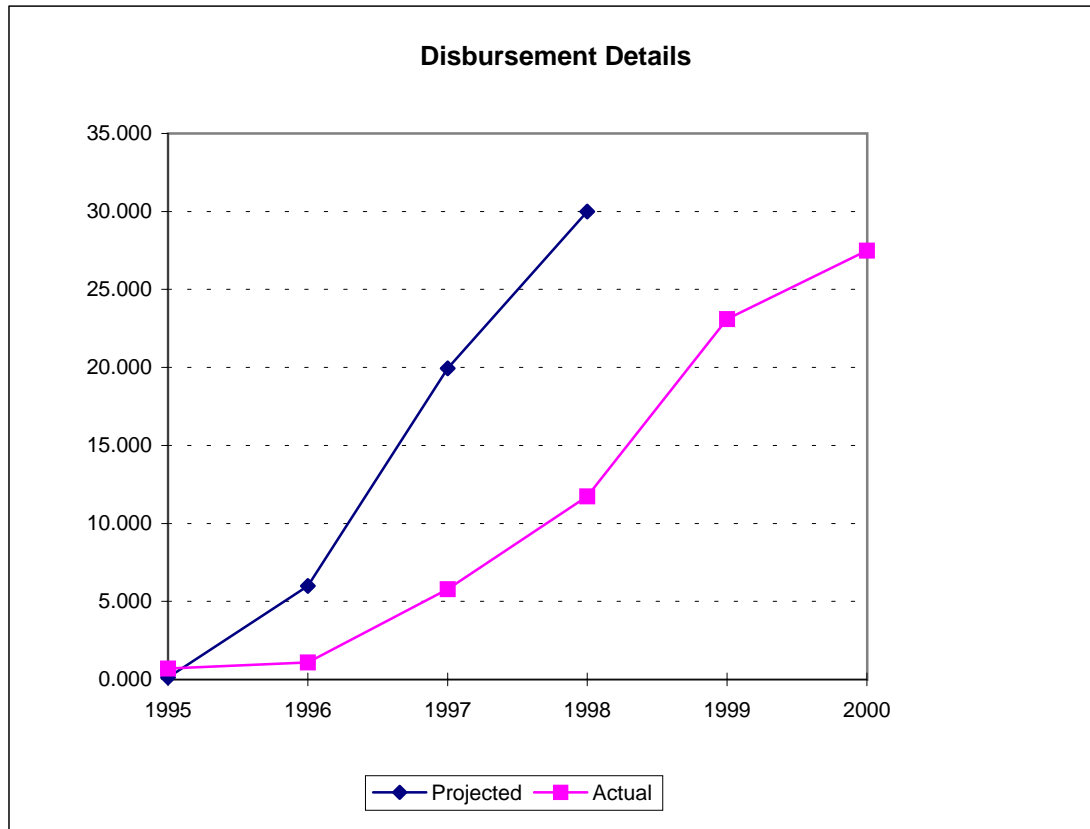
Item	1994	1995	1996	1997	1998	1999	2000
SOURCES OF FUNDS							
Net Income After Income Tax	19,732	56,213	60,198	45,224	40,210	18,239	17,604
Add: Depreciation	27,064	24,897	38,987	57,666	61,021	58,065	64,876
Total Funds Generated from Operation	46,796	81,110	99,185	102,890	101,231	76,304	82,480
Long-Term Borrowings	44,512	26,290	18,254	66,568	162,980	233,581	100,662
Government Contribution		1,383	63,040	(726)	(12,970)	20,688	13,336
Total Sources of Funds	91,308	108,783	180,479	168,732	251,241	330,573	196,478
APPLICATION OF FUNDS							
Capital Expenditure	2,412	24,064	123,150	97,848	237,557	305,779	134,526
Repayment of Long-Term Borrowings	58,311	39,301	38,703	37,439	33,894	61,741	37,229
Increase (Decrease) in Working Capital	(346)	34,844	10,611	15,842	(12,861)	(23,361)	(1,438)
Total application of Funds	60,377	98,209	172,464	151,129	258,590	344,159	170,317
INCREASE (DECREASE) IN CASH	30,931	10,574	8,015	17,603	(7,349)	(13,586)	26,161
Debt Service Ratio	0.8	2.0	2.6	2.7	2.7	1.2	1.9

31

DISBURSEMENT
(Projected and Actual)
(\$ million)

Year	Projected	Actual
1995	0.120	0.700
1996	5.990	1.091
1997	19.940	5.781
1998	30.000	11.727
1999		23.108
2000		27.482

Note: Final disbursement net of cancellation of \$0.695 million savings.



FINANCIAL REEVALUATION

1. The methodology adopted for financial reevaluation paralleled that used at appraisal: comparing the with-project and without-project situations. The investment costs of the Project comprise the initial capital costs and provision for replacing equipment. The rehabilitated facilities are expected to have a life of 40 years, while equipment will have a life of 10 years. The equipment will be replaced in the years 2007-2010. The residual value of the facilities in the year 2019 was included as a negative capital cost. A 20-year benefit period starting in 2000 was assumed. All costs and benefits in the analysis were based on constant 2000 prices.

2. Incremental revenues and net of taxes are based on traffic growth at Saigon Port, including throughput at the lighterage berths. It was estimated at appraisal that, with the rehabilitated facilities, equipment, and tugboats provided under the Project and implementation of the operations action plan, throughput capacity and inclusive lighterage operations would increase by 2.8 million tons. At project completion review (PCR), it was found that the incremental capacity amounted to 3.2 million tons. At appraisal, it was assumed that the unit price of D34,000/ton in 1994 would increase in real terms by 10 percent in 1995 and 1996. The actual real unit price was, however, much higher than estimated, reaching D52,000 in 1995 and D60,000 in 1996. In the following years, however, the real unit price turned downward, and fell to D42,700 in 2000. For the PCR, it is assumed that the real unit price will not increase, and will stay at the 2000 level.

3. At appraisal, it was assumed that (i) incremental operating costs would be 30 percent of incremental revenue; and (ii) incremental maintenance costs on the equipment would be 5 percent of equipment costs each year. For PCR, the same assumptions for operating and maintenance costs are adopted. Maintenance costs on the rehabilitated facilities are ignored for PCR as they were at appraisal. This is considered a conservative assumption, as maintenance costs on the rehabilitated facilities are likely to be lower than those on the existing facilities.

4. The Saigon Port Authority's (SPA's) weighted average cost of capital in real terms was calculated at 9.3 percent compared with 3.7 percent at appraisal. The bases follow:¹
 - (i) The long-term debt/equity capital structure of SPA is assumed at 50:50 compared with 60:40 at appraisal.
 - (ii) The after-tax cost of debt is calculated as 4.5 percent as assumed at appraisal.
 - (iii) The cost of SPA's equity is assumed to be 20 percent as at appraisal.
 - (iv) Inflation is estimated at 3 percent, and was deducted from the weighted average cost of capital to arrive at the weighted average cost of capital in real terms. At appraisal, inflation was estimated at 7 percent.

¹ The FIRR is compared with the weighted average cost of capital of SPA rather than with the weighted average cost of source funds for the Project. At appraisal, the same methodology was adopted despite the provision of the *Guidelines for Preparation and Presentation of Financial Analysis* that recommends the latter.

5. Based on the foregoing, the financial internal rate of return (FIRR) of the Project is estimated at 12.4 percent (Table A9.1) compared with 10.7 percent calculated at appraisal. The FIRR is higher than the SPA's weighted average cost of capital. Several tests were carried out to determine the sensitivity of the FIRR to changes in the initial assumptions. The results are in Table A9.2. Even the FIRR for the worst-case scenario is higher than the SPA's weighted average cost of capital. The FIRR is sensitive to changes in the real unit price. Efforts should be exerted to maintain the real unit price at the current level.

Table A9.1: Financial Internal Rate of Return (FIRR)
(D million)

Year	Investment Cost	Incremental Maintenance Cost	Incremental Revenue (Net of VAT)	Incremental Operating Costs	Net After Tax Revenue	Net Benefits
1995	2,864					(2,864)
1996	19,679					(19,679)
1997	72,388					(72,388)
1998	105,712					(105,712)
1999	182,481					(182,481)
2000	76,734	9,606	131,300	42,815	85,202	(1,138)
2001		9,606	131,300	42,815	85,202	75,596
2002		9,606	131,300	42,815	85,202	75,596
2003		9,606	131,300	42,815	85,202	75,596
2004		9,606	131,300	42,815	85,202	75,596
2005		9,606	131,300	42,815	85,202	75,596
2006		9,606	131,300	42,815	85,202	75,596
2007	11,210	9,606	131,300	42,815	85,202	64,386
2008	35,938	9,606	131,300	42,815	85,202	39,658
2009	125,220	9,606	131,300	42,815	85,202	(49,624)
2010	19,754	9,606	131,300	42,815	85,202	55,842
2011		9,606	131,300	42,815	85,202	75,596
2012		9,606	131,300	42,815	85,202	75,596
2013		9,606	131,300	42,815	85,202	75,596
2014		9,606	131,300	42,815	85,202	75,596
2015		9,606	131,300	42,815	85,202	75,596
2016		9,606	131,300	42,815	85,202	75,596
2017		9,606	131,300	42,815	85,202	75,596
2018		9,606	131,300	42,815	85,202	75,596
2019	(28,818)	9,606	131,300	42,815	85,202	104,415
					FIRR =	12.4%

VAT = value-added tax.

Table A9.2: FIRR Sensitivity Analysis

Assumptions	FIRR(%)	Sensitivity Index^a
Base Case	12.4	
Real Unit Price Per Ton Decreased by 5%	10.8	2.5
Operating Costs Increased by 10%	11.4	0.8
Income Tax Rate Increased by 20%	12.2	0.1
Three Assumptions Above Combined	9.7	na

FIRR = financial internal rate of return, na = not applicable.

^a Sensitivity index (SI) = percentage change in FIRR/percentage change in variable.

ECONOMIC REEVALUATION

A. Introduction

1. The methodology used in the economic reevaluation was similar to that used at project appraisal: the with-project situation was compared with the without-project situation to determine project impact. The economic benefits of the Project consisted of savings in ship service time for (i) existing traffic in the without-project situation, and (ii) generated traffic related to the overall berth capacity increase in the with-project situation. The assumptions at appraisal were modified, where necessary, based on updated information. The Project was reevaluated for a period of 20 years, which was the economic life assumed in the economic evaluation at appraisal. The financial costs were converted to economic costs by applying a standard conversion factor of 0.9 to the nontraded cost components, and by deducting all taxes and duties. All costs and benefits in the analyses were based on constant 2000 prices. The manufacturing unit value index published by the International Monetary Fund was used in converting costs and benefits generated in Viet Nam into 2000 prices.

B. Costs

2. The economic capital costs were primarily the financial costs of civil works, equipment, and consulting services. The final costs of contract packages were assigned to capital costs. The actual implementation period was used as the basis for allocating annual capital costs. Cargo-handling equipment was assumed to be replaced after 10 years of operation.

3. Net maintenance costs were calculated as the cost of maintaining the facilities provided under the Project less annual cost required for maintaining project-related facilities in their present condition. The cost of maintaining the provided facilities was calculated using the same methodology as that used at appraisal, 1 percent of civil works costs and 5 percent of equipment costs. The annual cost required for maintaining project-related facilities in their present condition was assumed to be the same as that at appraisal, which was converted to 2000 prices.

C. Benefits

4. The practical capacity at the wharves was assumed at 4.8 million tons in the without-project situation, which was the estimate at appraisal, and at 6.7 million tons in the with-project situation, which was estimated based on cargo throughput at the wharves in 2000.¹ Since the Project will not augment the number of berths, the increase of capacity at berth is entirely related to improved cargo-handling rates that would reduce ship service time. Because of the high capacity utilization in both situations, no savings in ship waiting time were anticipated.

5. Savings in ship service time were based on the traffic in 2000 for five main commodity groups, berth capacity, incremental improvement in cargo-handling efficiencies by each commodity group, and daily operating costs of vessels in the port. The improved cargo-handling efficiencies were related to the cargo-handling equipment and civil works for upgrading the port facilities provided under the Project. The cargo-

¹ In addition, 1.2 million tons in the without-project situation and 2.5 million tons in the with-project situation were estimated to be handled at the buoys.

handling rates, estimated on the basis of daily operations in Saigon Port at appraisal and international experiences related to improved conditions, together with the resulting annual ship service time, are given for the opening year 2000 in Table A10.1.

Table A10.1: Cargo–Handling Rates and Annual Ship Service Time in 2000

Commodity Type	Commodity Composition (percentage of total)	Cargo-Handling Efficiencies (t '000/berth/day)		Annual Ship Service Time (total berth days)	
		Without Project	With Project	Without Project	With Project
1. Rice, Fertilizer Cement (bagged)	35	1.1	1.57	1,527	1,070
2. Coal, Clinker (bulk)	5	0.9	1.005	267	239
3. Metal, Machinery Rubber, Timber	4	0.9	1.03	213	186
4. Other Agricultural Products and Chemicals	26	0.45	0.61	2,773	2,046
5. Containers ^a	30	204	680	642	193
Total	100			5,422	3,734

^a Container handling rate in twenty-foot equivalent units per berth day.

6. Daily operating costs of vessels during unloading or loading operations along wharves, which were estimated at appraisal at D53.5 million equivalent (\$5,000) for vessels of average size in the port, were reviewed. The average vessel size in the port has dramatically increased from 5,300 gross registered ton (GRT) at appraisal to 7,000 GRT in 2000, which has raised the average daily operating costs of vessels in the port to D93.8 million equivalent (\$6,700) in 2000 prices.

7. Savings in ship service time for generated traffic related to the overall berth capacity increase of 1.9 million tons (from 4.8 million tons for without–project situation to 6.7 million tons for with-project situation) were calculated in accordance with conventional practice, as one half of daily operating costs per unit of cargo throughput.

D. Estimates of Economic Internal Rate of Return

8. The economic internal rate of return (EIRR) for the Project was reestimated. As at appraisal, the benefits were calculated for a 20-year period. The EIRR for the Project was calculated as 33.3 percent, whereas it had been 18.1 percent at appraisal. The detailed cost and benefit streams for the Project are shown in Table A10.2.

**Table A10.2: Cost and Benefit Streams
(D million)**

Year	Capital Costs	Net		Net Benefits
		Maintenance Costs	<u>Savings in Ship Service Time</u> Normal Generated	
1995	2,787			(2,787)
1996	18,853			(18,853)
1997	69,576			(69,576)
1998	102,079			(102,079)
1999	178,651			(178,651)
2000	73,575	3,336	158,334	112,760
2001		3,336	158,334	186,335
2002		3,336	158,334	186,335
2003		3,336	158,334	186,335
2004		3,336	158,334	186,335
2005		3,336	158,334	186,335
2006		3,336	158,334	186,335
2007	11,120	3,336	158,334	175,215
2008	35,938	3,336	158,334	150,398
2009	125,220	3,336	158,334	61,115
2010	19,754	3,336	158,334	166,581
2011		3,336	158,334	186,335
2012		3,336	158,334	186,335
2013		3,336	158,334	186,335
2014		3,336	158,334	186,335
2015		3,336	158,334	186,335
2016		3,336	158,334	186,335
2017		3,336	158,334	186,335
2018		3,336	158,334	186,335
2019	(28,818)	3,336	158,334	186,335
		EIRR =	33.3%	

9. The improvement of the reestimated EIRR against the appraised EIRR is due to several factors: (i) cargo throughput increased above the projection at appraisal whereas capital costs were reduced; (ii) cargo-handling efficiencies increased above the projection due to the provision of additional mobile cranes; (iii) as the result of (ii), the overall berth capacity increased; and (iv) the savings in daily operating costs of vessels greatly increased according to the increase in average vessel size in the port.

E. Sensitivity Analysis

10. A conventional sensitivity analysis was undertaken to examine the effect of (i) decrease in benefits by 15 percent, (ii) increase in costs by 15 percent, and (iii) the two combined. The results are in Table A10.3.

Table A10.3: Sensitivity of the Economic Internal Rate of Return (EIRR)

Parameter	EIRR (%)
1. Base Case	33.3
2. Benefits Decreased by 15 percent	28.7
3. Operating Costs Increased by 15 percent	29.3
4. Combination of Cases 2 and 3	25.1

CARGO THROUGHPUT
(t '000)

	1995	1996	1997	1998	1999	2000
Throughput HCMC	12,365	13,813	13,746	14,336	17,285	19,136
Throughput SPA	7,212 (6,882)	7,339 (7,402)	6,820 (7,970)	7,601 (8,403)	8,336	9,700 (9,322)
Import	4,259	3,798	3,274	3,594	3,716	4,527
Fertilizer	724	665	528	1,200	1,365	1,414
Cement	464	789	396	9	4	11
Metals	548	537	358	439	343	552
Machinery & Equipment	65	50	42	33	17	23
Wheat	304	218	266	195	187	305
Chemicals	165	121	124	102	117	82
Others	1,988	1,418	1,559	1,615	1,683	2,140
Export	2,308	2,692	2,766	2,866	3,270	3,088
Rice	1,440	2,173	2,119	2,392	2,298	1,858
Agri Products	82	108				51
Rubber						
Timber & Products	2					
Fruits & Vegetables						
Reefer Cargo						
Others	784	411	647	474	972	1,179
Domestic	644	850	780	1,141	1,350	2,085
Coal	14	82	65	54	40	87
Rice	400	237	20	88	158	119
Cement	14	76	358	525	427	473
Clinker		216	58	118	299	423
Others	215	238	279	356	426	1,013
Containerized						
Container (t '000)	754	938	1,154	1,469	1,965	2,642
Import	440	626	725	1,012	1,080	1,345
Export	314	312	429	457	885	1,297
Total TEU (1,000)	77 (80)	105 (100)	122 (140)	140 (160)	172	237 (180)

HCMC = Ho Chi Minh City, SPA = Saigon Port Authority, TEU = twenty-foot equivalent unit.

Note: Appraisal estimates are in parenthesis.