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**Volume 1**

# THE PORT DEVELOPMENT STUDY IN THE SOUTH OF THE SOCIALIST REPUBLIC OF VIETNAM



**December 2002**

The Overseas Coastal Area Development Institute of Japan (OCDI)  
JAPAN Port Consultants, Ltd. (JPC)

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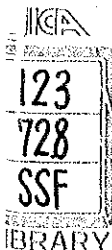
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CAI MEP - THI VAI INTERNATIONAL PORT

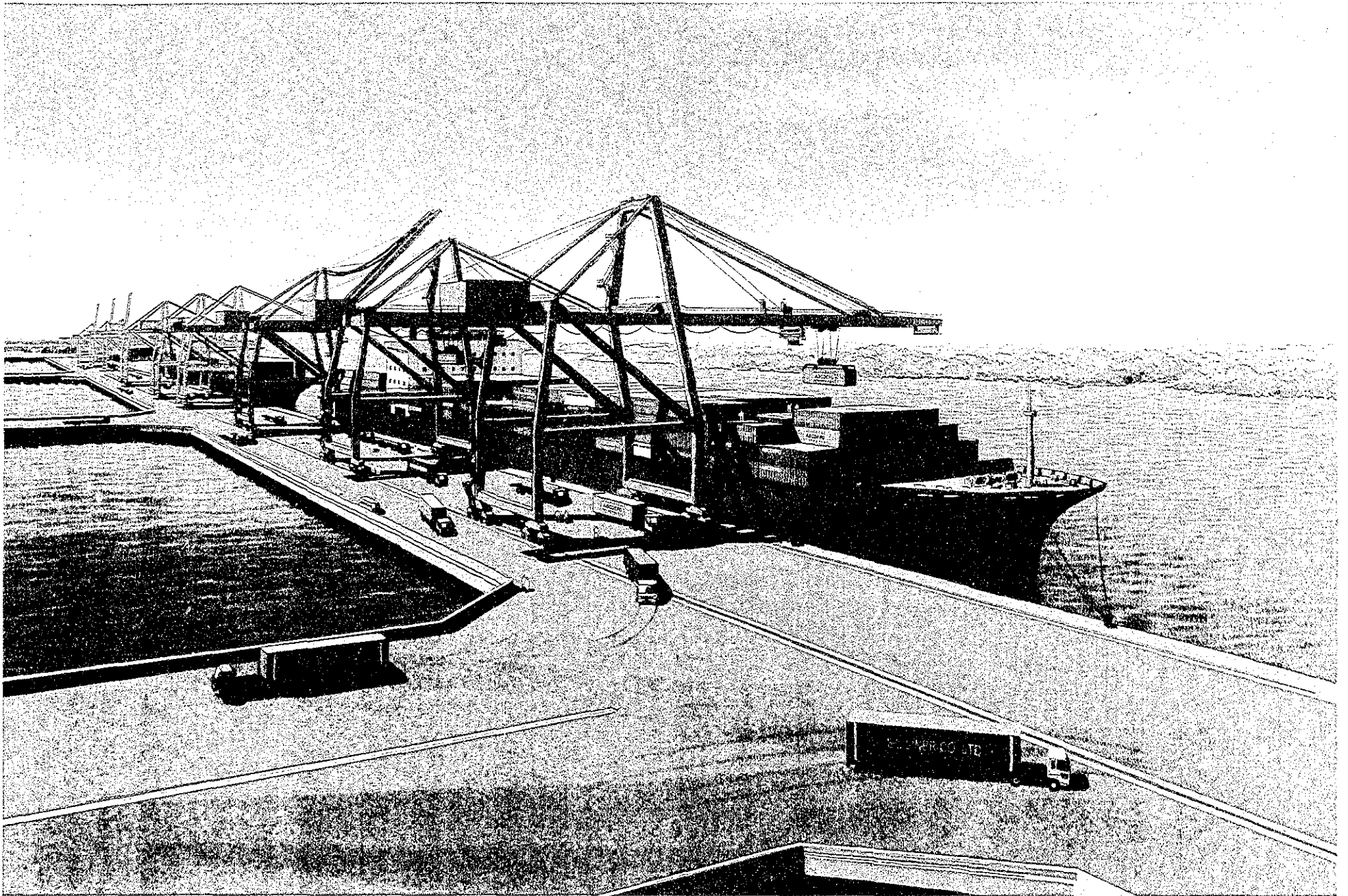


CAI MEP INTERNATIONAL CONTAINER TERMINAL



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CAI MEP INTERNATIONAL CONTAINER TERMINAL



## PREFACE

*In response to the request from the Government of the Socialist Republic of Vietnam (hereinafter referred to as "GOV"), the Government of Japan decided to conduct the Port Development Study in the South of the Socialist Republic of Vietnam (hereinafter referred to as "the Study") and entrusted the study to the Japan International Cooperation Agency (JICA).*

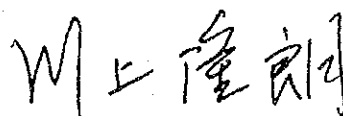
JICA selected and dispatched a study team headed by Mr. Yukio NISHIDA (hereinafter referred to as "the Study Team") of the Overseas Coastal Area Development Institute of Japan (OCDI) and comprised of OCDI and Japan Port Consultants (JPC) to Vietnam four times between March 2001 and October 2002.

The Study Team held discussions with the officials concerned of GOV and conducted field surveys at the study area. Upon returning to Japan, the Study Team conducted further studies and prepared this final report.

We hope that this report will contribute to the promotion of this project and to the enhancement of friendly relations between our two countries.

Finally, we wish to express our sincere appreciation to the officials concerned of GOV for their close cooperation extended to the Study Team.

December 2002



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Takao KAWAKAMI

President

Japan International Cooperation Agency

## LETTER OF TRANSMITTAL

December 2002

Mr. Takao KAWAKAMI  
President  
Japan International Cooperation Agency

Dear Mr. KAWAKAMI,

It is my great pleasure to submit herewith the Final Report of "The Port Development Study in the South of the Socialist Republic of Vietnam".

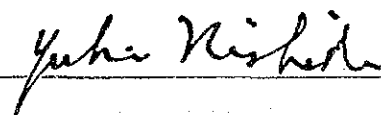
The Study Team comprised of the Overseas Coastal Area Development Institute of Japan (OCDI) and Japan Port Consultants (JPC) conducted surveys in the Socialist Republic of Vietnam over the period between March 2001 and October 2002 according to the contract with the Japan International Cooperation Agency (JICA).

The Study Team compiled this report, which proposes the future development scenario including Master Plan and Short-term Plan for the ports in the south of Vietnam up to 2020 and 2010 respectively, through close consultations with officials of the Ministry of Transport of the Vietnamese Government and other authorities concerned.

On behalf of the Study Team, we would like to express our sincere appreciation to the Ministry of Transport and other authorities concerned for their cooperation, assistance, and heartfelt hospitality extended to the Study Team.

We are also very grateful to the Japan International Cooperation Agency, the Ministry of Foreign Affairs, the Ministry of Land, Infrastructure and Transport, and the Embassy of Japan in the Socialist Republic of Vietnam for valuable suggestions and assistance during the course of the Study.

Yours faithfully,



Yukio NISHIDA

Team Leader

The Port Development Study in the South  
of the Socialist Republic of Vietnam

### List of Abbreviations

<b>ADB</b>	Asian Development Bank
<b>AFTA</b>	ASEAN Free Trade Agreement
<b>APA</b>	ASEAN Ports Association
<b>ASEAN</b>	Association of South-East Asian Nations
<b>BCR</b>	Benefit / Cost Ratio
<b>BDSM</b>	Ben Dinh - Sao Mai
<b>BOD<sub>5</sub></b>	Biological Oxygen Demand after 5 days
<b>BOT</b>	Build-Operate-Transfer
<b>BR-VT</b>	Ba Ria-Vung Tau
<b>BT</b>	Build-Transfer
<b>BTO</b>	Build-Transfer-Operate
<b>CAAV</b>	Civil Aviation Administration of Vietnam
<b>CDL</b>	Chart Datum Level
<b>CFEA</b>	Central Focal Economic Area
<b>CFS</b>	Container Freight Station
<b>CM</b>	Cai Mep
<b>COD</b>	Chemical Oxygen Demand
<b>DO</b>	Dissolved Oxygen
<b>DSI</b>	Development Strategy Institute
<b>DWT</b>	Dead Weight Tonnage
<b>EDI</b>	Electric Data Interchange
<b>EIA</b>	Environment Impact Assessment
<b>EIRR</b>	Economic Internal Rate of Return
<b>EPZ</b>	Export Processing Zones
<b>FIRR</b>	Financial Internal Rate of Return
<b>FDI</b>	Foreign Direct Investment
<b>GDP</b>	Gross Domestic Product
<b>GPS</b>	Global Positioning System
<b>GRT</b>	Gross Registered Tonnage
<b>GSO</b>	General Statistical Office
<b>HCMC</b>	Ho Chi Minh City
<b>HDI</b>	Human Development Index
<b>HEPZA</b>	HCMC Export Processing and Industrial Zones Authority
<b>HHWL</b>	Highest High Water Level
<b>HWL</b>	High Water Level
<b>IAPH</b>	International Association of Port and Harbours
<b>ICD</b>	Inland Clearance Depot
<b>IEE</b>	Initial Environmental Examination
<b>IMO</b>	International Maritime Organization
<b>IZ</b>	Industrial Zones
<b>JBIC</b>	Japan Bank for International Cooperation
<b>JETRO</b>	Japan External Trade Organization
<b>JICA</b>	Japan International Cooperation Agency
<b>JY</b>	Japanese Yen
<b>LCC</b>	Lower Cai Mep International Container Terminal
<b>LCM</b>	Lower Cai Mep
<b>LLWL</b>	Lowest Low Water Level
<b>LWL</b>	Low Water Level
<b>LOA</b>	Length Overall
<b>MADRECO</b>	Maritime Dredging Company

<b>MIS</b>	Management Information System
<b>MOC</b>	Ministry of Construction
<b>MOSTE</b>	Ministry of Science, Technology and Environment
<b>MOT</b>	Ministry of Transport
<b>MPI</b>	Ministry of Planning and Investment
<b>MPMU</b>	Vinamarine Project Management Unit
<b>MSL</b>	Mean Sea Level
<b>NFEA</b>	Northern Focal Economic Area
<b>NH</b>	National Highway
<b>NM</b>	Nautical Mile
<b>NR</b>	National Road
<b>OD</b>	Origin and Destination
<b>ODA</b>	Official Development Assistance
<b>PMB</b>	Port Management Body
<b>PSA</b>	Port of Singapore Authority
<b>PSP</b>	Private Sector Participation
<b>PTP</b>	Port of Tanjung Pelapas
<b>PTSC</b>	Petro Vietnam Technical Service Company
<b>PVECC</b>	Petro Vietnam Engineering Consulting Company
<b>RO/RO</b>	Roll-on Roll-off
<b>RTG</b>	Rubber Tired Gantry Crane
<b>SCF</b>	Standard Conversion Factor
<b>SER</b>	Shadow Exchange Rate
<b>SFEA</b>	Southern Focal Economic Area
<b>SOE</b>	State-owned Enterprise
<b>SS</b>	Suspended Solid
<b>TCN</b>	Ministerial Standards in Vietnam
<b>TCVN</b>	Standard of Vietnam
<b>TEDI</b>	Transport Engineering Design Incorporation
<b>TEDI-S</b>	Transport Engineering Design Incorporated South
<b>TEU</b>	Twenty Footer Equivalent Unit
<b>TV</b>	Thi Vai
<b>TVG</b>	Thi Vai International General Cargo Terminal
<b>UCC</b>	Upper Cai Mep Container Terminal
<b>US\$</b>	United States Dollar
<b>UNCTAD</b>	United Nations Conference on Trade and Development
<b>VCCI</b>	Vietnam Chamber of Commerce and Industry
<b>VICT</b>	Vietnam International Container Terminals
<b>VIETSOVPETRO</b>	Vietnam-Soviet Petroleum Company
<b>VINALINES</b>	Vietnam National Shipping Lines
<b>VINAMARINE</b>	Vietnam National Maritime Bureau
<b>VINAWACO</b>	Vietnam National Waterway Corporation
<b>VITRANSS</b>	Vietnam Transport Strategy Study
<b>VIWA</b>	Vietnam Inland Waterway Administration
<b>VMRCC</b>	Vietnam Maritime Regional Coordination Center
<b>VMS</b>	Vietnam Maritime Safety Agency
<b>VND</b>	Vietnam Dong
<b>VOC</b>	Vehicle Operation Cost
<b>VPBD</b>	Vertical Plastic Board Drain
<b>VSIZ</b>	Vietnam-Singapore IZ
<b>VTS</b>	Vessel Traffic Service

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