SEAPORT SYSTEM IN THE SOUTHERN KEY AREA OF VIETNAM: PRESENT STATUS AND DEVELOPMENT STRATEGIES

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INTRODUCTION

- Situated in the heart of Southeast Asia, with 3,260 km of coastline, Vietnam offers ideal advantages for economic development, trade and tourism.

- Rich in energy sources (oil, gas, coal) and other natural minerals.

- Overall economic renovation policy ("Doi Moi") was adopted producing impressive results.

- Recent annual economic growth rate is about 7-8%.

- The Southern Focal Economic Area (SFEA) is the most important economic area of Vietnam.
**Vietnam Ports System**

- **Number of seaport:** >150 ports

- **8 port groups:**
  1. Northern
  2. Central North
  3. Central
  4. Central South
  5. HCMC
  6. Mekong Delta
  7. South-West islands
  8. Con Dao

- **Cargo throughput (2007):**
  - Total (exclude crude oil): **134** mil. MTs
  - Import: **50** mil. MTs
  - Export: **52** mil. MTs
  - Domestic: **32** mil. MTs
  - Container: **4.5** mil. TEUs
  - Annual growth rate: **20%**
    Container HCMC area: **30%**
Location of main ports in Vietnam

Hai Phong – Cai Lan port
Dung Quat Port

Port for exporting oil product (under construction)
Van Phong International Transit Port

[Map showing locations of Ha Noi, Hue, Nha Trang, and Ho Chi Minh City with Van Phong Bay highlighted.]
Van Phong International Transit Port

- Total length of berth: >12,000m
- Port area: 740 ha
- Water depth: 15~20m
- Ship: Up to 220,000 DWT
- Port capacity: 17mil TEUs
Location of ports in the South of Vietnam

Southern Focal Economic Area

THE MAP OF MAJOR PORTS
### Three main ports in Vietnam

*Source: MOT*

<table>
<thead>
<tr>
<th>Port</th>
<th>Terminal</th>
<th>Berth Length (m)</th>
<th>Type of Ship Accommodated</th>
<th>Cargo Handled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hai Phong</td>
<td>Hoang Dieu (conventional)</td>
<td>1,300</td>
<td>10,000</td>
<td>General, Bagged, Bulk</td>
</tr>
<tr>
<td></td>
<td>Hoang Dieu (container)</td>
<td>410</td>
<td>10,000</td>
<td>Container, General, Metal</td>
</tr>
<tr>
<td></td>
<td>Vat Cach</td>
<td>311</td>
<td>10,000</td>
<td>General, Bagged, Bulk, Metal</td>
</tr>
<tr>
<td></td>
<td>Doan Xa</td>
<td>200</td>
<td>10,000</td>
<td>General, Bagged, Bulk, Liquid</td>
</tr>
<tr>
<td></td>
<td>Chua Ve</td>
<td>335</td>
<td>10,000</td>
<td>Container, General</td>
</tr>
<tr>
<td>Danang</td>
<td>Tien Sa</td>
<td>732</td>
<td>30,000</td>
<td>Container, Passenger</td>
</tr>
<tr>
<td></td>
<td>Song Han (1,2)</td>
<td>235</td>
<td>5,000</td>
<td>Container, Passenger</td>
</tr>
<tr>
<td></td>
<td>Song Han (3,4,5)</td>
<td>465</td>
<td>3,000</td>
<td>General, Passenger</td>
</tr>
<tr>
<td></td>
<td>Song Han (6,7,8)</td>
<td>273</td>
<td></td>
<td>General</td>
</tr>
<tr>
<td>Saigon</td>
<td>Nha Rong</td>
<td>689</td>
<td>30,000</td>
<td>General, Passenger</td>
</tr>
<tr>
<td></td>
<td>Khanh Hoi</td>
<td>1,389</td>
<td></td>
<td>General, Passenger</td>
</tr>
<tr>
<td></td>
<td>Khanh Hoi B</td>
<td>140</td>
<td></td>
<td>Bulk</td>
</tr>
<tr>
<td></td>
<td>Tan Thuan</td>
<td>713</td>
<td></td>
<td>Roro, Container, Bulk</td>
</tr>
</tbody>
</table>
Existing seaports in southern key area of Vietnam

- Consist of 28 ports along Sai Gon, Dong Nai, Nha Be, Long Tau, Soai Rap River
- 4 major ports: Tan Cang, Sai Gon, Ben Nghe and VICT (85% of total general cargo throughput in the SFEA)
- Small area, narrow space, shallow water, bad traffic

- Consist of Dong Nai River Port, Go Dau, Phu My, and Cai Mep Port
- Deep riverbed in Phu My area, able to accommodate ship of 30,000DWT

- Located inside the Vung Tau peninsula
- Almost all ports are oil related ports
Ports in Sai Gon river

[Map and images of ports along the Sai Gon river]
## CONDITIONS OF EXISTING PORTS

### Four Major Ports in HCMC Area

*Source: JICA*

<table>
<thead>
<tr>
<th>Item</th>
<th>Tan Cang</th>
<th>Sai Gon</th>
<th>Ben Nghe</th>
<th>VICT</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of Berths</td>
<td>5</td>
<td>18</td>
<td>4</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Total length</td>
<td>706m</td>
<td>2,667m</td>
<td>816m</td>
<td>303m</td>
<td>4,492m</td>
</tr>
<tr>
<td>(Maximum depth)</td>
<td>-9.5m</td>
<td>-11.0m</td>
<td>-10.5m</td>
<td>-10m</td>
<td>-11.0m</td>
</tr>
<tr>
<td>No. of Buoy Berths</td>
<td>2</td>
<td>25</td>
<td>7</td>
<td>0</td>
<td>34</td>
</tr>
<tr>
<td>(Maximum depth)</td>
<td>-10.5m</td>
<td>-13.0m</td>
<td>-9.5m</td>
<td>0</td>
<td>-13.0m</td>
</tr>
<tr>
<td>Maximum size of Vessel</td>
<td>16000DWT at wharf</td>
<td>30000DWT at wharf</td>
<td>30000DWT</td>
<td>20000DWT</td>
<td>30000DWT at wharf</td>
</tr>
<tr>
<td>Available cargo storage area</td>
<td>19ha</td>
<td>30ha</td>
<td>28ha</td>
<td>8ha</td>
<td>85ha</td>
</tr>
<tr>
<td>Main cargo Equipment</td>
<td>Floating 1 RTG 9 Contai.C. 2 Other C. 9</td>
<td>RTG 2 Other C. 27</td>
<td>Mobile C. 7</td>
<td>Container Crane 2 RTG 4</td>
<td></td>
</tr>
</tbody>
</table>
CONDITIONS OF EXISTING PORTS

Breakdown of the cover
Hon Chong Port (1992)

The break on surface of pavement
Ben Nghe Port - HCMC

The crack on surface of pavement
Ben Nghe Port – HCMC

The breakdown of the cover of almost plate
Hon Chong Port (1992)

The steel bars rusted and the cover gone away
Ben Nghe Port - HCMC
CONDITIONS OF EXISTING PORTS

Terrible traffic congestion
CONDITIONS OF EXISTING PORTS

- Port areas are small
- Limited land due to congested urban areas

- Port depth is shallow
- Maximum depth is 11m
- Unsuitable for shipping large vessels

- Port operation is inefficient
- Poor navigation service
- Inadequate supervision and management
- Lack of incentives, unclear port charges

- Lack of modern equipments and facilities
- Well-maintained cargo-handling equipment
- Trained port labor
- Technology in container handling

Most of the ports are unproductive and less competitive
Port Capacity

<table>
<thead>
<tr>
<th>Year</th>
<th>Port Capacity (Mil. Tons)</th>
<th>Length of Berth (1,000m)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995</td>
<td>20</td>
<td>15</td>
</tr>
<tr>
<td>1997</td>
<td>40</td>
<td>20</td>
</tr>
<tr>
<td>1999</td>
<td>60</td>
<td>25</td>
</tr>
<tr>
<td>2001</td>
<td>80</td>
<td>30</td>
</tr>
<tr>
<td>2003</td>
<td>100</td>
<td>35</td>
</tr>
</tbody>
</table>
Port planning in the South of Vietnam

- Cat Lai
- Cai Mep – Thi Vai
- Hiep Phuoc
PORT DEVELOPMENT STRATEGY

Ports in HCMC Area: Relocate and redevelop the port facilities

- Serious traffic congestion in the city
- The environment is more and more serious during the cargo transport time

Reason

- All the major ports in this area are planned to be relocated to the Cat Lai and Hiep Phuoc Area (2020).
- The cargo coming from the other areas should be handled at a convenient port (Phu My Port).
- The relocation of the Saigon Port group and the possibility of the large-scale development of the lower Soai Rap River Channel are the important factors.
- A container and general cargo port for 20,000DWT vessels should be developed by the year 2010. Accordingly, it will be imperative to adjust the capacity of port facilities.
- In near future, Sai Gon port has to be changed the function to tourist port.
## PORT DEVELOPMENT STRATEGY

<table>
<thead>
<tr>
<th>Ports need to be relocated soon:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Tan Cang</td>
<td>Cat Lai, HCMC</td>
</tr>
<tr>
<td>- Ba son Shipyard</td>
<td>Rach Ban Thach, BR-VT</td>
</tr>
<tr>
<td>- Sai Gon Port</td>
<td>Cai Mep–Thi Vai, BR-VT</td>
</tr>
<tr>
<td>(Nha Rong + Khanh Hoi)</td>
<td>Hiep Phuoc, HCMC</td>
</tr>
<tr>
<td></td>
<td>Other places</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ports need to be relocated:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>East Tan Thuan Port</td>
<td>Cat Lai, HCMC</td>
</tr>
<tr>
<td>Vegetable Port</td>
<td>Hiep Phuoc, HCMC</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ports will be remained:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>- Tan Thuan area (Sai Gon Port)</td>
<td></td>
</tr>
<tr>
<td>- Ben Nghe Port</td>
<td></td>
</tr>
<tr>
<td>- VICT</td>
<td></td>
</tr>
<tr>
<td>- Lotus</td>
<td></td>
</tr>
</tbody>
</table>
PORT DEVELOPMENT STRATEGY
**PORT DEVELOPMENT STRATEGY**

**Ports in THI VAI – VUNG TAU Area:** Develop deep ports

- Good natural conditions: Deep water, wide river...
- Near the sea, suitable for locating sea-ports

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The river section has a deep riverbed and is able to accommodate ships of 30,000DWT with less investment.

Cai Mep Area has a berth length of approximate 4km, river width of greater than 1,000m and riverbed depth of 30m in some sections.

It is possible to develop deep ports for vessels, can be operated continuously 24 hours a day, not depend on the tidal level.

Container terminals for 50,000DWT vessels should be developed as quickly as possible by the year 2010. In the short term, these ports will play a role of supporting for the ports in HCMC area.
PORT DEVELOPMENT STRATEGY

Major Port Project Sites

Potential sites for deep container ports

- Cat Lai
- Phu My
- Thi Vai
- Can Gio
- Ben Dinh Sao Mai
- Hiep Phuoc
- Saigon
- Cat Mep
- Thi Vai Area
- HCMC Port Area
- Vung Tau - Thi Vai - HCM City Area

PORTS SYSTEM
Administration, management and operation system

The main current problems relating to port development in SFEA and having to be improved

- Cargo handling productivity on ship operation and cargo dwelling time in port
  - To increase or introduce number of cargo equipment, especially quayside container cranes
  - To convert existing general cargo stockyard into container yard paved to cope with the future increase of container throughput
  - It is assumed the volume of handling cargo per ship will increase at the improved condition
PORT DEVELOPMENT STRATEGY

Administration, management and operation system

Classification of Ports: not effective for all ports to be administrated in the same way

Improvement of Institutional Framework for Port Administration

Establishment of Appropriate Port Management System

Establishment of Construction Management Team

Promotion of Private Sector Participation (PSP)

Introduction of Electric Data Interchange (EDI) System

Strict application of environmental quality standards

Introduce a more advanced port management and operation system
The Vietnamese economy has experienced significant growth, accompany with the demand of shipping for imports as well as exports.

It is very important for Vietnam to develop its infrastructures, particularly deep water ports, in the time ahead.

An analysis of the current situations of port development in the SFEA was conducted.

The key aspects of the strategy approach are being incorporated in the management of port system in this area and need a more strategic and longer-term approach to port management problem.
THANK YOU VERY MUCH FOR YOUR ATTENTION!