“K” Line Vision 2008+
Ship Management Structure
to Sustain Safety and Quality

Kawasaki Kisen Kaisha, Ltd.
May 25, 2006
Ship Management Structure to sustain safety and quality

1. Global Expansion and Competitive Intensification

2. Securing and training marine technical personnel on a global basis
Strong commitment to “K”LINE SPIRIT

“K”Line SPIRIT for keeping vessels in good condition

SKILL           Technical capabilities acquired from experience
PROFESSIONALISM Professional dedication with thorough knowledge about each vessel
INTELLIGENCE    Intelligence that contributes to improving society worldwide
RESPONSIBILITY  Strong feeling of personal responsibility
INNOVATION      Innovate through new technology
TEAMWORK        Teamwork for achieving each target

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Management Plan (Each Particular Type)

- 2005F: 160 ships
- 2008F: 210 ships
- 2011F: 270 ships

(Operating Ships 400 Ships, 500 Ships, 600 Ships)

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1. Global Expansion and Competitive Intensification

(1) Ship management structure places emphasis on In-House ship management

(2) Ship management for specialized types of vessels

(3) Strengthening and Global Expansion of In-House Ship Management

(4) Quality management of our owned and controlled vessels

(Supplement) Quality management of chartered vessels
Strengthening and Global Expansion of In-House Ship Management

(1) Ship management structure places emphasis on In-House ship management

We will sustain and improve our two main In-House ship management companies, i.e. “K” Line Ship Management Co., Ltd. (KLSM) and Taiyo Nippon Kisen Co., Ltd. (TNKC). Management know-how accumulated and on reserve from the experiences of In-House ship management companies is to be an essential part of our safe marine operation.
· Ship management for ship’s entire life from plan of new building throughout to the end.
· Careful and efficient ship management by acceleration of adopting Information Technology.
· Sharing information between each office for precaution to prevent from accidents.
· Strengthening ship management by SI with same background through maintaining close communication.
(2) Ship management for specialized types of vessels

<table>
<thead>
<tr>
<th>LNG</th>
<th>Container</th>
<th>PCC</th>
</tr>
</thead>
<tbody>
<tr>
<td>“K” Line Tokyo</td>
<td>KLSM Tokyo</td>
<td>TNKC Kobe</td>
</tr>
<tr>
<td>“K” Line LNG(UK)</td>
<td>KLSM Singapore</td>
<td>TNKC Manila</td>
</tr>
<tr>
<td></td>
<td>Stargate Bremen</td>
<td>Stargate Bremen</td>
</tr>
<tr>
<td></td>
<td>(TNKC Group)</td>
<td></td>
</tr>
</tbody>
</table>
(3) Strengthening and Global Expansion of In-House Ship Management

a) Management Plan (Each Company)
b) Global Expansion

- We will manage near calling ports to clearly grasp vessel condition.
- In order to secure and give good educational training to seafarers, we will locate in areas having convenient access to maintain source.
(4) Quality management of our owned and controlled Vessels

To maintain vessels in best possible condition, it is important to keep well-trained seafarers and have skillful superintendents (=SI).

Seafarers : Highly trained by “K” Line Maritime Academy
SI    : Japanese SI(s) and SI(s) who come from our foreign seafarers’ pool after enjoying the advantage of our training program based on specialized type of vessel.

SI(s) are committed to the “K” Line SPIRIT to support the vessels from the shore side.
Total number of foreign SI in our training program

<table>
<thead>
<tr>
<th>Nationality</th>
<th>2005FY End</th>
<th>2011FY End</th>
</tr>
</thead>
<tbody>
<tr>
<td>India/Philippines</td>
<td>25</td>
<td>90</td>
</tr>
<tr>
<td>Europe/Others</td>
<td>6</td>
<td>15</td>
</tr>
</tbody>
</table>

* Training to be carried out at our offices in Japan, the Philippines, Singapore, India and Europe.
To confirm vessels’ condition
• Visits by Marine Inspectors from our company.
• Evaluation of each vessel with its annual review.

Sharing information
• Sharing information through periodical meetings with experienced owners of long-chartered vessels.
• Circularizing of news related trouble, accidents, etc.

Others
• Joint purchase and maintenance agreement for spare parts with Sister vessels’ owner.
2. Securing and training marine technical personnel on a global basis

(1) Establishment of “K” Line seafarer’s standard

(2) Upgrading training facilities and enhancement of training systems

(3) Supporting maritime colleges and training institutions

(4) Training Ships and Training Programs (“K” Line Training Fleet)

(5) Reinforcement of cooperation with overseas manning companies
Required Number of Officers (Nationality)

- **CHINA**
- **EUROPE**
- **INDIA/BANGLADESH**
- **PHILIPPINES**
- **JAPAN**

<table>
<thead>
<tr>
<th>Year</th>
<th>CHINA</th>
<th>EUROPE</th>
<th>INDIA/BANGLADESH</th>
<th>PHILIPPINES</th>
<th>JAPAN</th>
</tr>
</thead>
<tbody>
<tr>
<td>2000</td>
<td></td>
<td></td>
<td>1500</td>
<td></td>
<td>1000</td>
</tr>
<tr>
<td>2005F</td>
<td>2000</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2008F</td>
<td></td>
<td>2600</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2011F</td>
<td></td>
<td></td>
<td></td>
<td>3500</td>
<td></td>
</tr>
</tbody>
</table>
## Required Number of Cadets

### [Per Year]

<table>
<thead>
<tr>
<th>Nationality</th>
<th>2005FY</th>
<th>2008FY</th>
</tr>
</thead>
<tbody>
<tr>
<td>Philippines</td>
<td>70</td>
<td>100</td>
</tr>
<tr>
<td>India/Bangladesh</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Bulgaria</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>China</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>30</td>
</tr>
<tr>
<td>Total</td>
<td>135</td>
<td>230</td>
</tr>
</tbody>
</table>

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(1) Establishment of “K” Line seafarer’s standard
(Concept of “K” Line Maritime Academy: KLMA)

● Purpose
To develop seafarers’ standards in accordance with “K” Line global standards.

● Measures
a) Developing standard curricula for seafarers.
b) Upgrading training facilities and building-up global network.
c) Sharing necessary information for recruiting, education and training.
<Concept>

“K” Line Maritime Academy (Philippines)
- Main training Center.
- Training of seafarers, regardless of nationality or kind of vessel.

“K” Line Maritime Academy (India)
- Training of officers to be on container vessels and dangerous cargo vessels.

“K” Line Maritime Academy (Japan)
- Training of Japanese seafarers as core technical group
- Establishment of “K” Line global training policy
- Fixing standards for training programs and curricula
- Unification of texts and manuals
- Unification of career promotion plans

“K” Line Maritime Academy (East Europe)
- Training of officers to be on PCC

“K” Line Maritime Academy (North Europe)
- Training of officers to be on LNG
(2) Upgrading training facilities and enhancement of training systems

Rebuilding and expanding the training center in Manila and developing “K” Line standard” for the entire “K” Line Group.
(Starting construction date: Aug 2006, Completing construction date: End of 2007)

<table>
<thead>
<tr>
<th>Present Training Center</th>
<th>Planned Training Center</th>
</tr>
</thead>
<tbody>
<tr>
<td>Planned number of trainees 4000 / year</td>
<td>10,000 / year</td>
</tr>
<tr>
<td>Total floor space 2,800㎡</td>
<td>6,800㎡</td>
</tr>
<tr>
<td>Maneuvering simulator of main engine, Cargo handling simulator for LNG, etc.</td>
<td>Addition of latest ship maneuvering simulator, Engine simulator</td>
</tr>
<tr>
<td>Real model of exhaust valve, fuel valve</td>
<td>Install more real machineries for maintenance training</td>
</tr>
<tr>
<td>Grade up criteria for seafarers</td>
<td>Support acquiring upper-grade licenses &amp; gaining promotion to senior officers</td>
</tr>
<tr>
<td>Dormitory : 42 persons</td>
<td>110 persons</td>
</tr>
</tbody>
</table>
India

Extension of KLSM Mumbai office and installation of training facilities such as ship maneuvering simulator, engine maneuvering simulator, Cargo handling simulator, etc.

**Requirement**
- To increase number of required officers to be on dangerous cargo vessels.
- To develop scholarship programs.
- To improve general quality, knowledge and skills of officers.

**New training facilities**
- Ship Maneuvering simulator
- Engine maneuvering simulator
- Boiler combustion control system simulator
- Cargo handling simulator
- Reefer container unit

Target: 500 persons at 2008F
Supporting maritime colleges and training institutions

Bulgaria
Naval Academy (Varna)
Technical University (Varna)

China
Shanghai Maritime Academy
Nantong Shipping College

India
TS Chanakya (Mumbai)
VELS (Chennai)
MERI (Kolkata)
AMET (Chennai)

Philippines
MAAP
PMMA
University of Cebu
John B Lacson

Japan
Tokyo University of Marine Science and Technology, Kobe University, Oshima National College of Maritime Technology, Toba National College of Maritime Technology, Toyama National College of Maritime Technology, Hiroshima National College of Maritime Technology, Yuge National College of Maritime Technology, Marine Technical College, National Fisheries University
【Japan】
- Reinforcement of partnership/study for bridge resource management using ship maneuvering simulator and grade-up K Line seafarers.
- Implementation of internship programs.
- Introduction of K Line original curriculum in Marine Technical College.
- Training of instructors of universities, colleges, etc.

【Philippines】
Cadet: 100 persons/year
- Enhancement of scholarship scheme with the following universities, colleges, etc.:
  - MAAP (Manila), PMMA (Manila),
  - University of Cebu (Cebu), John B. Lacson (Iloilo)
- Introduction of "Bridge Course Curriculum" with Technology University of the Philippines-Visayas to procure efficient, well-trained senior engineers (24 persons/year).

【India】
- Strengthening partnerships according to donations, etc. and introduction of cadet program (60 people/year) from the following institutions:
  - Training Ship Chanakya (Mumbai)
  - VELS Academy of Maritime Studies (Chennai)
  - Marine Academy of Maritime Studies (Chennai)
  - Academy of Marine Education & Research Institute (Kolkata)

【Bulgaria】
- Apprentice and cadet program (30 persons/year)

【China】
- Introduction of cadet ship program (10 people/year)
  - Shanghai Maritime Academy
  - Nantong Shipping College.

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(4) Training Ships and Training Programs
(“K” Line Training Fleet)

Purpose
• To train senior officers at the earliest opportunity.
• To develop In-house Cadet programs for new graduates. (230 persons / year)

Measures
① Securing of training ships with private rooms for each trainee and training senior officers.
• Increasing accommodation capacity on the following vessels: VLCC (launch date: Dec. 2006), Container vessels: (launch date: Jan. 2007)
• Planning to change accommodation capacity on LPG vessels (launch date: Apr. 2008).
• Implementation of Onboard Instructor Programs for effective on-the-job-training.
② Securing training ships for new graduates.
• Increasing the maximum number of persons allowed onboard both existing vessels and planning stage vessels.
(5) Reinforcement of cooperation with overseas manning companies

(1) Europe
- Tying up with OSM Norway A.S. (Norwegian ship management company) to secure efficient, well-trained seafarers for LNG vessels.
- Establishment of K Line team in OSM to specialize in manning “K” Line vessels.
- Recruitment of seafarers of North European/Baltic countries, Ukraine and Russia.
- Supplying such crews to crude oil and ammonia carriers in the future.

(2) Asia
- Reinforcement of the connection with manning companies such as Ventis, Veritas, etc. in Philippines.
- Reinforcement of the connection with Confidence Shipping Co. PVT Ltd. and K Steamship Agencies PVT Ltd. (J.M.Baxi Group) in India and Haque & Sons Ltd. in Bangladesh.
Thank you very much.

Kawasaki Kisen Kaisha, Ltd.