**Basic strategies of “Staying Ahead 2022 with Digitalization and Green”**

**Step 1**
Optimize business portfolio
- Reconfigure business portfolio to withstand volatile market conditions
- Decisively reform the dry-bulk business
- Lead the new container JV (ONE) to success

**Step 2**
Secure stable-freight-rate business
- Develop well-balanced revenue structure
- Leverage logistics capabilities with YLK
- Strengthen car carrier and auto-logistics businesses
- Reinforce LNG and offshore businesses

**Step 3**
Increase efficiency and create new values
- Accelerate growth by constantly improving our technological, informational and network capabilities
- Implement Digitalization and Green initiatives

**Dividend policy**
- Basic policy for the return of profits to shareholders is to pay stable dividends aiming for a payout ratio of 25% on a consolidated basis

**Earnings and financial targets**

<table>
<thead>
<tr>
<th>FY2017 Results</th>
<th>Medium-Term Target (by FY2022)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Recurring Profit</td>
<td>¥28 billion</td>
</tr>
<tr>
<td>ROE</td>
<td>3.8%</td>
</tr>
<tr>
<td>Equity Ratio</td>
<td>26.6%</td>
</tr>
<tr>
<td>DER</td>
<td>1.78</td>
</tr>
<tr>
<td>Exchange rate (1US$)</td>
<td>¥111.19</td>
</tr>
<tr>
<td>Bunker oil prices (1MT):</td>
<td>$341.41</td>
</tr>
</tbody>
</table>

*HSFO = High Sulphur Fuel Oil / LSGO = Low Sulphur Gas Oil

**To achieve ROE target**

- **Profitability**
  - Accelerate business growth and improve profitability
  - Reduce cost
- **Liquidity**
  - Reduce stockholdings
  - Review and effectively utilize real estates
- **Financial Leverage**
  - Maintain investment grade or equivalent rating

**Cash Flow Management**

- **Operating cash flow** ¥570 billion

- **Cash generation by asset liquidation**
  - Reduce stockholdings
  - Review and effectively utilize real estates

- **Cash generation by cost reduction**

- **Capital investment** ¥520 billion
- **Debt repayment**
- **Shareholder returns**

**Outlook for cash flow allocation (5 years cumulative FY2018-22)**
**Step 1 of Medium-term management plan**

**Dry-bulk**

Decisively reform dry-bulk business and improve its profitability

<table>
<thead>
<tr>
<th>Strengthen business structure to withstand volatile market conditions</th>
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<tbody>
<tr>
<td>● Strictly control market risk exposure</td>
</tr>
<tr>
<td>● Separate owner/operator functions in aim to gain cost competitiveness and market adaptability</td>
</tr>
<tr>
<td>● Optimize fleet composition based on cargo contracts</td>
</tr>
<tr>
<td>● Secure stable earnings with efficient operation and fleet allocation</td>
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<table>
<thead>
<tr>
<th>Reduce fleet and operating costs by effective application of ICT expertise</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Differentiate through expertise in IT and vessel operation</td>
</tr>
<tr>
<td>● Enhance practical application skills with usage of onboard IoT data management system (SIMS)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Enrich customer engagement with proposal-based marketing and sales activities</th>
</tr>
</thead>
<tbody>
<tr>
<td>● Accurately identify customer needs and provide best solutions</td>
</tr>
<tr>
<td>● Further strengthen long-term and stable win-win partnership with the customers</td>
</tr>
</tbody>
</table>

**Container shipping**

Made a major strategic shift pursuing operational efficiency and economy of scale through the integration of container shipping business

<table>
<thead>
<tr>
<th>Initiatives to date</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reformed service structure</strong></td>
</tr>
<tr>
<td>● Expanding container shipping service network through THE Alliance</td>
</tr>
<tr>
<td><strong>Reduced market volatility</strong></td>
</tr>
<tr>
<td>● Switching to newly built large vessels with high cargo-loading rates and fuel efficiency</td>
</tr>
<tr>
<td>● Reducing fuel consumption by upgrading existing vessels</td>
</tr>
<tr>
<td>● Saving fleet and operating costs by efficiently deploying vessels</td>
</tr>
<tr>
<td>● Efficiently utilizing containers for higher profit margin</td>
</tr>
<tr>
<td><strong>Improved technological capabilities</strong></td>
</tr>
<tr>
<td>● Working to ensure safe, fuel efficient operations by utilizing big data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Operational Efficiency</th>
<th>Economy of Scale</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Best practice</strong></td>
<td></td>
</tr>
<tr>
<td>Creation of more synergy and enhancement of operational efficiency by integration of each company’s best practice</td>
<td></td>
</tr>
<tr>
<td><strong>Larger business size</strong></td>
<td></td>
</tr>
<tr>
<td>Achievement of economy of scale by bringing three companies’ business</td>
<td></td>
</tr>
</tbody>
</table>

**Synergy of approx. 110 billion yen/year**

Profit stabilization by accomplishment of synergy of approx. 110 billion yen/year

**Source of competitiveness**

- Plan to develop services across over 90 countries
- Sustainable safety vessel operation leveraging cutting edge technology
- Carry out the IBIS project continuously to achieve optimal economic ship operations
- Forecast future worldwide container transportation plans by an optimization system incorporating mathematics and statistics model in EAGLE project.
Step 2 of Medium-term management plan

Promote growth (Logistics Car carriers Auto logistics)

Initiatives to date

Logistics

Fully acquired Yusen Logistics

- Repositioning logistics business as the Group’s core business
- Deepening collaboration of each business and strengthening sales capabilities
- Seeking synergetic effect by mutually utilizing its global network and management resources

Car carriers Auto logistics

- Globally expanding roll-on/roll-off (RORO) terminal facilities and onshore value-added services in addition to maritime automobile transport
- Focusing on technological innovation and human resource development to maintain the highest level of quality control

Future actions

Logistics

- Enhance total logistics business and run a selective and concentrated investment policy focusing on growing industries and emerging markets
- Fully utilize the Group’s management resources supported by the pillars of people, assets, IT, and capital to strengthen sales capabilities

Car carriers Auto logistics

- Focus on improvement of transportation/cargo handling efficiency using digital techniques and make proactive efforts on environmental issues
- Develop and provide a sophisticated, high-quality finished-car logistics looking ahead to the structural changes in the automotive industry

Enhance investment (LNG Offshore business)

Initiatives to date

LNG

- Winning orders for the transportation of LNG, sourced from shale gas fields in North America
- Expanding its business scope to feature offerings for transporting LNG, operating LNG-fueled vessels, and supplying and marketing LNG as marine fuel

Offshore business

- Developing business at every stage of the energy value chain, from upstream to downstream

Offshore Business and LNG Value Chain

<table>
<thead>
<tr>
<th>Exploration</th>
<th>Prospecting, drifing</th>
<th>Production, storage</th>
<th>Inter-regional transport</th>
<th>Refining, liquefaction, storage</th>
<th>Transport</th>
<th>Customers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research vessel, Seismic vessel</td>
<td>Deep-sea drillship</td>
<td>FSO, FPSO</td>
<td>Wheatstone Project, Shutle Tanker</td>
<td>Cameron LNG Project</td>
<td>LNG Carriers, Tankers</td>
<td>FSRU, LNG-fueled vessels</td>
</tr>
</tbody>
</table>

Workflow

Services provided by NYK Group

Participated

Considering participation

Future actions

LNG

- Further expand and develop business in newly emerging countries.
- Strongly promote LNG marine fuel sales business in response to the increasing interest in LNG-fueled vessels

Offshore business

- Make selective investments in areas of strength and technological expertise
- Enter into new businesses in regards to the broad transformations in the global energy landscape and to effectively meet customers needs
Step 3 of Medium-term management plan

Initiatives to date

Working on various technological developments and increasing operational efficiency

- **R&D of proprietary technologies**
  -防止引擎事故减少维修成本

- **Solutions through mobile apps**
  -通过信息共享移动应用增强运营效率和服务提升

- **Onboard IoT data management system**
  -通过数据收集、监控、共享系统在船和岸之间实现安全、高效的运营

Transform the entire supply chain

Transform the entire supply chain more environmentally sustainable with the application of the latest digital technology

- **Simulation technology by Digital Twin concept**

- **Optimization of route, operation, and cargo space planning**

- **R&D for advanced automation ship**

- **Digital forwarding**
  -利用区块链技术开发贸易平台

- **Visualization of the entire supply chain with centralized information**

- **Operational Process efficiency**
  -减少铅时

- **Trade platform development using block chain technology**

**Green**

- **Energy efficient vessel design**
  -改进船舶能源效率并遵守环境法规

- **Vessels powered by next-generation fuels**
  -开发LNG-燃料的船舶来减少CO2、NOX和SOX排放

- **Expansion of optimum vessel operation**
  -通过扩大IBIS项目到各种船型来强化燃料节约努力

**Increase operational efficiency**

- **Planned improvement**: 10 billion yen/year
Step 1
Optimize business portfolio

- **Dry-bulk**: Strictly control market risk exposure. Revise long-term chartered vessels ratio. Strengthen medium-/long-term relationships with customers.
- **Container**: Merge our liner business together with those of two other Japanese companies. Pursue efficiencies and economies of scale. Generate JPY110 billion synergy.
- **Others**: Decided to return seven high-cost chartered vessels early. Reduce market exposure.

**FY18 Results**

- Decided to return seven high-cost chartered vessels early. Increase medium-/long-term contracts by 13%
- Record loss due to a service disruption that occurred immediately after the start of the business. 82% of the synergistic effects emerged.
- NCA: All of the aircraft operated were temporarily grounded due to improper maintenance (successively returned to service in January). Initiatives to stabilization of business and strengthen governance.
- Cruise: Transferred of 50% of the shares of NYK Cruises Co. Ltd. stock.
- Terminal: Transferred our subsidiary company, conducts stevedoring operations in North America.

Step 2
Secure stable-freight-rate business

- **Promote growth**: Leverage group business infrastructure for sales. Cooperation with YLK results in securing project cargo.
- **Enhance investment**: LNG fleet plan: 97 ships (end of FY22) Developing business at every stage of the energy value chain, from upstream to downstream. Five new LNG carriers delivered. Signed medium-/long-term agreements for six LNG carriers and two shuttle tankers.

Step 3
Increase efficiency and create new values

- **Digitalization**: Transform the entire supply chain more sustainable with the application of the latest digital technology. Onboard tests have been conducted to realize cashless ships. Launched ship-management platform named “NiBiKi”. Provided ship data for use in the iOS open platform.
- **Green**: Implement Green Business initiatives to take new challenges on renewable energy business for driving future growth and value creation. Issued Green Bonds. Announced NYK Super Eco Ship 2050. Contributed to 50% increase in renewable energy generation vs. previous year (solar power, biomass transport).

### Medium-Term Management Plan Progress

**Stable-freight-rate business**

<table>
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<tr>
<th>Plan</th>
<th>FY18 Results</th>
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| **Container** | Record loss due to a service disruption that occurred immediately after the start of the business. 82% of the synergistic effects emerged.
| **Others** | NCA: All of the aircraft operated were temporarily grounded due to improper maintenance (successively returned to service in January). Initiatives to stabilization of business and strengthen governance.
| **Cruise** | Transferred of 50% of the shares of NYK Cruises Co. Ltd. stock.
| **Terminal** | Transferred our subsidiary company, conducts stevedoring operations in North America. |

**Other businesses**

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| **Enhance investment** | Five new LNG carriers delivered. Signed medium-/long-term agreements for six LNG carriers and two shuttle tankers. |
| **Digitalization** | Onboard tests have been conducted to realize cashless ships. Launched ship-management platform named “NiBiKi”. Provided ship data for use in the iOS open platform. |
| **Green** | Issued Green Bonds. Announced NYK Super Eco Ship 2050. Contributed to 50% increase in renewable energy generation vs. previous year (solar power, biomass transport). |