Port of Tokyo
1. Outline of Tokyo Port
   (1) Characteristics
   (2) Trend of cargo throughput
   (3) Port map

2. Initiatives and Challenges
   (1) Development and reorganization of new container terminals
   (2) Efforts for the 2020 Tokyo Olympics in the Port of Tokyo
1-(1) Characteristics

- **Commercial port**
  - Mega-consumption area as hinterland
  - Tokyo Metropolitan Area: 43 million people

- **Import port**
  - Import : Export = 7 : 3

- **Container port**
  - Containers cargo: 96% of foreign trade cargo
1-(1) Characteristics

Foreign Trade Breakdown

Imports (Unit: 1,000,000 tons):
- Clothing/Personal Belongings/Shoes = 4.7
- Electronics = 3.21
- Processed Food = 2.56

Exports (Unit: 1,000,000 tons):
- Recycled Material = 2.17
- Industrial Machinery = 1.95
- Industrial Chemical Products = 1.82
1-(2) Trend of cargo throughput

Foreign trade container throughput

Container Throughput at 5 Major Ports in Japan

<table>
<thead>
<tr>
<th>Year</th>
<th>Tokyo</th>
<th>Yokohama</th>
<th>Nagoya</th>
<th>Osaka</th>
<th>Kobe</th>
<th>Los Angeles</th>
<th>Long Beach</th>
<th>Hamburg</th>
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<tbody>
<tr>
<td>2008</td>
<td>435</td>
<td>300</td>
<td>220</td>
<td>222</td>
<td>272</td>
<td>270</td>
<td>210</td>
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<td>2009</td>
<td>439</td>
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<td>270</td>
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<td>270</td>
<td>210</td>
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<tr>
<td>2010</td>
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<td>360</td>
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<td>270</td>
<td>210</td>
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<td>2011</td>
<td>425</td>
<td>390</td>
<td>272</td>
<td>270</td>
<td>272</td>
<td>270</td>
<td>210</td>
<td>198</td>
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<tr>
<td>2012</td>
<td>417</td>
<td>400</td>
<td>272</td>
<td>270</td>
<td>272</td>
<td>270</td>
<td>210</td>
<td>198</td>
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<td>2013</td>
<td>425</td>
<td>410</td>
<td>272</td>
<td>270</td>
<td>272</td>
<td>270</td>
<td>210</td>
<td>198</td>
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<tr>
<td>2014</td>
<td>415</td>
<td>400</td>
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<td>270</td>
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<td>2015</td>
<td>415</td>
<td>410</td>
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<td>2016</td>
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<td>2017</td>
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<td>2018</td>
<td>415</td>
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<td>270</td>
<td>272</td>
<td>270</td>
<td>210</td>
<td>198</td>
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</tbody>
</table>

Growth of Ratio of Imported Cargo

<table>
<thead>
<tr>
<th>Year</th>
<th>Tokyo Import (ton)</th>
<th>Tokyo Export (ton)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007</td>
<td>62%</td>
<td></td>
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<tr>
<td>2008</td>
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<td>2009</td>
<td></td>
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<tr>
<td>2017</td>
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</tr>
<tr>
<td>2018</td>
<td></td>
<td>73%</td>
</tr>
</tbody>
</table>

Effective Utilization of Yards

Comparison of the Effective Utilization of Yards (Calculated by dividing cargo throughput since 2018 by container yard area)

<table>
<thead>
<tr>
<th></th>
<th>Tokyo</th>
<th>Yokohama</th>
<th>Nagoya</th>
<th>Osaka</th>
<th>Kobe</th>
<th>Los Angeles</th>
<th>Long Beach</th>
<th>Hamburg</th>
</tr>
</thead>
<tbody>
<tr>
<td>TEU/㎡</td>
<td>3.00</td>
<td>1.29</td>
<td>1.67</td>
<td>1.70</td>
<td>1.58</td>
<td>1.33</td>
<td>1.48</td>
<td>1.98</td>
</tr>
</tbody>
</table>
<Main Terminal>

**Foreign Trade Container Terminals**
In service: 16 berths/total 4,709m

<table>
<thead>
<tr>
<th>Name</th>
<th>Oi</th>
<th>Aomi</th>
<th>Shinagawa</th>
<th>Central Breakwater Outer Berth</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of berths</td>
<td>7</td>
<td>5</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Length (m)</td>
<td>2,354</td>
<td>1,570</td>
<td>555</td>
<td>230</td>
</tr>
<tr>
<td>Water depth (m)</td>
<td>15</td>
<td>13–15</td>
<td>10</td>
<td>11</td>
</tr>
<tr>
<td>Yard area (㎡)</td>
<td>945,700</td>
<td>479,079</td>
<td>96,741</td>
<td>129,319</td>
</tr>
<tr>
<td>Number of cranes</td>
<td>20</td>
<td>12</td>
<td>4</td>
<td>3</td>
</tr>
</tbody>
</table>

**Domestic RORO/Ferry Terminals**
In service: 23 berths/total 3,908 m

**Other Terminals**
2-(1) Development and reorganization of new container terminals

Future plan of container terminals

- In service
- Under construction
- Under planning

**Shinagawa CT**
- <Under planning>
- Change of water depth 10m→11m

**Oi CT**
- **Oi Marine Products Terminal**
- Under planning

**Aomi CT**
- New Terminal <Under planning>
- 500m long, 2 berths, 11~12m water depth

**Outer Central Breakwater CT**
- Under construction
- 800m long, 2 berths, 16m water depth

**Y3**
- In service
- Under construction
- Under planning

**Y2**
- In service
- Under construction
- Under planning

**Y3**
- In service
- Under construction
- Under planning

**New Terminal**
- Under planning
- 400m long, 1 berth, 15~16m water depth

**New Terminal**
- Under planning
- 420m long, 1 berth, 16~16.5m water depth
2-(1) Development and reorganization of new container terminals

Reorganization & Redevelopment of Existing Container Terminals

Improve the effectiveness and productivity of container terminals
2-(1) Development and reorganization of new container terminals

◆ Building new logistics base

Now building container terminal with high-standard berths for large ships

Outer Central Breakwater Container Terminal Completed Berths (Y1 & Y2)

<table>
<thead>
<tr>
<th></th>
<th>Y1 (Opened Nov 1, 2017)</th>
<th>Y2 (Under Construction*)</th>
<th>Y3 (Under Construction)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Yard Area</td>
<td>Approx. 13 ha</td>
<td>Approx. 20 ha</td>
<td>Approx. 25.2 ha</td>
</tr>
<tr>
<td>Cranes</td>
<td>3</td>
<td>3</td>
<td>—</td>
</tr>
<tr>
<td>Depth</td>
<td>-11 m</td>
<td>-16 m</td>
<td>-16 m</td>
</tr>
</tbody>
</table>

*Quay opened on Nov. 1, 2017

◆ Installing large cranes

<Installing large cranes in the Outer Central Breakwater Container Terminal (Y2)>

Low Profile Crane <Expected Completion Image>

- Shuttle Boom Type Container Crane (Seismically Isolated Structure)
- Outreach: 63.0 m  Supports 22 rows

We are gradually upgrading gantry cranes in existing container terminals, in order to promote the docking of large ships
2-(2) Efforts for the 2020 Tokyo Olympics in the Port of Tokyo

- Olympic village
- Ariake Urban Sports Park (Tennis)
- Ariake Gymnastics center (Gymnastics)
- Tokyo Aquatics Center (Swimming, etc.)
- Yumenoshima Park Archery Field (Archery)
- Odaiba Marine Park (Triathlon, etc.)
- Shiokaze Park (Beach volleyball)
- Ariake Tennis Park (BMX racing, etc.)
- Olympic village
- Ariake Urban Sports Park (Sport climbing, etc.)
- Ariake Arena (Volleyball)
- Tatsumi Water Polo Center (Water polo)
- Tokyo Big Sight (Press Center)
- Sea Forest Cross-Country Course (Equestrian, cross country)
- Sea Forest Waterway (Rowing, etc.)
- New Passenger Ship Terminal (Under Construction)
- North-South Route (under construction)
- Oi Hockey Stadium (Field hockey)
- Outer Central Breakwater CT
- Tokyo port Tunnel
- Shinagawa CT
- Oi CT
- Aomi CT
1) Open the new container terminal (Y2)

2) Promote spread of container vehicles by time
   • Extend the container middle gate open time
   • Expand temporary storage usable 24 h (1→4)

3) Enhance the provision of information
   • Install more web cams on coast roads (1.5x)
   • Provide coastal area traffic congestion maps
   • Open a specially made website

4) Reduce cargo inside terminals
   • Eliminate long-term stored cargo

5) Promote use of ships (feeder/barge support)