Yeosu Gwangyang Port Authority (YGPA)
Safety Management Systems
1. Introduction of Yeosu and Gwangyang Ports
YGPA

Purpose of establishment: Develop Yeosu and Gwangyang Ports into competitive hubs of maritime logistics, contributing to the growth of the national economy

History:
April 29, 2011 The National Assembly passed the bill to abolish the Korea Container Terminal Authority Act.
May 18, 2011 The Korea Container Terminal Authority Act was abolished.
Aug. 11, 2011 The enforcement decree of the Port Authority Act was amended.
Aug. 19, 2011 YGPA was established.
(public institution under the Ministry of Oceans and Fisheries)

Major functions
- Develop and operate port facilities
- Develop and operate port hinterland
- Conduct surveys, research, and technology development, and cultivate manpower
- Conduct projects commissioned by central/local governments to develop/operate ports.

World Marine Center
- Location: at the center of the hinterland of Gwangyang Port
- Project period / budget: '04~'09 / KRW 63.9 billion
- Land: 20,748㎡ (6,276 pyeong)
- Gross floor area: 35,000㎡ (10,587 pyeong)
- Number of floors in the building (Phase 1: 19-story building with 1 basement floor)
**Scale**
- 39 piers, 104 berths, 24,592m in total length
- Gwangyang Port ("container" pier, POSCO pier), Yeosu Port (pier for the national industrial complex)
- Annual cargo unloading capacity: 346.48 million tons
- Five free economic zones, 88.9 km² in gross areas

**Cargo handling capacity (2021)**
- Total volume of cargos handled (295 million RT)
- ‘Container pier’ ranks 3rd among domestic piers by cargo handling volume (2.12 million TEU)
- Highest volume of import and export cargos in Korea (224 million RT)

**Pier operation and safety control**
- All piers in Yeosu and Gwangyang Ports are operated following the lease contracts between YGPA and pier operators and permission to use, and the pier operators are responsible for safety management.
2. Safety Management System
Safety Management System

2030 Corporate Strategy Framework of YGPA

CORE VALUES
- FAIRNESS
- INNOVATION
- SAFETY
- CO-PROSPERITY

ESG Management
- Create eco-friendly, green ports
- Create ports that are safe and inclusive to people
- Establish governance for anti-corruption and collaboration

Posted on YGPA's homepage
Safety Management System
areas and scope of management

**Port area**
- Facilities constructed and used by logistics business operators to transport and unload cargos
- Private companies operating business sites for maritime transport/port logistics

**Underlying facilities**
- Underlying structures in piers and hinterland
- Sites for construction awarded by YGPA for the construction and maintenance of underlying facilities

**Safety control by** YGPA

**Outside of ports**
YGPM(subsidiary) is entrusted to manage port facilities(electricity, firefighting, etc.)

**Safety control by** YGPA

YGPA head office

**Safety management system**
- areas and scope of management

[Diagram showing port area and outside of ports with safety control details]
Safety Management System: roles and responsibilities

**Port area**
Safety control by: logistics business operators (lessees)

### Upper facilities
- **Organization**: Private companies (e.g., pier operators)
  - **R&R**: Safety management
- **Organization**: Logistics Strategy Office
  - **R&R**: Compliance with safety regulations, port operation management
- **Organization**: Department of Disaster and Safety Management
  - **R&R**: Joint safety inspection / education and response to accidents

### Underlying facilities
- **Organization**: Port Development Department
  - **R&R**: Safety management of new construction sites, facilities, and repair & maintenance
- **Organization**: Logistics Strategy Office
  - **R&R**: Joint inspection of port facilities
- **Organization**: Private companies (constructors)
  - **R&R**: Safety management and legal compliance in construction sites

### Outside of ports

#### YGPA head office
- **Organization**: Chief safety manager
  - **Official in charge**: CEO
- **Organization**: Safety supervision department
  - **Official in charge**: Department of Disaster and Safety Management
- **Organization**: Safety supervisor
  - **Official in charge**: Operation HQ heads Department leaders

Occupational safety and health activities (for workers’ safety and health)
Safety Management System: YGPA organization (as of Nov. 2022)

Chief safety & health officer (CEO)

Supervision department
(Department of Disaster and Safety Management)

Safety manager
(Korea Industrial Safety Association)

Health manager
(Suncheon Hospital of Korea Workers’ Compensation and Welfare Service)

Occupational Safety and Health Committee
(decision-making body)

Supervisors (HQ heads (3), department heads (15))

Head of Management HQ
- Audit department
- Marine Tourism Promotion department
- Planning and Coordination Department
- ESG Management Office
- Management Support Department
- Department of Finance and Accounting

Head of Operation HQ
- Logistics Strategy Office
- Future Growth Business Department
- Distripark Management
- Marketing Department
- Yeosu Branch Office

Head of Development Business HQ
- New Deal Business
- Port Development Department
- Port Facilities Department

Department of Finance and Accounting

Strategy Office

Future Growth Business Department

Distripark Management

Marketing Department

Yeosu Branch Office

New Deal Business

Port Development Department

Port Facilities Department
## Safety Management System: Disaster Response Organization

### YGPA

Preemptive & voluntary enhancement of port safety and safety awareness

<table>
<thead>
<tr>
<th>Year</th>
<th>2014</th>
<th>2018</th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization</td>
<td>New safety department (Logistics Planning Office)</td>
<td>Dedicated safety department (Port Operation Department)</td>
<td>Under direct control of CEO (Safety and Security Department)</td>
<td>Under direct control of CEO (Safety and Security Department)</td>
<td>Under direct control of CEO (Safety and Security Department)</td>
</tr>
<tr>
<td>Personnel</td>
<td>2 persons</td>
<td>7 persons</td>
<td>10 persons</td>
<td>13 persons</td>
<td>13 persons</td>
</tr>
<tr>
<td>Variance</td>
<td>-</td>
<td>-5</td>
<td>-3</td>
<td>-3</td>
<td>-</td>
</tr>
</tbody>
</table>

### Partner organizations

- **Korea Gas Safety Corporation & fire stations**
- **Korea Coast Guard & Gwangyang fire station**
- **Cargo unloaders including POSCO**
- **Korea Port Logistics Association**
- **Labor union of port and shipping workers**
- **Safe Work Council**
- **Labor union of port and shipping workers**

### Early response to multi-faceted disasters and safety accidents through systematic collaboration

- Facility safety inspection to prepare for disasters
- Education and necessities donation to the vulnerable (in safety) in Gwangyang
- Maritime emergency rescue system
- Sustainable development of Yeosu and Gwangyang Ports in the post COVID-19 era
- Companywide response to the pandemic
- Work environment improvement to foster zero-accident, safe ports

### Collaboration with YGPA

<table>
<thead>
<tr>
<th>Category</th>
<th>Safety personnel (planned)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Organization (planned)</td>
<td>16 persons</td>
</tr>
<tr>
<td>Safety personnel (planned)</td>
<td>16 persons</td>
</tr>
</tbody>
</table>

**Category**

- Safety personnel (planned) (2022)
# Safety Management System: Annual Safety and Health Activity Plan

**Vision:** Create ports putting people’s lives and safety first  
**Goal:** Maintain the record of ZERO major disasters at Yeosu and Gwangyang Ports

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Activities</th>
<th>Note</th>
</tr>
</thead>
</table>
| Upgrade safety and health management systems | ISO22301 certification  
Follow-up assessment for safety and health management systems (KOSHA-MS)  
Consulting for health and safety management systems (KOSHA-MS) | ISO22301 international standard certification and 18 items (Attachment 1) |
| Preemptive port safety management | (Workplace) Reinforce safety inspection and training, publish standard safety manual for unloading  
Operate the Safety Management Committee and the Safe Work Council  
(Facility) Set up safety shelters for port workers, SFFP (drones for maritime activities)  
Introduce the YT drowsy driving prevention system  
Expand AI-based video monitoring (AIG)  
(Construction site) Operate the work suspension system at construction sites  
Build a safety management platform using technologies of the 4th industrial revolution | Workplace safety inspection and 24 items (Attachment 1) |
| Fostering safety culture among the people (port workers) | Create safe ports by engaging the public (safety inspection by citizens, public campaign)  
Safety accidents report center and identify near miss  
Operate the safety report center | Fostering safe ports by engaging the public and 6 items (Attachment 1) |
| Promotion of health management | 3H (Health, Heart, Healing) care for port workers  
Employee health check-up and assessment / counseling on job stress  
Job stress counseling (EAP) and healing program for security staff | Employee health checkup and 13 items (Attachment 1) |
3. Best Practices of Safety Control
Support subsidiaries (partners) managing YGPA’s business facilities to acquire certification of their safety and health management systems, with the goal of promoting efficiency and competitiveness in port safety control by aligning safety management systems across Yeosu and Gwangyang Ports.

**Activities**

- **Provision of heating vests to security personnel in winter (for 163 special guards)**
- **MOU to jointly operate SFFP (drone): facility safety inspection, quarantine support, etc.**
- **Operation of safety and health management systems aligned with YGPA**

**Supported by YGPA**

- Budget
- Consulting

**Conducted by YGPM**

- Assessment
- Certification
- Operation
- Follow-up assessment

**Background**

Support subsidiaries (partners) for KOSHA MS certification

**Achievements**

- Strengthen safety management systems of Yeosu and Gwangyang Ports and enhance safety awareness through integrated management of safety management systems

Additionally, YGPA is supporting subsidiaries (partners) for ISO22301 certification
Protection of life through joint emergency rescue operation using helicopters

**Background**
Need to build a joint emergency rescue operation system with partner organizations (Korea Coast Guard and Fire Department) in the eastern coastal areas of Jeollanam-do to secure golden time in case safety accidents occur at the port: first time among port authorities.

**Activities**
- Signed MOUs to build emergency rescue systems
- Joint drills to save life (twice/year)
  - Disaster response drills at Yeosu and Gwangyang Ports using helicopters (KCG), ambulances, drones, etc.

**Achievements**
- Set a model for collaborative emergency rescue operation (first time among port authorities) to create ports ensuring safety of port workers and citizens
- Recognized for excellence in disaster response and safety control by establishing collaboration systems with relevant organizations and providing systematic training
Health Clinic at Gwangyang Port: creation and operation

**Background**
Benefit society and help strengthen social safety net as a public institution by providing medical services customized to piers (which are regarded as 3D-dangerous, difficult, dirty-workplaces).

**Activities**
- Prevention of cerebrovascular disease
- Prevention of musculoskeletal illness
- First aid training
- Mobile clinic
- VR content

**Achievements**
Realize the value of co-prosperity and collaboration through close partnership with public institutions in Yeosu and Gwangyang Number of users in 2021: 228 (satisfaction rate: 93%)
Prime Minister's Commendation for Excellent Management of National Disasters

Need to promote sustainable development of major institutions around Yeosu and Gwangyang Ports in the post-COVID-19 era and build companywide response systems to protect the ports from the pandemic

Signed an MOU to promote the sustainable development of Yeosu and Gwangyang Ports in the post-COVID-19 era

Put in place inspection and quarantine systems by operating temporary living facilities for foreign sailors and special quarantine facilities in partnership with the government

YGPA won the Prime Minister’s commendation for excellent management of national disasters in 2021 in recognition of early response to natural/social disasters and contributing to recording zero casualties and COVID-19 confirmed cases by establishing seamless disaster & safety management systems against the pandemic.
Foster a safety workplace by adopting new technologies for safety control

While safety accidents have decreased at the ports over the past three years, it is still important to enhance workplace safety by adopting new technologies for safety control.

Enhance port workers’ safety awareness and minimize safety accidents to ‘zero’ by adopting new technologies for safety control.

Activities

- Safety control for drunken people
- Utilization of drones (e.g., facilities inspection quarantine)
- VR-based safety training

Background

Achievements
4. Response to the COVID-19 Pandemic
### Response to the COVID-19 Pandemic

#### Major quarantine measures at Yeosu and Gwangyang Ports

<table>
<thead>
<tr>
<th><strong>1</strong> 2 special quarantine offices</th>
<th><strong>2</strong> Disinfection of public facilities</th>
<th><strong>3</strong> Establishment of quarantine/disinfection systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Security checkpoint (Yeosu)</td>
<td>• Conducted disinfection of passenger terminals, Expo terminal (Yeosu) and YGPA head office, daily inspection following quarantine guidelines, notified quarantine guidelines (e.g., government policies) on electronic boards.</td>
<td>• Vessels waiting for on-board quarantine increased. (Shipper forwarders asked for solutions.) • Established PCR inspection systems at berths through consultations with related institutions (e.g., quarantine offices)</td>
</tr>
<tr>
<td>• Pier for government vessels (Gwangyang)</td>
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<tr>
<td>• Conducted special quarantine screening of 18,000 foreign sailors - 70 with symptoms were found and restricted from entering local areas.</td>
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</table>

<table>
<thead>
<tr>
<th><strong>4</strong> Daily check on arriving vessels</th>
<th><strong>5</strong> Temporary shelters for foreign sailors</th>
<th><strong>6</strong> Creation of pandemic response systems</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Inspected over 1,500 vessels (2020)</td>
<td>• Contained the pandemic by segregating sailors coming in for shift • 1,200 rooms were provided at Ramada Hotel (Gimpo), BWP Hotel (Incheon), and Skypark Hotel (Myeongdong).</td>
<td>• Secured business continuity in port operation by obtaining an excellent disaster mitigation certificate • Signed MOUs with relevant institutions for the post COVID-19 era • Distributed disinfection guidelines on port operation tasks and checked compliance</td>
</tr>
<tr>
<td>• Focused on segregation between port workers and sailors</td>
<td></td>
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<tr>
<td>• Checked compliance with quarantine guidelines (e.g., workspace)</td>
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</table>

Put in place multilateral disinfection systems among YGPA, Yeosu regional office of oceans and fisheries, quarantine authority, and terminal operators. Systematic quarantine measures enabled preemptive response to suspected cases (20) and kept confirmed cases from entering local areas.
Support to Overcome the COVID-19 Pandemic

Support measures for shipping & port-related businesses and the local economy

<table>
<thead>
<tr>
<th>SHIPPING &amp; PORT (up to KRW 2.9 billion)</th>
<th>Reduction of rents for port-related businesses (up to 50%, KRW 2.6 billion)</th>
<th>Provision of incentives relating to the pandemic (KRW 300 million in 2021)</th>
</tr>
</thead>
<tbody>
<tr>
<td>LOCAL ECONOMY (Up to KRW 2.8 billion)</td>
<td>Preferential hiring of local agents for maintenance and repair services (up to 50%, KRW 1 billion)</td>
<td>Increased sourcing from local outdoor markets and small businesses (KRW 1.8 billion)</td>
</tr>
<tr>
<td>SUPPLIES FOR QUARANTINE (KRW 600 million)</td>
<td>Reinforcement of quarantine for public facilities using drones, etc.</td>
<td>Provide quarantine goods (e.g., mask, hand sanitizer) to the vulnerable and port workers</td>
</tr>
</tbody>
</table>

- Identify YGPA's own tasks to support and lead their implementation following the government's support measures against the pandemic.

- Provide incentives, reduce rents, purchase local products, and reinforce support for the vulnerable.
Thank you.