



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.



Container pier



POSCO pier (raw materials, products)



LNG pier

Petrochemicals pier



Yulchon (under development)

An aerial photograph of a large container ship sailing on the ocean. The ship is viewed from above, showing its deck covered with numerous colorful shipping containers in shades of red, blue, green, and yellow. The ship's hull is visible on the left side, and the ocean's surface is a deep blue with some whitecaps. The text "2. Safety Management System" is overlaid in white, sans-serif font across the middle of the image.

2. Safety Management System

2030 Corporate Strategy Framework of YGPA

여수광양항만공사
2030 경영전략 체계도

Mission
여수·광양항을 경쟁력있는 해양산업 중심기지로 육성하여
국민경제 및 지역사회 발전에 기여

- Vision -
국민과 함께하는 스마트 종합항만

핵심가치 공 정
 혁 신
 안 전
 상 생

경영방침 배우고 생각하자
 실행하고 돌아가자
 모으고 이어가자

5대 경영목표

- 스마트 항만 투자규모 1.2조원
- 해양관광여객 100만명
- 총 물동량 4억 3천만톤
- 신재생에너지 지급률 100%
- 사회적가치기여도 최우수기관

전략방향 및 전략과제

미래선도항만 <ul style="list-style-type: none">항만 자동화·현대화지능형 항만 운영디지털기반 경쟁력 확보	고부가가치 배후시장 개척 <ul style="list-style-type: none">해양중심 산업 클러스터 조성해양관광 거점 육성항만 물류 비즈니스 확대	ESG경영 실현 <ul style="list-style-type: none">친환경 녹색 항만 구현국민공공 포용·인민항만 구축민투자·협력 거버넌스 확립	지속가능경영 고도화 <ul style="list-style-type: none">선진경영체계 확립함께하는 조직문화 형성공공성 기반 열린참여 정착
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FAIRNESS
INNOVATION
SAFETY
CO-PROSPERITY

CORE VALUES

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

Safety control by logistics business operators (lessees)

Upper facilities

- 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

**YGPA
head
office**

YGPM(subsidiary) is entrusted to manage port facilities(electricity, firefighting, etc.)

Safety control by | YGPA

Safety Management System : roles and responsibilities

Port area

Safety control by: logistics business operators (lessees)

Upper facilities

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

Underlying facilities

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

Outside of ports

YGPA head office

Organization	Official in charge
Chief safety manager	CEO
Safety supervision department	Department of Disaster and Safety Management
Safety supervisor	Operation HQ heads Department leaders

Occupational safety and health activities (for workers' safety and health)

Safety Management System : YGPA organization (as of Nov. 2022)



Safety Management System : Disaster Response Organization

YGPA

Preemptive & voluntary enhancement of port safety and safety awareness

Year	2014	2018	2019	2020	2021
Organization	New safety department (Logistics Planning Office)	Dedicated safety department (Port Operation Department)	Under direct control of CEO (Safety and Security Department)	Under direct control of CEO (Safety and Security Department)	Under direct control of CEO (Safety and Security Department)
Personnel	2 persons	7 persons	10 persons	13 persons	13 persons
Variance	-	+5	+3	+3	-



Category	Safety personnel (2022)
Organization	Under direct control of CEO (Department of Disaster and Safety Management)
Safety personnel (planned)	16 persons
Safety personnel (current)	16 persons

Partner organizations

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

Korea Gas Safety Corporation & fire stations

Facility safety inspection to prepare for disasters Education and necessities donation to the vulnerable (in safety) in Gwangyang

Korea Coast Guard & Gwangyang fire station

Maritime emergency rescue system

Cargo unloaders including POSCO Korea Port Logistics Association Labor union of port and shipping workers

Sustainable development of Yeosu and Gwangyang Ports in the post COVID-19 era Companywide response to the pandemic

Safe Work Council Labor union of port and shipping workers

Work environment improvement to foster zero-accident, safe ports



Collaboration with YGPA



Safety Management System : Annual Safety and Health Activity Plan

65 tasks in 4 areas: 100% completed in 2021

Vision: Create ports putting people's lives and safety first

Goal: Maintain the record of ZERO major disasters at Yeosu and Gwangyang Ports

Strategy	Activities	Note
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) for KOSHA MS certification

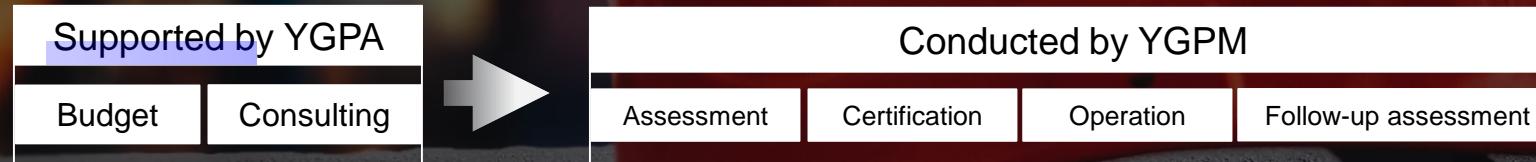
Background

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

< Collaboration Program >

- 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



Achievements

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

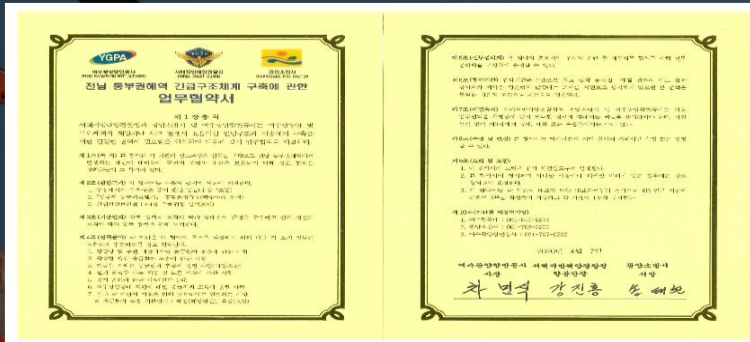
Additionally, YGPA is supporting subsidiaries(partners) for ISO22301 certification

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



Basic health check-up (e.g., blood sugar level)

Prevention of musculoskeletal illness



Physical therapy

First aid training



AED, how to use emergency kit

Mobile clinic



Visits to 8 companies (88 users)

VR content



VR-based experience of safety accidents (user satisfaction: 93%)

Achievements

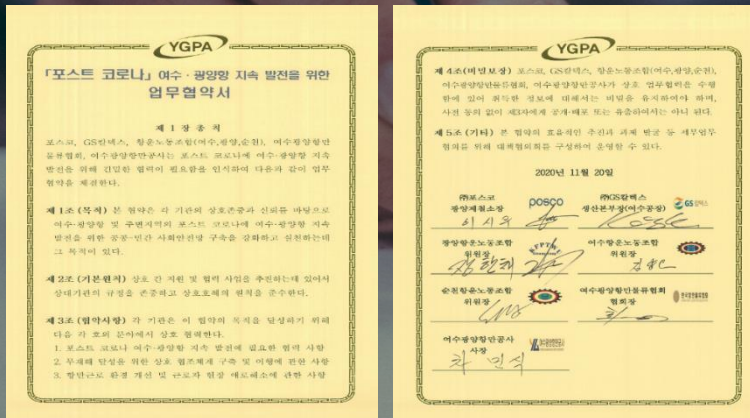
Realize the value of co-prosperity and collaboration through close partnership with public institutions in Yeosu and Gwangyang Number of users in 2021: 228 (satisfaction rate: 93%)

Prime Minister's Commendation for Excellent Management of National Disasters

Background

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

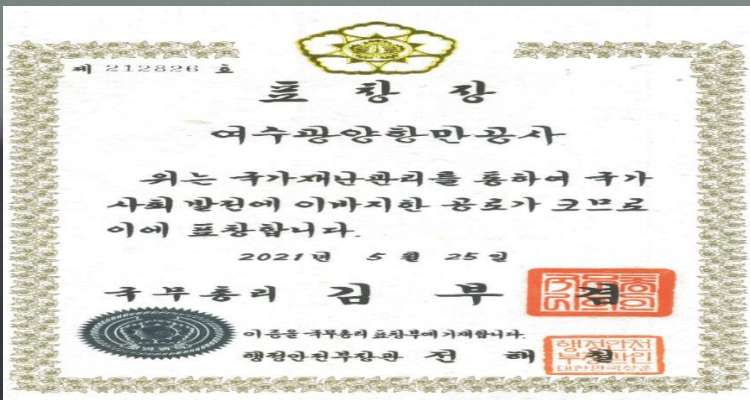
Activities



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

Achievements



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

Background

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.

Activities



Safety control
for drunken people



Utilization of drones
(e.g., facilities inspection quarantine)



VR-based safety training

Achievements

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



4. Response to the COVID-19 Pandemic

Response to the COVID-19 Pandemic.

Major quarantine measures at Yeosu and Gwangyang Ports

① 2 special quarantine offices

- Security checkpoint (Yeosu)
Pier for government vessels (Gwangyang)
- Conducted special quarantine screening of 18,000 foreign sailors
 - 70 with symptoms were found and restricted from entering local areas.

② Disinfection of public facilities

- 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.

③ Establishment of quarantine/disinfection systems

- 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)

④ Daily check on arriving vessels

- Inspected over 1,500 vessels (2020)
- Focused on segregation between port workers and sailors
- Checked compliance with quarantine guidelines (e.g., workspace)

⑤ Temporary shelters for foreign sailors

- 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).

⑥ Creation of pandemic response systems

- 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

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

SHIPPING & PORT (up to KRW 2.9 billion)

- ▶ Reduction of rents for port-related businesses (up to 50%, KRW 2.6 billion)
- ▶ Provision of incentives relating to the pandemic (KRW 300 million in 2021)

LOCAL ECONOMY (Up to KRW 2.8 billion)

- ▶ Preferential hiring of local agents for maintenance and repair services (up to 50%, KRW 1 billion)
- ▶ Increased sourcing from local outdoor markets and small businesses (KRW 1.8 billion)

SUPPLIES FOR QUARANTINE (KRW 600 million)

- ▶ Reinforcement of quarantine for public facilities using drones, etc.
- ▶ Provide quarantine goods (e.g., mask, hand sanitizer) to the vulnerable and port workers

- 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

A nighttime photograph of a cable-stayed bridge spanning a bay. The bridge is illuminated with white lights, and its reflection is visible in the water. The city lights of the surrounding area are visible in the background, along with mountains under a dark blue sky. The text "Thank you." is overlaid in the center of the image.

Thank you.