

23RD INAP CONFERENCE

OCTOBER 16-17, 2024

RESILIENT PORTS:

INNOVATING BEST PRACTICES FOR ENVIRONMENTAL PROTECTION AND DISASTER MANAGEMENT

Port of Mokyoo

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PRO, OPERATION TEAM





Mokpo Newport Terminal

















Classification	①Multi-purpose harbor	②Car harbor	③Car harbor	4 General harbor
Company	Mokpo Newport Terminal	Mokpo Newport Terminal	Mokpo International RoRo Terminal	Government
Handled cargo	Iron, Car, Offshore Wind Power etc.	Car	Car	General merchandise
Length of inner wall (m)	750m	240m	300m	240m
Water depth (m)	15m	15m	15m	15m
Berthing capacity (DWT)	30,000DWT × 3	30,000DWT × 1	30,000DWT × 1	30,000DWT × 1
Yard area (m²)	300,000 m²	100,000 m²	100,000 m²	70,000 m²
Unloading capacity (yarrly)	5mil.ton	2.7mil.ton	2.7mil.ton	0.75mil.ton

Resilient Ports: Innovating Best Practices for Environmental Protection and Disaster Management



Resilient Ports: Environmental Protection and Disaster Management

Status of Building a Port Resilience Enhancement System: Disaster Management System

Implementation of Practical Disaster Prevention Activities

- •Effective Pre-inspection of Disaster Risk Facilities
- •Conducting Training for Workers on Disaster Prevention
- •Registration and Management of Vulnerable Facilities
- •Enhancement and Maintenance of Vulnerable Facilities
- •Registration and Management of Risk Indicators

Strengthening On-Site Response Capabilities for Swift Incident Management

- •Enhancing Initial Response Capabilities and Establishing a Rapid Information Dissemination System
- •Building a Foundation for Quick On-Site Response and Strengthening Cooperation with Relevant Agencies
- •Establishing a Comprehensive Response System Through the Rapid Activation of the Emergency Response Team in Case of Disaster



Field-Oriented Training and Development/Improvement of Manuals

- •Enhancing and Improving Response Capabilities Through Regular Simulation Drills
- •Establishing and Reviewing/Improving Crisis Management Manuals to Ensure Functionality During Actual Disasters
- •Establishing an Automatic Emergency Response Team Formation System in Case of Disaster

Stable Port Operations through Systematic Recovery Plan

- •Registration of Disaster Management Resources and Sharing with Relevant Agencies
- Prompt and Accurate Damage Assessment and Recovery Planning
- Incident Response Monitoring for Similar Accidents
- •ICT-Based Disaster Management System Operation

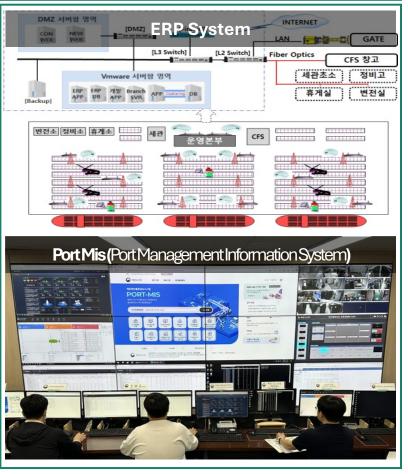
Resilient Ports: Environmental Protection and Disaster Management

Status of Strengthening Port Resilience System: Innovating Best Practices





Integrated Management System



Emergency Response Training





Resilient Ports: Environmental Protection and Disaster Management

Status of Port Resilience Strengthening System: Rebuild by Design

Moving from a Traditional Focus on 'Natural Disasters' to a Resilience-Based Disaster Response System

Port Risk Factors

Nature

- Typhoons
- •Earthquakes (Including Tsunamis)
- Other Natural Disasters

Social (Human)

- •Global Supply Chain Disruptions
- Disease Outbreaks (e.g., COVID-19)
- •Port Workers' Strikes

Security

- Terrorism (Property Destruction)
- •Cyberterrorism
- Smuggling and Illegal Immigration



Port Design

Risk Management Matrix

Absorption Capacity

- •Resilience: Regular Inspections and Maintenance
- •Redundancy: Resource Management
- Visibility: Manual Management



Adaptability

Capacity

- •Flexibility: Emergency Response System
- •Collaboration: Joint Response with Relevant Agencies
- Agility: Training and Drills



·Response:

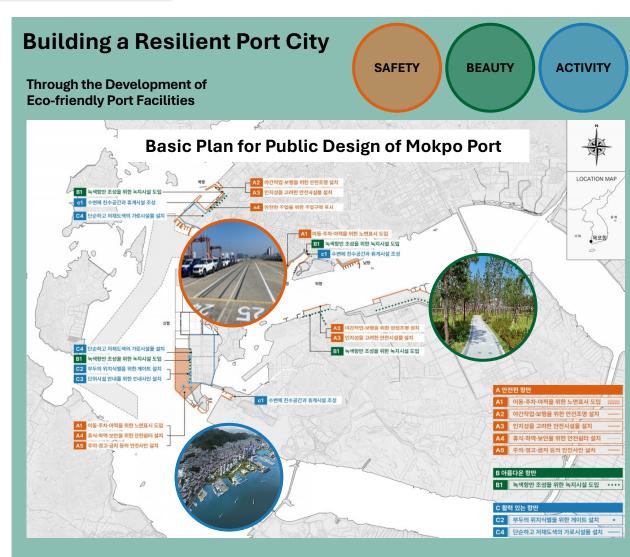
Situation Communication System

•Recovery:

Recovery Plan Development



Port Business Continuity Management





THANK YOU