

Dangerous Goods Safety Management

In Port Authority of
Thailand

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Background

An important part of Thailand's industrial, economic, and trade development is played by the state-owned **Port Authority of Thailand (PAT)**.

PAT is in charge of managing 5 important ports of Thailand including

2 Main ports

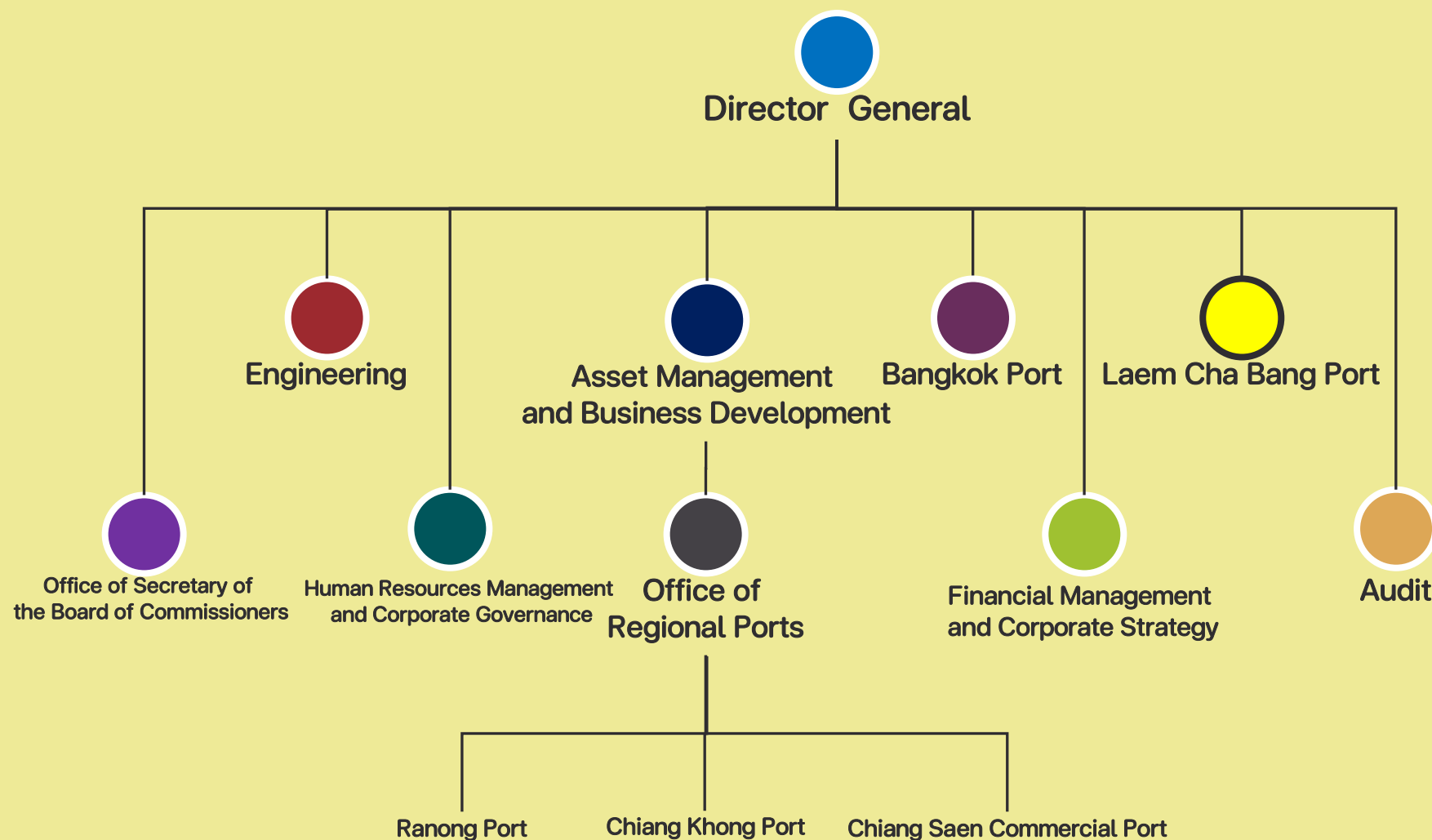
- Bangkok Port (Public port)
- Laem Chabang Port (Landlord port)

3 Regional ports

- Chiang Saen Commercial Port
- Chiang Khong Port
- Ranong Port



Organization chart



Kriengkrai Chaisiriwongsuk
Director General

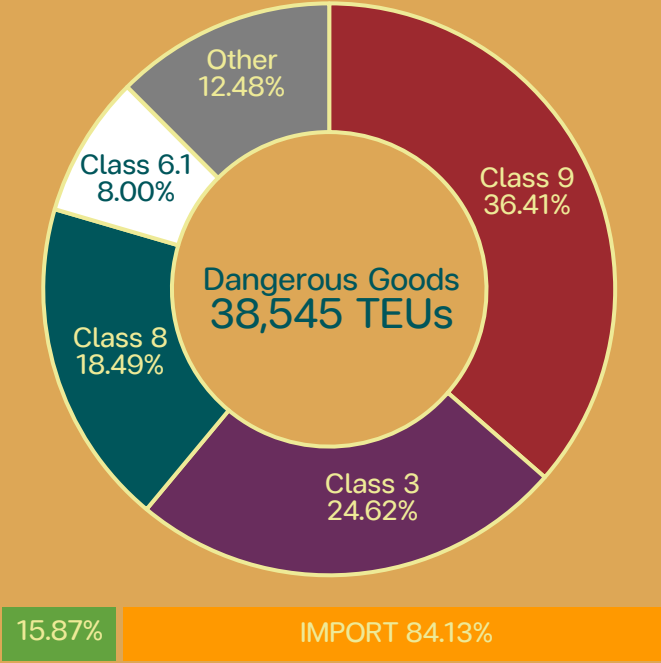


Key to excellence implementation

- ❖ March 2, 1991 Explosion in DG warehouse of Bangkok Port
- ❖ September 18, 1991 PAT and the Swedish Rescue Services Agency (SRV) launched the Safe Dangerous Goods Handling Project Including ;
 - ❖ Safe handling procedures of DGs
 - ❖ Program for Accident Prevention
 - ❖ Emergency Preparedness
- ❖ March 18, 2003 – present The PSHEM System (Port Safety, Health and Environment Management System) was introduced with services for dangerous goods in the ports of Bangkok and Laem Chabang, and it has been certified by PEMSEA since 2006.
- ❖ 2009 – 2015 PAT launched the project on 'Sustainable Port Development in the ASEAN Region' to provide methodological and technical support for the implementation of modern and sustainable Safety, Health and Environmental (SHE) Management in cooperation with the Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ) GmbH .

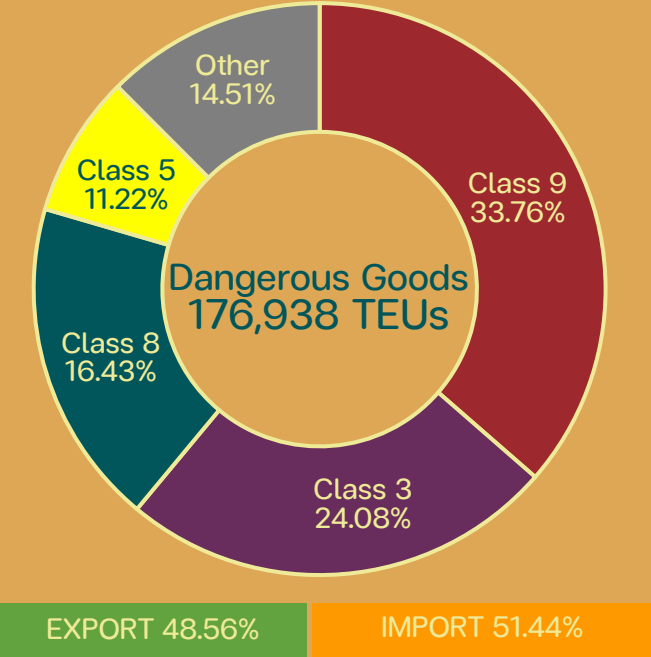


Risk assessments



Bangkok port

Location : Bangkok (River port)
Throughput : 1,271,964 TEUs
DGS : 38,545 TEUs (3.03%)
Direct delivery : 2,152 TEUs (5.58%)



Laem Cha Bang Port

Location : Chon Buri (deep seaport)
Throughput : 8,838,040 TEUs
DGS : 174,997 TEUs (1.98%)
Direct delivery : 4,188 TEUs (2.39%)

Port regulations

Port Regulations for Dangerous Goods Handling

According to the IMDG Code, Shipper shall submit dangerous goods on the electronics systems in advance at appropriate time. Training, packing, labeling and marking, stowage and segregations are mandatory. Penalties is used to enforce them.

The regulations have been classified the dangerous goods into 3 Groups according to IMDG Code;










- Group 1 - Not allow to be discharged, loaded or stored.
- Group 2 - Allow to be discharged or loaded but cannot stored in the port area.
- Group 3 - Allow to be discharged, loaded and stored with time limitation.

To improve the efficiency, the specifics of the port regulations will be examined and evaluated.

Bangkok Port

Group 1	Group 2	Group 3
  	             	        

Laem Cha Bang Port

Group 1	Group 2	Group 3
 	 	          

Present circumstances

Dangerous Goods warehouse and container yards

Bangkok Port and Laem Chabang Port have special warehouses for storing the DGs according with the IMDG Code and IMO's Recommendations. Each warehouse was built with special structure consists of firewall, fire doors, air ventilation systems, fire and chemical alarm systems.

Container yards are set specific blocks for DGs. DGs Containers are planned to stow at the right segregation before arrive. PAT develops IT system to be simplified planning and reduce operator errors.

In Bangkok Port, DGs are handled by PAT while Laem Chabang Port are operated by private company (JWD InfoLogistics PCL) by concessions.

Water drainage in DGs Operation area is close system. In case of fire or chemical spillage, wastewater was confined to the pond and treated before drain to the river or sea.



Present circumstances

TRAINING – Training courses are set according to the Chapter 1.3 of IMDG Code and Marine Department Announcements. Both general awareness and function specific course are conducted for PAT staff, customers and emergency response units.

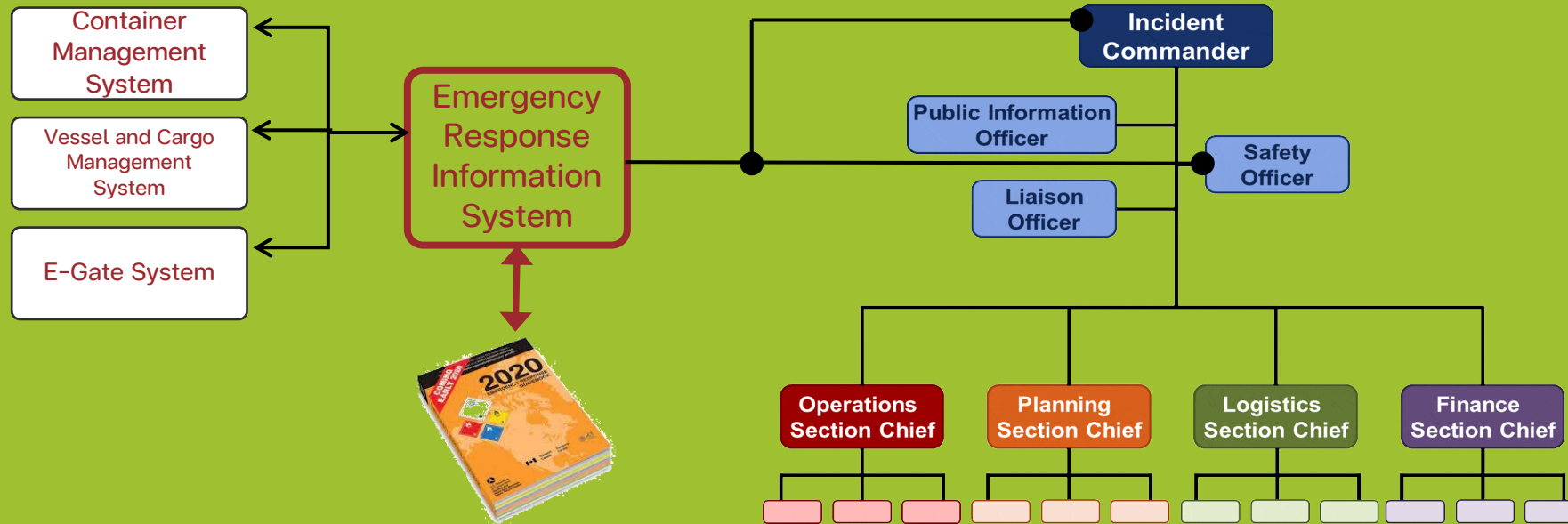
Safety Inspection for DGs – The safety measures and regulations will be maintained in standard. Inspection schedule will be created in suitable period of time. DGs officers will inspect every units involving in the DGs handling though the DGs inspection checklist.

Emergency Preparedness – Bangkok Port and Laem Chabang Port have own emergency response units. Trained teams are standby 24/7 with emergency equipment. In case of emergency, PAT staffs or customers can notify to the emergency call center by the internal hot line. In DGs warehouses, the notification of emergency case will be sent automatically to the response units by IT systems (sensor detection or pressing the emergency button).



Emergency response

DGs information for emergency response



In the emergency response plans, It is the responsibility of the dangerous goods section to gather DGs information and use it to create procedures for responding to dangerous goods accident at various levels.

In case of events level 2 and higher, the ICS system will be utilized.



Future development



Thank you for your attention