

Development of Port Community System



Transport and Logistics Bureau

The Government of the Hong Kong Special
Administrative Region of the People's Republic of China

Background

Maritime Advantages

- Hong Kong's strategic location and "One Country, Two Systems" framework have made it a leading international maritime centre, **ranked fourth globally**

Support from Central Government

- Both the "14th Five-Year Plan" and the "Guangdong-Hong Kong-Macao Greater Bay Area Development Plan" support Hong Kong's status as international maritime centre

Challenges & Opportunities

- To maintain its position as a regional transshipment hub, Hong Kong must enhance its competitiveness in the face of external changes and port competition

Smart Port Development

- Action Plan on Maritime and Port Development Strategy promulgated in December 2023: Develop a digitalised port community system that facilitates the flow and sharing of data
- 2024 Policy Address: **Complete installation of the system by 2025** to bolster the competitiveness of the port

The Importance of Developing Port Community System



Lack of a Unified System for exchanging cargo delivery information

Other port cities have gradually developed PCS (such as Singapore, Rotterdam, Hamburg)

Hong Kong needs to develop PCS to enhance port competitiveness

The Proposed Port Community System

A Unified Information Platform

- Establishing a **unified information system** for stakeholders involved in the cargo delivery process
- Facilitating information **interconnectivity**
- Offering reliable **real-time cargo tracking** services



Functions & Features of the Proposed Port Community System

(1) One-stop round-the-clock real-time cargo tracking and transportation information

Input

- **Master Bill of Lading number and**
- **House Bill of Lading number**

Artificial intelligence
+
Big data
+
Blockchain

Vessel name,
vessel location,
and departure
and arrival
times
(worldwide)

Container
release status at
terminals
(worldwide)

Reefer
container
temperature
(initially only
limited to HK
container
terminals)

Input

- **Customs declaration number**

Customs clearance status
(initially limited to
Mainland customs)

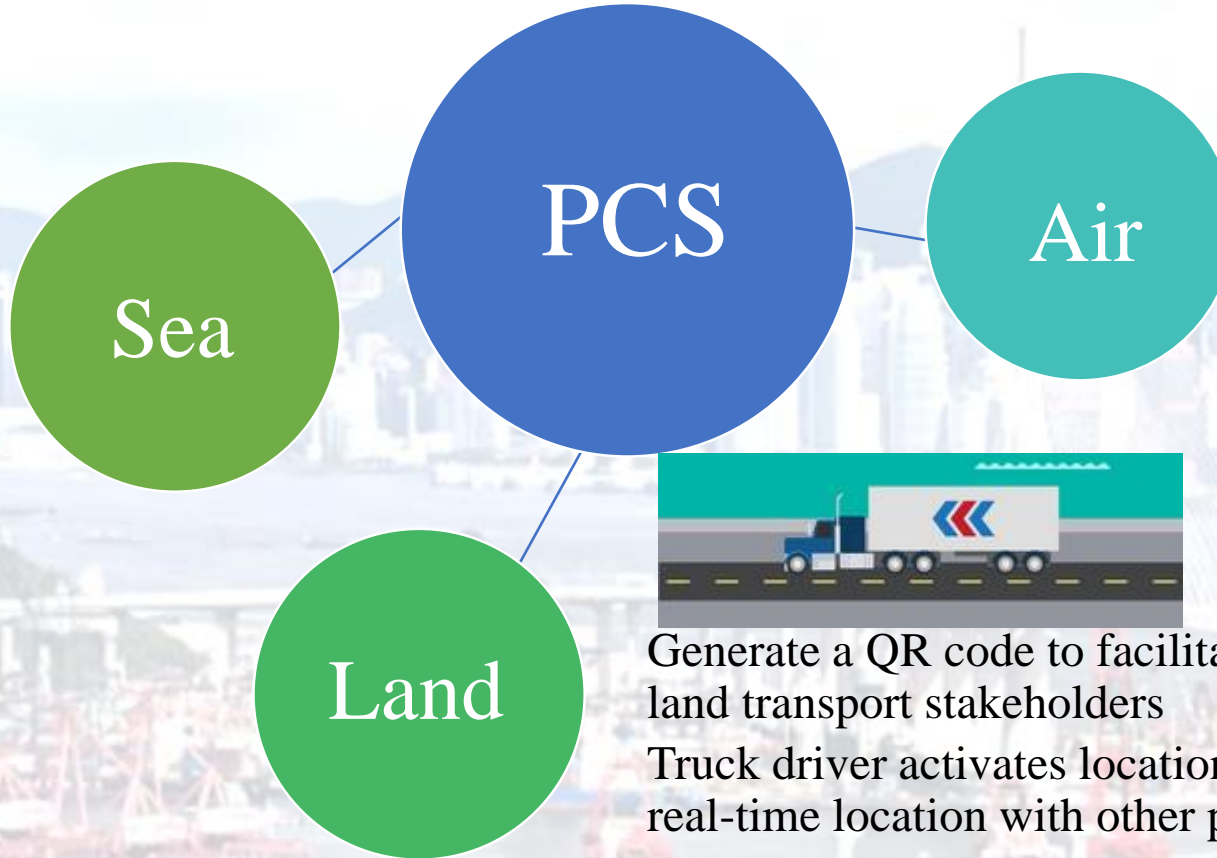
***Only authorised users can access the relevant information**

Functions & Features of the Proposed Port Community System

(2) Integration of sea, land and air transportation information



Enter the bill of lading number → vessel's location, departure and arrival time (including barge arranged by shipping companies) will be provided



Enter the air waybill number → track the cargo's boarding, departure and arrival time by air in real time



Generate a QR code to facilitate identification of cargo by land transport stakeholders

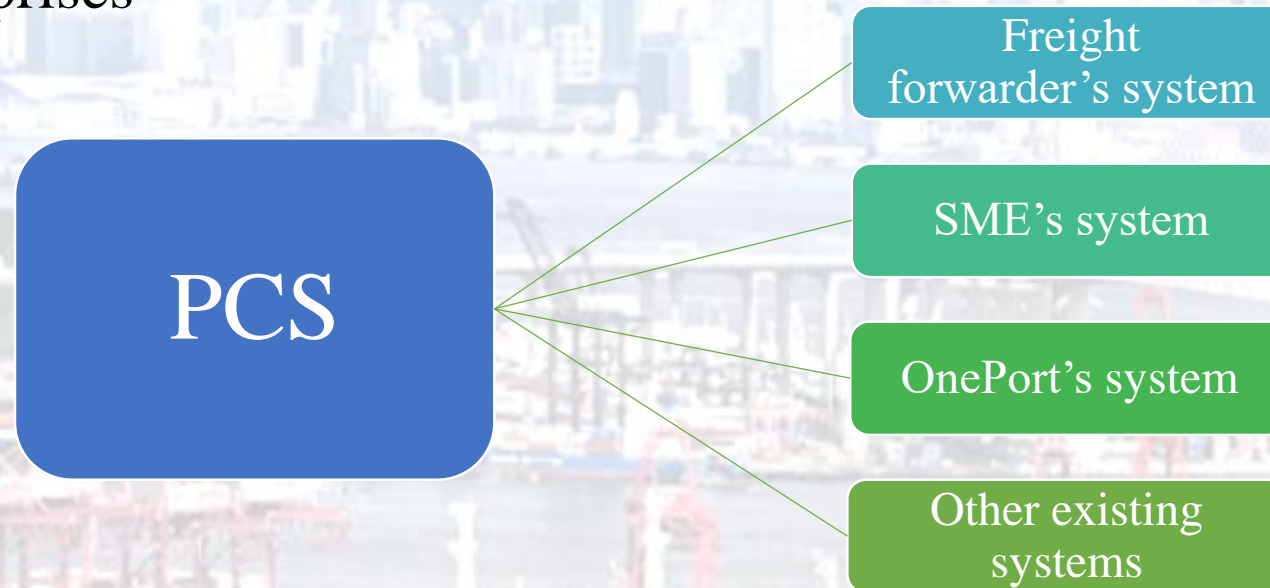
Truck driver activates location tracking → share the truck's real-time location with other parties

Warehouse staff scans the QR code for confirmation → all parties are informed of the goods' arrival at the warehouse

Functions & Features of the Proposed Port Community System

(3) Interface with existing systems

- PCS can interface with existing cargo tracking systems
- Supports data upload and download through Application Programming Interfaces (APIs)
- Facilitate information flow and sharing with minimal disruption to the existing work flows of enterprises



Functions & Features of the Proposed Port Community System

(4) Analysis and alert function

- Sending notifications to users in specific situations:

Delays in vessel schedules

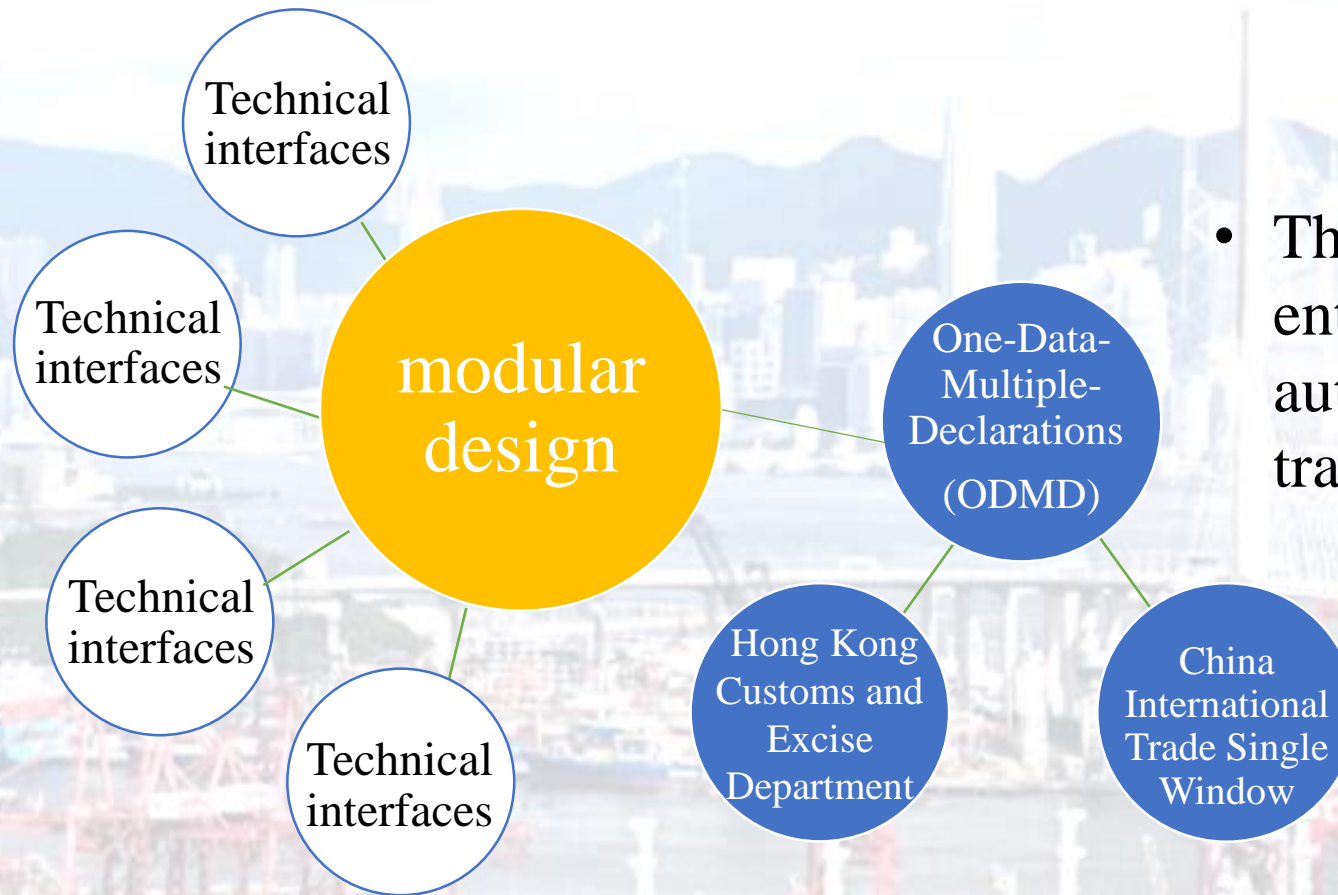
Deviations in the temperature of reefer containers from the standard range

Delay in the pick-up of containers from the terminal

- The alert function can be further expanded or modified in response to industry feedback

Functions & Features of the Proposed Port Community System

(5) Value-added electronic services (on voluntary basis)



- The system extracts previously entered cargo information and automatically completes the trade declaration form

Project Benefits

Government-led, Credible and Reliable

- PCS is overseen by the Transport and Logistics Bureau, with its development and management supported by the Logistics and Supply Chain MultiTech R&D Centre (LSCM)

Simple Design and Easy to Use

- System design is user-centric with both website and mobile application versions, to facilitate use at any time

Basic Functions Free of Charge

- Basic functions, including cargo tracking, shipping information, and reminder features, will be provided free of charge to help enterprises enhance efficiency

Value-Added Services

- Value-added services (provided at a fee) provide innovative services and problem-solving solutions for enterprises

Smart Port to Enhance Competitiveness

- PCS drives digitalisation of the port and enhances its competitiveness, providing Hong Kong with new opportunities

Timeline for the Proposed Port Community System

2025

Completion of installation
of the proposed PCS

2026 to 2029

Phased rollout
Expanding infrastructure capacity in a steady
and orderly manner
Supporting more users gradually



Thank you