



HONG KONG MONETARY AUTHORITY
香港金融管理局



Project Cargo^x Recommendation Report



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01

Introduction

1.1 Foreword



The global trade landscape is in constant flux, driven by accelerating technological innovation. This dynamic environment presents both an urgent challenge and an unprecedented opportunity for Hong Kong (SAR), China to reinforce its position as a leading international trade and finance hub. Central to this evolution is digital transformation, vital for a robust and globally competitive trade finance ecosystem.

For decades, Hong Kong has thrived as a gateway for international commerce, underpinned by its strategic location, free-market policies, and financial infrastructure. However, the digital age demands more than traditional strengths. It calls for robust financial infrastructure to power its digital economy. This requires seamless data exchange, enhanced transparency, and integrated digital solutions across the trade finance value chain. The Hong Kong Monetary Authority (HKMA) champions this imperative, developing next-generation data infrastructure like the Commercial Data Interchange (CDI) to build digital bridges and prevent isolated digital islands.

This report delves into the critical role of digital infrastructure in transforming trade finance. Project Cargo^x is a pivotal initiative, a collaborative effort to modernise our trade finance landscape by integrating advanced digital solutions, optimising cargo and trade data connectivity, and strengthening international links. It charts a strategic roadmap for Hong Kong to build a trusted, data-driven, and interoperable hub for digital trade finance, crucially supporting small and medium-sized enterprises (SMEs) by enhancing their access to capital and streamlining trade operations.

The recommendations herein distil extensive research and global best practices into actionable recommendations. They serve as a call to action for all stakeholders to collectively shape the next era of Hong Kong's trade finance ecosystem. By embracing these strategic initiatives, we can unlock new efficiencies, proactively mitigate risks, and cultivate sustainable growth, ensuring Hong Kong's enduring prosperity and leadership in the global arena.



Mr. Howard Lee, Deputy Chief Executive, HKMA

“

Project Cargo^x marks a pivotal step in modernising Hong Kong's trade finance ecosystem by integrating advanced digital solutions, optimising cargo and trade data connectivity through our next-generation CDI infrastructure, and strengthening international links. The recommendations of the Cargo^x Expert Panel provide a strategic blueprint and actionable roadmap to position Hong Kong as a trusted, data-driven hub for global digital trade.

”

12 Project Cargo^x



The strategic context

Global trade is undergoing a dynamic transformation. Digitalisation, data transparency and real-time connectivity are redefining how goods and capital flow across borders. This evolving landscape is further shaped by geopolitical realignments and the emergence of novel economic models, demanding constant adaptation from all participants.

In today's complex global trade environment, stakeholders in the trade value chain encounter several challenges. In Hong Kong, the persistence of paper-based trade finance processes contributes to challenges in operational efficiency and cost-effectiveness.

While there have been advancements, digital trade infrastructure and the extent of digitised trade documentation remain limited. There is also insufficient trade connectivity and interoperability across borders.

The HKMA recognises that many businesses, especially SMEs, require more digital and efficient trade finance solutions to transform their business models and supply chains in response to the evolving conditions of global trade.

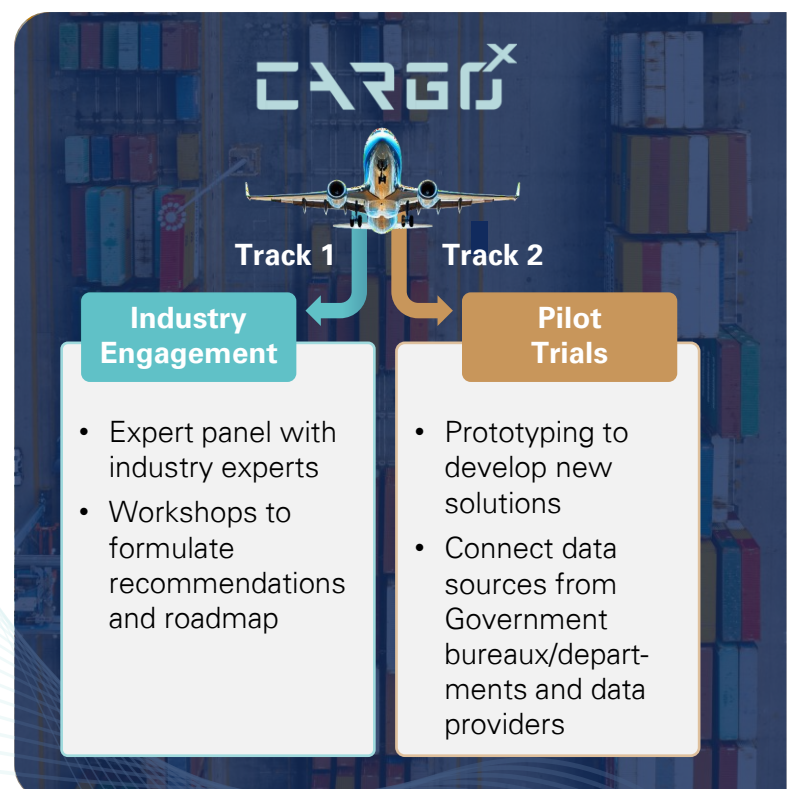
Meanwhile, the HKMA launched CDI in 2022, establishing a platform for consent-based sharing of commercial data, in particular the data of SMEs, between 26 banks and 17 data providers¹, facilitating easier access to financial services for SMEs.

Project Cargo^x value proposition

To advance the infrastructure established through CDI, the HKMA launched Project Cargo^x, a strategic initiative aimed at modernising the trade finance landscape in Hong Kong. Project Cargo^x is a multi-year, public-private collaboration, focusing on three key areas:

- **Leveraging cargo and trade data** to streamline and enhance trade finance processes;
- **Developing digital solutions** to improve accessibility to trade finance for SMEs;
- **Exploring connections with international data partners** to facilitate the trade financing use case for banks in Hong Kong.

A dual-track approach has been employed to foster collaboration and establish a feedback loop. Track 1 involves the formation of an expert panel to facilitate public-private collaboration. Track 2 focuses on the development and trial of air, sea, and land cargo use cases.



¹ HKMA Commercial Data Interchange. 2025. *Our Partners*. (<https://cdi.hkma.gov.hk/our-partners/>). Note: Information retrieved December 2025

The stakeholder ecosystem

To achieve the key objectives of Project Cargo^x, the HKMA has convened an international Expert Panel. This panel brings together a diverse group of industry experts and key stakeholders, each contributing unique insights and critical perspectives to shape the Cargo^x recommendations and development roadmap:



Banks: Provide essential insights into the requirements of data consumers and prioritise critical trade finance use cases



Local and Overseas Data providers: Offer their expertise on data availability, formats, standards, and potential use case applications



Credit reference agency: Contribute knowledge on SME credit scoring models and the applicability of trade documentation data



Export credit insurers: Share their perspectives on the availability of solutions to effectively support Hong Kong exporters



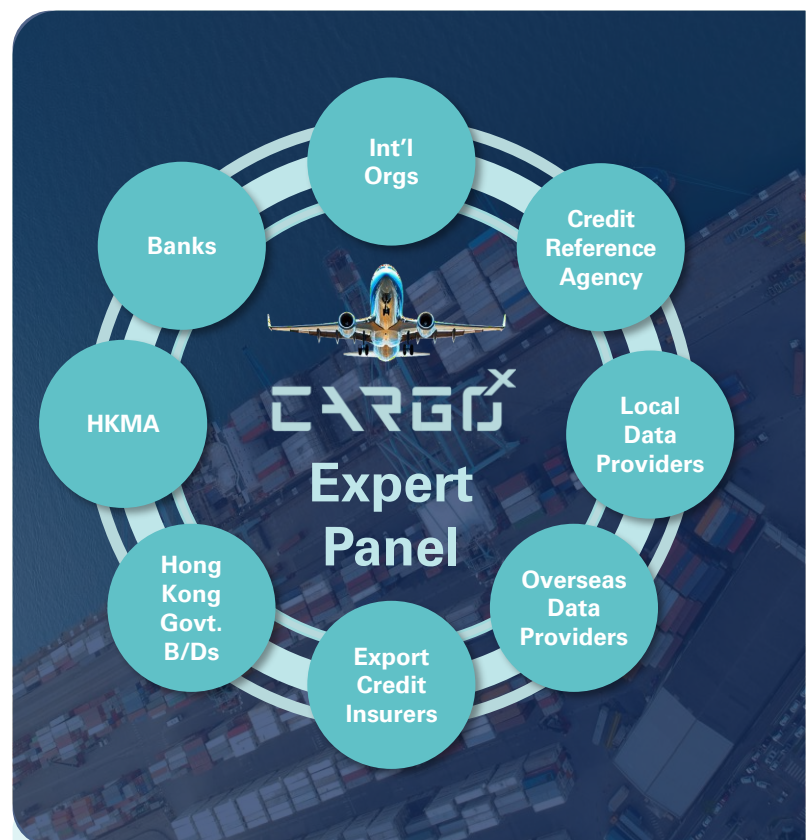
Hong Kong Government Bureaux and Departments: Inform on government platforms under development, the scope of their features, trade data policies, and relevant investments supporting international trade in Hong Kong



International organisations: Offer valuable insights into global best practices, and key requirements and global standards for data interoperability



Hong Kong Monetary Authority: Provide strategic inputs from various internal teams, guiding relevant priorities and ongoing projects including those under the Supply Chain Working Group



Driven by the HKMA and supported by an Expert Panel, Project Cargo^x is a strategic initiative to establish Hong Kong as a leading digital trade finance hub. It aims to create a robust infrastructure that supports the seamless exchange of cargo and trade data across borders.



13 Executive Summary



Hong Kong's future as a global trade and financial centre is linked to its ability to digitalise trade and make use of data to drive innovation and growth. Project Cargo^x, led by the HKMA, sets out the strategy to transform Hong Kong into a trusted, data-driven, and interoperable hub for digital trade finance by integrating digital technologies and optimising data connectivity, thereby solidifying Hong Kong's position in the global trade arena.

Trade is the second-largest industry in Hong Kong after finance, contributing 15% of the city's Gross Domestic Product (GDP). In 2024, the value of trade was 3.6 times that of the GDP, ranking third in the world². Despite its strong foundation, Hong Kong's trade finance system remains constrained by paper-based processes, fragmented data and limited interoperability with international partners. As peers in the Asia Pacific region accelerate digital trade initiatives, Hong Kong must evolve its operating model to remain competitive. Project Cargo^x defines the pathways for this transformation, identifying the strategic pillars, recommendations, and technological enablers required to realise Hong Kong's digital trade ambition.

Pillars of transformation for Hong Kong's digital trade future

This report provides a detailed analysis of the current digital trade ecosystem in Hong Kong, pinpointing significant challenges and uncovering opportunities to enhance the efficiency of trade finance processes:

Trade finance pain points

Paper-based and inefficient process

Availability of trade finance for SMEs

Due diligence and risk oversight efforts

Data availability and accuracy challenges

Trust, security and interoperability issues with certain digital documents

Insufficient trade connectivity and interoperability

Target outcomes

Streamlined paperless trade finance processes

Greater availability of trade finance, narrowing the SME financing gap

Digital, automated checks and controls

Real-time accessibility to trusted digital data

Facilitating development of digital trade infrastructure

Increased integration with key trade corridors, improved cross-border data flow

The vision is for Hong Kong to maintain its position as a leading trade financing hub, powered by a robust, globally connected digital infrastructure. Overall, this vision reflects a forward-thinking approach, recognising that in order to remain competitive and relevant in the fast-paced global economy, Hong Kong must leverage digital advancements to enhance its trade finance capabilities and connectivity.



Informed by research and extensive industry engagement, a series of recommendations has been developed to advance the vision. They are structured under three pillars (see Figure 1).



Data: Accelerating data-enabled trade finance automation, to transition towards a streamlined and paperless trade finance process and to increase the availability of trade finance, particularly for SMEs. The foundational elements underpinning this pillar include the automation of trade finance processes, the enhancement of credit decision-making by financial institutions, and the innovation of new trade finance products.



Infrastructure: Enhancing digital trade infrastructure and advancing the digitisation of trade documentation to increase efficiency, security, and transparency in trade transactions. Together, digital documents, digital identity and digital payments foundations create a solid basis that supports the overarching goals of enhanced connectivity, transparency, and efficiency in the trade finance ecosystem.



Connectivity: Strengthening connectivity and integration with key trade corridors to optimise cross-border flow of digital trade data, and maintaining Hong Kong's competitiveness as a trade hub. Collectively, connectivity with key trade corridors, interoperable standards and overall ecosystem enhancements ensure Hong Kong is a globally connected trade hub.

Together, these pillars form the backbone of Hong Kong's digital trade finance transformation roadmap. By accelerating automation, enhancing infrastructure, and strengthening connectivity, Hong Kong will maintain its competitiveness as a trade hub. To further this vision, the 20 recommendations laid out on the next page provide strategic guidance for advancing Project Cargo^x's vision.

A roadmap for competitiveness

This report sets out a roadmap with a series of prioritised initiatives to be executed by 2030, focusing on expediting the adoption of digital trade processes, establishing connections with global trade partners, and enhancing the supply chain and related financial ecosystem to support continued trade finance innovation in Hong Kong.

Executing these strategic initiatives will enable Hong Kong to strengthen its position as a premier international trade hub, facilitating greater access to trade finance for SMEs, supporting sustainable economic growth and driving towards a future of enhanced efficiency and global competitiveness. However, Project Cargo^x is more than a blueprint; it is a call to action for government, banks and the wider trade community to collaborate in shaping the next era of Hong Kong's trade finance ecosystem.

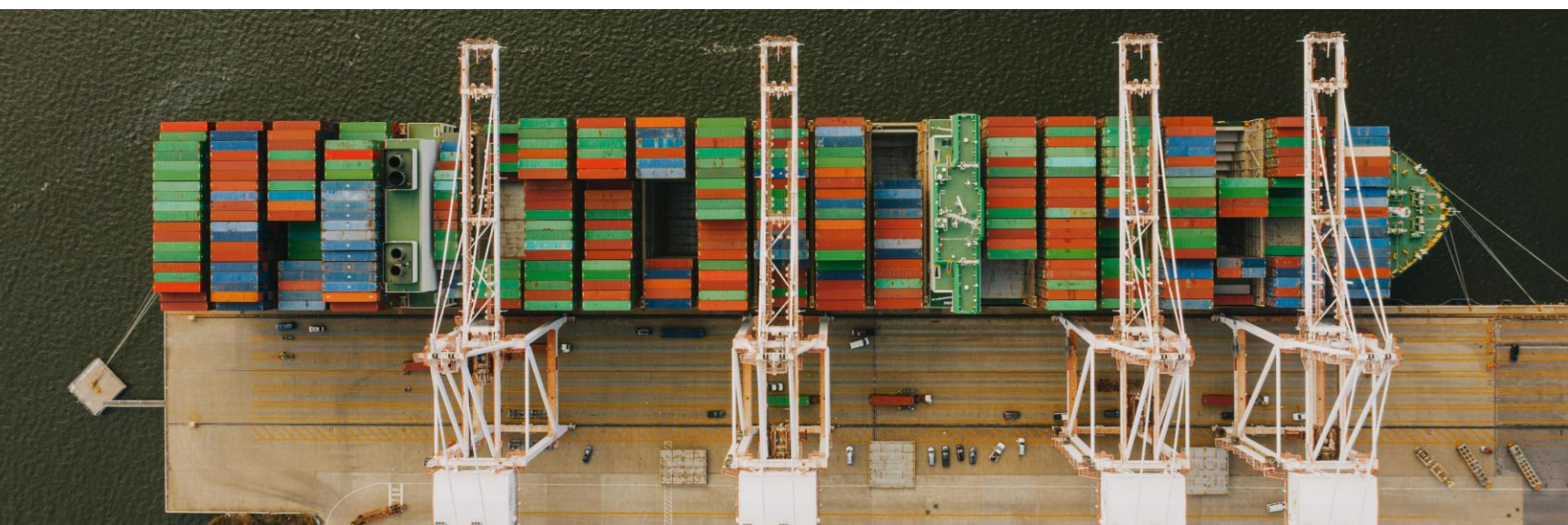
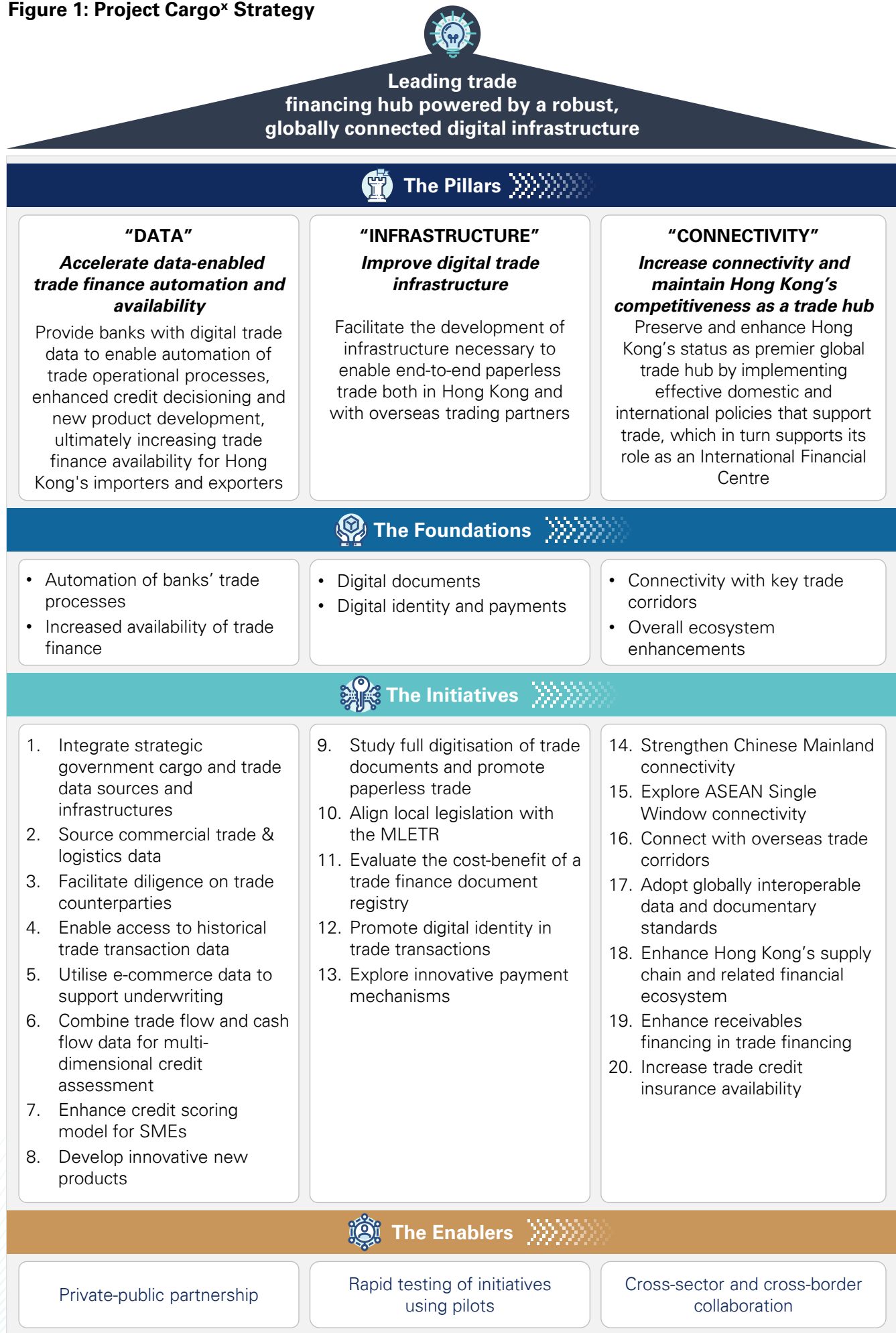


Figure 1: Project Cargo^x Strategy

02

International Trade
in Hong Kong

2.1 Trade in Hong Kong

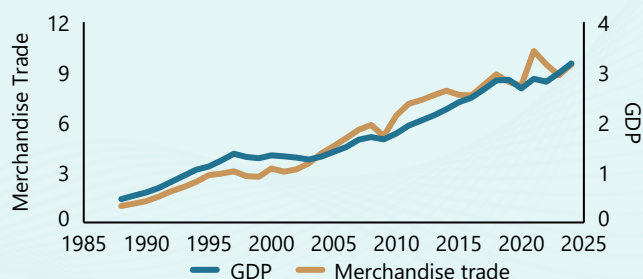
Trade is pivotal to Hong Kong's
economy

Hong Kong's identity as a global trade hub remains core to its economy, and enhancing this role depends on elevating its competitiveness in the era of digital trade and cross-border data integration. According to the World Trade Organisation (WTO), in 2024, Hong Kong was the world's 7th largest trading entity in merchandise trade³ and in 2024, Hong Kong recorded an impressive trade-to-GDP ratio of 359.5%⁴. The high ratio underscores the city's deep integration into international trade, with exports and imports comprising a significant share of its economic activity.

Figure 2 shows a strong correlation ($R^2=0.95$) between merchandise trade and GDP over the past four decades, underscoring the city's significant economic dependencies on cross-border goods flows.

Figure 2: Hong Kong's total merchandise trade and GDP^{5,6}

HKD t, 1988 – 2024



These figures reflect not just trade volume, but the systematic networks including ports, financial services, and logistics infrastructure that sustain Hong Kong's position as a global trade hub.

Hong Kong is an established
international trade hub

Hong Kong's economy thrives on the back of extensive trade, supported by its strategic geographical position, proximate to Chinese Mainland and South East Asia. These geographic advantages, coupled with free-market policies, low tax regimes as well as sophisticated financial services and logistical frameworks, support its status as a gateway for regional and global trade.

The city's advanced logistics infrastructure, comprising state-of-the-art ports, world-class airport facilities, and efficient transportation systems, also supports its function as a key node in global supply chains. Between 2019 and 2024, Hong Kong witnessed a shift towards more land and air trade due to intensified competition from Southern China ports, which will be discussed in a later section.

3 Commerce and Economics Development Bureau. 2025. *Hong Kong in Global Trade*. (<https://www.cedb.gov.hk/en/trade-and-investment/hong-kong-in-global-trade.html>).

4 World Bank. 2024. *World Development Indicators*. (<https://databank.worldbank.org/source/world-development-indicators>). Note: Data base parameters are as follows, Country (Hong Kong SAR, China), Series (Trade (% of GDP)), Time (2024).

5 Census and Statistics Department. 2025. *Table 410-50001: External Merchandise Trade Aggregate Figures*. (https://www.censtatd.gov.hk/en/web_table.html?id=410-50001). Note: KPMG analysis.

6 Census and Statistics Department. 2025. *Table 310-31001: Gross Domestic Product (GDP), implicit price deflator of GDP and per capita GDP*. (https://www.censtatd.gov.hk/en/web_table.html?id=310). Note: KPMG analysis.



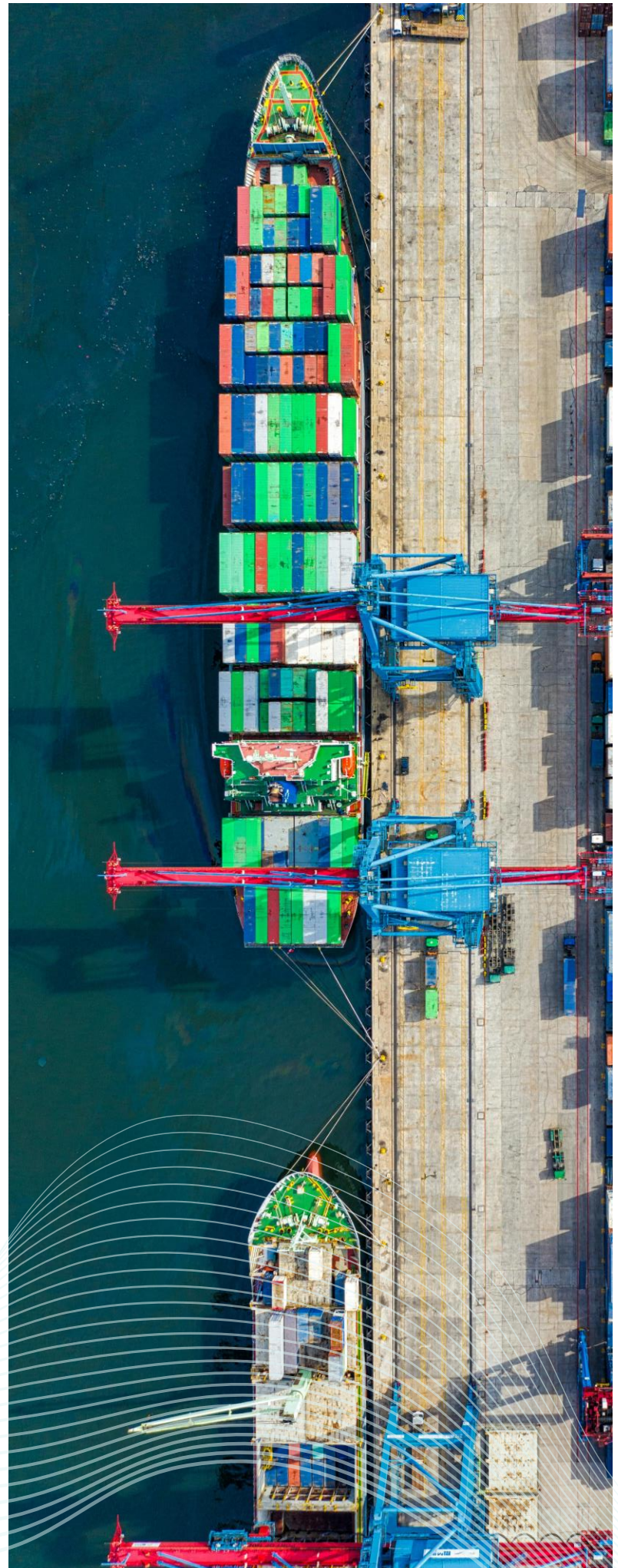
Re-exports powerhouse connecting markets

Hong Kong's export profile is dominated by manufactured goods, which account for 92.5% of total exports⁷. Chinese Mainland emerges as the predominant trading partner, constituting 59.3% of exports while the Association of Southeast Asian Nations (ASEAN) and the United States are also key export destinations⁸.

On the import front, Hong Kong primarily sources manufactured goods, which represent 88.7% of imports, with Chinese Mainland and Taiwan, China as major suppliers⁷. This extensive trade network reflects Hong Kong's role as a re-export hub, facilitating trade flows across global supply chains.

In response to evolving global trade dynamics, many enterprises are adopting a "China Plus One" or "China Plus Many" strategy, diversifying their supply chains to manage risks and access new markets. This diversification increases the complexity and volume of trade routes that pass through Hong Kong, reinforcing its role as a re-export hub and central node for financing of these expanded supply chains.

For Hong Kong to maintain its strategic role in orchestrating international trade, it must evolve from a logistics and finance hub into a digitally integrated trade ecosystem, a transformation explored over the following sections.



⁷ United Nations Comtrade. 2024. *UN Comtrade Database*. (<https://comtradeplus.un.org/TradeFlow?Frequency=A&Flows=X&CommodityCodes=TOTAL&Partners=0&Reporters=all&period=2024&AggregateBy=none&BreakdownMode=plus>).
Note: Data base parameters are as follows, Codes (AG2), Reporters (China, Hong Kong SAR), Trade Flows (Export, Import), Periods (2023), Partners (All).
⁸ Hong Kong Trade Development Council. 2025. *Import and Export Trade Industry in Hong Kong*. (<https://research.hktdc.com/en/article/MzEzODkxODY0>).



98%

SMEs represent over
98% of all enterprises in
Hong Kong⁹

24%

24% of Hong Kong's
SMEs are in the
import/export trade and
wholesale industries¹⁰

50%

SMEs contribute about
50% of Hong Kong's
GDP¹¹

22 SMEs in Hong Kong



Hong Kong's trade sector is powered by SMEs

With approximately 360,000 SMEs⁹, Hong Kong's economy is powered by its small businesses. Representing over 98% of all enterprises in Hong Kong, SMEs are pivotal in driving economic activity and contribute approximately 50% of Hong Kong's GDP. These businesses are not only crucial for maintaining Hong Kong's position as a global trading hub but also play a key role in job creation, accounting for roughly 43% of total employment, excluding public administration⁹.

The importance of SMEs in Hong Kong extends beyond their sheer numbers. Engaged across various sectors, with a significant presence in international trade, SMEs contribute significantly to the flow of goods and services across borders, enhancing Hong Kong's connectivity to international markets. Approximately 24% of SMEs in Hong Kong operate in the import/export trade and wholesale industries and many in other industries import and/or export goods as part of their operations. Recognising their significance, the HKSAR government allocated HKD 1.5 billion in the 2025–26 Budget to support SME-driven growth, including export activities¹².

Despite their crucial role, SMEs face considerable challenges in accessing trade finance. This often involves grappling with complex requirements, limited access to technology, insufficient access to information, and the demanding task of providing extensive documentation.

Addressing the financing needs of SMEs is vital for unlocking their full potential. Enhancing access to capital for these enterprises is essential not only for their individual success but also for reinforcing Hong Kong's broader economic strength.

⁹ Hong Kong Trade and Industry Department. 2025. *Hong Kong: The Facts Trade and Industry*. (https://www.gov.hk/en/about/abouthk/factsheets/docs/trade_industry.pdf).

¹⁰ Hong Kong Trade and Industry Department. 2025. *Small and medium enterprises (SMEs)*. (https://www.success.tid.gov.hk/english/aboutus/what_are_sme.html).

¹¹ Quinlan & Associates. 2024. *Plugging Hong Kong's SME Credit Gap: Reinventing the SME Lending Proposition*. ([https://www.quinlanandassociates.com/insights/plugging-hong-kongs-sme-credit-gap-reinventing-the-sme-lendingproposition/#:~:text=Research%20Overview,%25\)%20and%20GDP%20\(50%25\)\)](https://www.quinlanandassociates.com/insights/plugging-hong-kongs-sme-credit-gap-reinventing-the-sme-lendingproposition/#:~:text=Research%20Overview,%25)%20and%20GDP%20(50%25)))).

¹² Hong Kong Government. 2025. *The 2025-26 Budget*. (<https://www.budget.gov.hk/2025/eng/index.html>).

23 Hong Kong ports and terminals

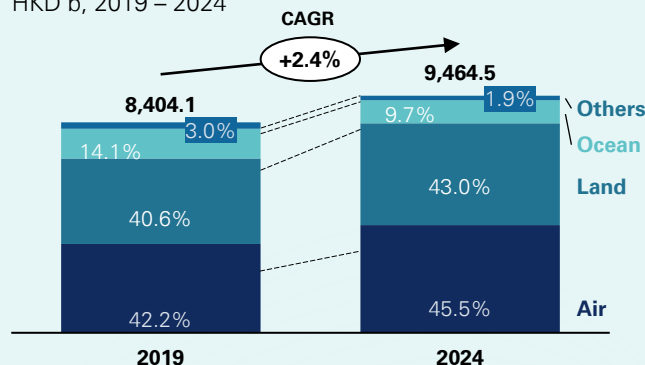
Evolving trade dynamics and modal shifts reflect value chain transition

Hong Kong's trade sector is undergoing a dynamic transformation, characterised by significant shifts in the modes and value of trade activities. One notable market evolution is the rise of e-commerce, with a concentration of sellers in Guangdong using Hong Kong as a re-export hub. Notably, Shenzhen is home to over 100,000 Amazon sellers, demonstrating a significant e-commerce presence in the region¹³. Technological advancements, changing market demands, and increased competition from regional players are reshaping Hong Kong's position within global supply chains, impacting its trade dynamics in various ways.

Figure 3 demonstrates that Hong Kong's ports and terminals have witnessed a shift, with the total value of trade growing by 2.4% CAGR from 2019 to 2024, primarily fuelled by growth in air and land transport, while ocean and river trade have declined due to intensified competition from Southern China ports and a shift towards higher-value, low-weight goods.

Figure 3: Values of HK trade by transport mode^{14,15}

HKD b, 2019 – 2024



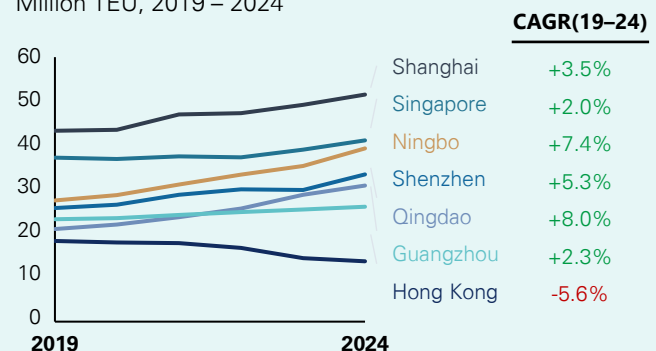
Ocean trade decline fueled by intensified competition

Hong Kong's ocean trade has faced constraints, with container throughput declining at a CAGR 5.6% between 2019 and 2024, as shown in Figure 4. This decline is attributed to

competitive pressures from neighbouring Southern China ports like Shenzhen and Guangzhou which have seen billions of dollars worth of investment, offering comparable connectivity and competitive pricing structures.

Figure 4: Top 6 container ports by throughput¹⁶

Million TEU, 2019 – 2024

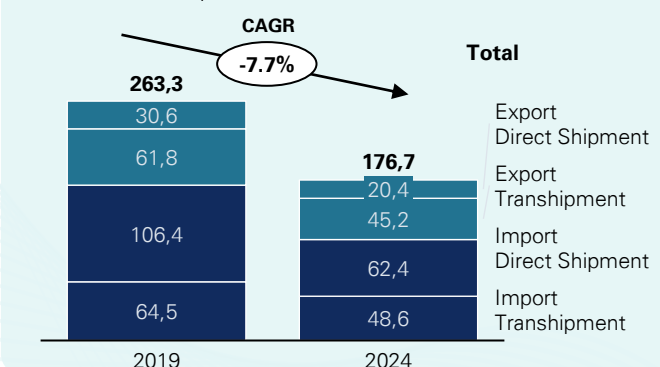


Hong Kong's port success was based on the river-to-sea feeder model, where cargo from inland river ports in the Greater Bay Area (GBA) was transported on smaller feeder vessels then loaded onto mega-ships in Hong Kong. The GBA ports are now directly connected to GBA manufacturing areas via highways and railways, and are in close proximity to global shipping lanes.

During the same period, Hong Kong cargo weight decreased at a faster pace than container throughput cargo weight declined, as seen in Figure 5. This indicates a slight shift towards lower-weight cargo, which is also explained by a larger decrease in shipments of crude materials, machinery and chemical products.

Figure 5: HK port cargo throughput by type¹⁷

Thousand tonnes, 2019 – 2024



Note: CAGR – Compound Annual Growth Rate

13 Smartscore. 2025. *Top Cities for Amazon Sellers*. (<https://www.smartscore.com/reports/top-cities-for-amazon-sellers>).

14 Census and Statistics Department. 2025. *Table 410-50021: External Merchandise Trade Statistics by Mode of Transport – Imports*. (https://www.censtatd.gov.hk/en/web_table.html?id=410-50021#).

15 Census and Statistics Department. 2025. *Table 410-50022: External Merchandise Trade Statistics by Mode of Transport – Exports*. (https://www.censtatd.gov.hk/en/web_table.html?id=410-50022#).

16 World Shipping Council. 2025. *The Top 50 Container Ports* (<https://www.worldshipping.org/top-50-container-ports>).

GBA cities previously manufactured heavy, bulky goods like furniture, textiles and low-end electronics. Now it is a hub for high-value, low-weight goods like semiconductors, smartphones, drones, and premium electronics.

Despite these challenges, Hong Kong's strategic strength lies in its capacity to adapt and become a leading logistics hub for high-value goods. Its expertise in managing low-weight, high-value cargo, such as electronics, aligns with the increasing industry demand for enhanced data visibility and swift logistics integration.

Role as a vital international aviation hub

Hong Kong is a leading force in global air cargo throughput, holding its position as a top aviation hub (see Figure 6). In 2024, Hong Kong International Airport (HKIA) took the first position in the world ranking of busiest cargo airports, for the 14th time¹⁸. Hong Kong's air cargo volume has been growing steadily, driven by strong demand from e-commerce, electronics, and pharmaceutical products, low-weight and high-value goods. With the expansion of the Three-Runway System, annual cargo capacity is expected to gradually increase to 10 million tonnes starting from 2035¹⁹. Nearby GBA airports in Guangzhou and Shenzhen are also rapidly expanding their air cargo throughput and adding more international cargo routes.

Figure 6: Top 5 airports by air cargo throughput²⁰

Million tonnes, 2019–2024

	2019	2024	% change
Hong Kong	4.8	4.9	+2.7%
Memphis	4.3	3.8	-13.2%
Shanghai	3.6	3.8	+4.0%
Louisville	2.8	3.2	+13.0%
Incheon	2.8	2.9	+6.6%

As Hong Kong strengthens ties with the GBA, there exists significant potential to further establish key trade corridors. Hong Kong must continue to enhance logistics coordination and multimodal transport integration with other GBA cities to streamline trade flows and strengthen regional supply chains.

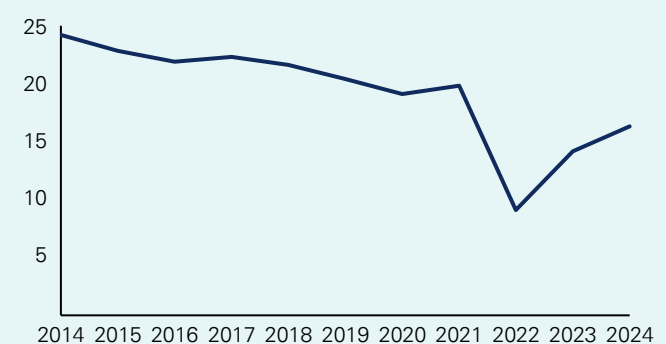
Cross-border e-commerce driving land trade

Building on the observed modal shifts and the focus on high-value, low-weight goods, land trade is becoming a critical component of Hong Kong's evolving logistics strategy, particularly driven by cross-border e-commerce.

Figure 7 shows that there was a sharp rebound in land trade after 2022 as a result of rerouting trade through land and air networks to sustain trade flows in the face of severe congestion at major global seaports, caused by the global supply chain crisis.

Figure 7: Hong Kong cross-border road cargo throughput²¹

Million tonnes, 2014–2024



The continued rebound of land-based trade is propelled by growing cross-border e-commerce and integration with air cargo networks. New roads, rail links and automated border control points will significantly increase the throughput capacity of land trade and enhance connectivity. This aligns with a broader shift from traditional sea cargo to multimodal logistics solutions, enabling more flexible and resilient trade routes.

17 Census and Statistics Department. 2025. *Hong Kong Shipping Statistics*. (<https://www.censtatd.gov.hk/en/wbr.html?ecode=B10200082024QQ04&rcode=230>).

18 Hong Kong Airport. 2025. *HKIA Wins Top Spot as World's Busiest Cargo Airport in 2024*. (https://www.hongkongairport.com/en/media-centre/press-release/2025/pr_1782).

19 TLB. 2024. *Two Major Milestones in Aviation Development: Three-Runway System and Hong Kong-Zhuhai Collaboration*. (<https://www.tlb.gov.hk/eng/blog/20241130.html>).

20 Airport Council International. 2025. *World's Busiest Airports Revealed in Final Global Rankings*. (<https://aci.aero/2025/07/08/worlds-busiest-airports-revealed-in-final-global-rankings/>).

21 Transport and Logistics Bureau. 2025. *Cross boundary road cargo statistics*. (https://data.gov.hk/en-data/dataset/hk-tlb-tlb_div5_2-mpb/resource/2b95ccf0-1955-4a3e-95e1-3eaf71ad6517).



Multimodal integration drives new financial and service opportunities

As global trade pivots from sea-dominated to multimodal networks, Hong Kong's ability to orchestrate land-air-sea integration has become a defining differentiator in the Asia-Pacific logistics ecosystem.

By leveraging the Greater Bay Area's strengths in ocean, air, and land cargo networks, Hong Kong can create a multimodal solution that solidifies its role as a super-connector and global trade hub, enabling Hong Kong to act as a bridge between Chinese Mainland and fast-growing regions such as ASEAN and the Middle East. This will aid in generating new demand for its high-value professional services and financial sectors.

These multimodal logistics developments are not only expanding capacity, they are redefining how trade finance, risk management and technological developments must evolve to match faster, more complex movement of goods.

Hong Kong's ports and terminals are adapting to significant shifts in global trade, moving from bulky goods to high-value, low-weight cargo. This transition is driven by the evolution of manufacturing in the GBA, and increased demand for efficient, data-driven logistics. Hong Kong's strategic advantage stems from its ability to leverage its expertise in handling these specialised goods, positioning itself as a high-value logistics hub. This evolving trade environment also brings new considerations for the financial services that underpin global commerce, which we will explore next.





03

The Role of Trade Finance

3.1 Trade finance facilitates global commerce



Supporting trade by providing finance and risk mitigation

Trade finance serves as a central component in the international trade ecosystem, facilitating smooth transactions by providing necessary liquidity and risk mitigation tools. Within the value chain, trade finance ensures that both buyers and sellers can transact with greater confidence, enabling seamless global commerce. Figure 8 summarises the common banking solutions available to international traders.

A fundamental role that banks have historically played in trade finance is risk mitigation. Instruments such as letters of credit, bank guarantees, and documentary collections offer protection against potential risks such as non-payment, non-performance, and political instability. These tools ensure that exporters receive payment and importers obtain their goods, thus fostering trust and enabling parties to engage in international transactions without bearing excessive risk.

Moreover, trade finance enhances liquidity by bridging the gap between the shipment of goods and the receipt of payment. This is particularly crucial for SMEs that may lack the cash reserves to manage long cash conversion cycles in international trade. By providing access to working capital, trade finance enables these companies to partake in global markets, promoting economic growth and diversification.










The International Chamber of Commerce (ICC) defines trade finance²² as:

“A financial service facilitating the real economy, enabling businesses to finance, monetise, risk mitigate and settle trade flows, thus supporting the movement of goods and/or the performance of services regardless of maturity, both internationally and domestically”

²² ICC Academy. 2024. *What is trade finance?*. (<https://academy.iccwbo.org/international-trade/article/what-is-trade-finance/>).

Figure 8: Financing solutions available to traders

	Payment method	Seller risk (Exporter)	Buyer risk (Importer)	Primary risk mitigation	Typical use cases
Financing solutions available	 Cash in Advance The importer pays the exporter in full before the goods or services are shipped or delivered ²²			Buyer bears all risk	<ul style="list-style-type: none"> • Distrustful markets • Small/new importers • High-risk countries
	 Letter of Credit Issued by a bank on behalf of a importer guaranteeing payment to a exporter upon fulfillment of specified terms ²³ and submission of trade documents			Bank guarantees payment	<ul style="list-style-type: none"> • New trade partners • Large transactions • Complex cross-border deals
	 Documentary Collections The exporter entrusts their bank to forward shipping documents to an importer's bank for collection and the importer pays on sight or on a specified future date to the exporter's bank via the importer's bank ²³			Bank mediates document exchange; no payment guarantee	<ul style="list-style-type: none"> • Established relationships • Mid-value shipments • When L/Cs are too costly
	 Open Account Goods are shipped before payment is received, or a financial relationship where a balance is not fixed and transactions are ongoing ²²			Seller bears non-payment risk	<ul style="list-style-type: none"> • Trusted, long-term partners • Intra-company trade • Recurring shipments
	 Consignment An exporter (consignor) sends goods to a reseller (consignee) who pays the exporter only after the goods are sold ²²			Seller bears all risk	<ul style="list-style-type: none"> • Distributer relationships • Market testing • Perishable goods

Key: Low risk  High risk

In Documentary Trade, a financial institution acts as an intermediary to facilitate the exchange of shipping and payment documents to help mitigate risks of cross-border commercial transactions.

In Open Account transactions, there is no bank intermediation. A buyer and seller agree

a commercial arrangement, the goods are shipped and payment is made by the buyer as per agreed payment terms (e.g. 30, 60, or 90 days).

Banks can provide trade loans whether the transaction is on Documentary Trade or Open Account basis.

²³ International Trade Administration. 2025. *Methods of Payment*. (<https://www.trade.gov/methods-payment>).

²⁴ ICC Academy. 2024. *Key trade finance products: Definitions and use cases*. (<https://academy.iccwbo.org/trade-finance/article/key-trade-finance-products-definitions-and-use-cases/>).



Unlocking innovation with data

Trade financing needs are evolving as global commerce increasingly favours efficiency and flexibility, leading to a progressive shift away from the traditional model in which banks intermediate transactions to provide risk mitigation. Between 2021 and 2024, total merchandise trade in Hong Kong, which is the movement of goods between Hong Kong and its trading partners, including imports, exports and re-exports, decreased by only 2.7%. However the value of trade finance loans, which are disbursed by banks specifically to finance merchandise trade, declined by 11.5% over the same period²⁵. This decline reflects a combination of factors, including the ongoing shift towards open account trading, which reduces reliance on traditional bank-intermediated instruments, as well as the increase in alternative, non-bank sources of trade finance. The broader economic environment, such as fluctuations in interest rates, may also have influenced the demand for traditional bank-led trade finance.

Digital data is instrumental to adjusting to this transition, empowering banks to create new trade and working capital solutions that leverage real-time transactional information and meet the evolving needs of traders. Digital trade documents and data-driven insights can support improved credit scoring, automated approvals, and streamlined operations. This, in turn, can increase trade finance access, particularly benefiting the SMEs that are crucial to trade.

Narrowing the trade finance gap

In 2022, the global trade finance gap surpassed USD 2.5 trillion, representing 10% of the total global export value²⁶. SMEs experienced the most substantial shortfall of financing, with nearly 50% of trade finance rejections affecting these enterprises²⁶.

Banks providing trade finance services must

navigate various compliance requirements, including Anti-Money Laundering (AML) and sanctions screening. While these obligations play an important role in enhancing security and trust, their resource-intensive nature increases the costs associated with offering trade finance solutions, which may make offering a full suite of trade finance products to SMEs unviable for some banks. This is particularly true where transaction monitoring and customer verification processes require data that must be manually sourced and processed. This limits the availability of trade financing options available to SME traders.

Even when trade finance products are available, some SMEs face challenges in securing financing due to collateral requirements. A 2022 study found collateral was the top financing pain point for Hong Kong SMEs²⁶. Shifting away from traditional collateral-based lending, cash-flow and data-driven lending models offer significant potential. These models evaluate SME creditworthiness by utilising real-time data and intangible assets like cash flows and purchase orders, enabling a more nuanced assessment.

In Hong Kong, the cumulative impact of these challenges results in an estimated trade finance gap in the range of HKD 311.2 billion to HKD 519.1 billion for 2024, representing 3.6% to 5.5% of Hong Kong's merchandise trade value²⁷. This is substantially lower than the global average ratio of 10%²⁶, which can be attributed to Hong Kong's developed economy, strong banking system, and stringent regulatory environment, which collectively support more efficient supply of trade financing.

A concerted effort to enhance digitisation, improve data integration, and adopt innovative financing solutions is essential to optimise the trade finance process and to narrow the SME funding gap in Hong Kong. Implementing strategic measures to improve process efficiency and lower access barriers are key steps toward achieving this goal.

²⁵ Hong Kong Monetary Authority. 2021 – 2024. *Register of AIs & LROs*. (<https://vpr.hkma.gov.hk/eng/regulatory-resources/registers/register-of-ais-and-lros/>). Note: KPMG analysis, including review of over 100 banks' annual report

²⁶ Asian Development Bank. 2023. *2023 Trade Finance Gaps, Growth, and Jobs Survey*. (<https://www.adb.org/sites/default/files/publication/906596/adb-brief-256-2023-trade-finance-gaps-growth-jobs-survey.pdf>).

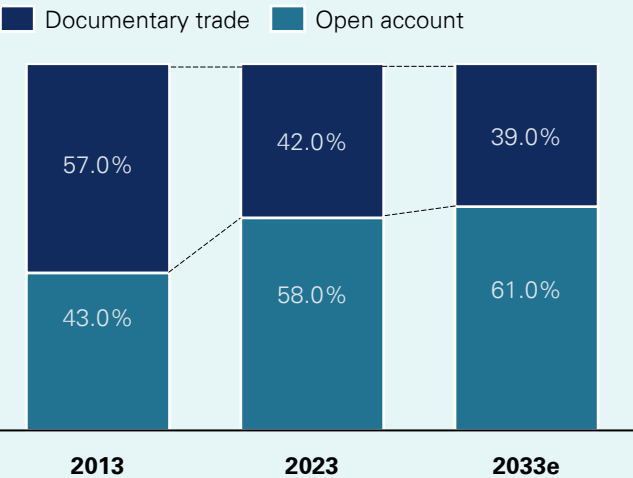
²⁷ KPMG desktop research and market sizing exercise. See 8.2 Estimated trade finance gap calculation methodology in the Appendix

Shift from documentary trade to open account trade

The global trade finance market is poised for stable growth, with a projected increase of 4.5% CAGR from 2023 to 2033²⁸. However the way it is delivered is evolving, as shown in Figure 9. More trade is now conducted on open account terms due to cost-effectiveness and simplicity, rather than through documentary trade, which uses bank intermediation to manage risk.

Figure 9: Global trade finance revenues by type²⁸

% of market, 2023 – 2033e



This global pivot towards open account trade places pressure on Hong Kong's traditional banking model, underscoring the need for digital, data-driven innovation to meet the increasing demands for speed and flexibility by the market.

This transition creates significant opportunities for banks. By embracing digitalisation, they can streamline open account processes and offer more efficient solutions. Furthermore, leveraging alternative data becomes essential to assess risk and provide financing in a landscape where traditional documentary evidence is less prevalent, enabling banks to maintain competitiveness and capture new market share in this evolving environment.

Opportunity to expand trade finance availability

Hong Kong's established trade finance sector, can advance through automation and digitisation. Regulatory disclosures reveal that the 12 banks with the largest outstanding trade finance loan balances in Hong Kong collectively account for 80% of total trade finance loans²⁹. This concentration underscores limited competition and significant control within the sector.

Moreover, only a small proportion of banks serve the SME market. Challenges like manual paperwork and paper-based transactions create operational inefficiencies, hindering banks' balance of compliance and cost-effectiveness. Effectively addressing these challenges presents a significant opportunity to expand trade finance capabilities and improve service delivery.

In summary, the fundamental role of trade finance in international trade cannot be overstated. It not only supports the operational demands of global commerce but also strengthens the economic resilience of businesses by enabling them to navigate the complexities and challenges of trading across borders. As trade evolves, innovative and adaptive solutions are needed to sustain global economic growth.

For Hong Kong to remain competitive, advancing digital trade finance infrastructure and broadening access to SME lenders will be key priorities. These themes are explored in the recommendations that follow.

Addressing obstacles to trade finance is critical. The next section will examine the pain points of trade finance, highlighting the barriers faced by businesses and financial institutions alike. Understanding these challenges is crucial for developing strategies to enhance efficiency, reduce friction, and improve access to trade finance.

28 International Chamber of Commerce. 2024. *ICC Trade Register 2024*. (<https://iccwbo.org/news-publications/policies-reports/icc-trade-register-report/>).
29 Hong Kong Monetary Authority. 2025. *Register of AIs & LROs*. (<https://vpr.hkma.gov.hk/eng/regulatory-resources/registers/register-of-ais-and-lros/>). Note: Desktop research and quantitative analysis based on banks' disclosures. In this calculation, trade finance loans are determined based on reported loans that cover the financing of imports to Hong Kong, exports and re-exports from Hong Kong, as well as merchandising trade, in accordance with the relevant guidelines issued by the HKMA.

04

Pain Points in
Trade Finance

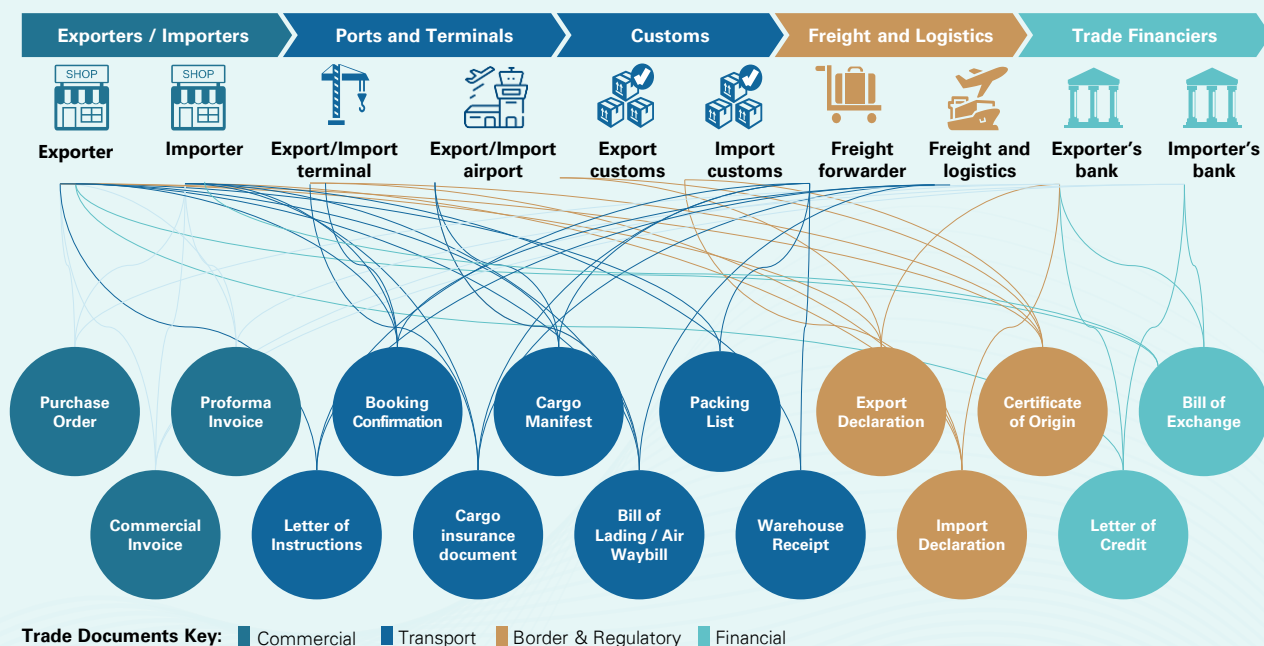
4.1

International trade involves an intricate network of stakeholders

International trade is characterised by a complex network of stakeholders, each integral to the seamless flow of goods and services across borders. Figure 10 highlights the web of interactions among stakeholders and the scale of fragmentation across the trade ecosystem. Each exchange of documents and data introduces potential friction, highlighting why smoother exchange is more essential than ever to sustain global trade leadership.

Manufacturers must synchronise with logistics providers to align production schedules with shipping timelines, while exporters and importers navigate the regulatory landscapes of various jurisdictions to meet compliance requirements. Banks are equally critical, offering trade finance solutions and risk mitigation tools necessary to support cross-border commerce and manage uncertainties such as currency fluctuations and payment defaults.

Figure 10: Complexity of the trade value chain and documents exchange³⁰



30 International Chamber of Commerce Digital Standards Initiative, 2022. *Key Trade Documents and Data Elements (KTDE)*. (<https://www.digitalizetrade.org/ktde>).




Additionally, customs authorities enforce tariffs and trade regulations, requiring detailed documentation and procedures that add layers of oversight and complexity to international trade operations.

The intricate nature of international trade leads to challenges such as information asymmetry, varied regulatory requirements across jurisdictions, and the need for comprehensive risk management strategies.

Consider the bill of lading, a key document for international trade. While it is issued by a maritime carrier to a shipper, multiple other stakeholders require the document, or its data, for different purposes. Customs officials need shipment details for their compliance, security and regulatory processes, whereas banks may require the data to support financing and payment processes. The recipient of the goods being transported, whether that is the buyer or a service provider, needs the bill of lading to take possession of the shipment on arrival.

The traditional paper-based exchange of such documents poses multiple challenges such as the risk of loss or damage, the potential for errors during manual data entry, delays in transit between stakeholders, difficulties in tracking and verifying document authenticity, and duplication of efforts.



ICC research found that that a single international trade transaction can involve the use of up to **36** different trade documents, and the exchange of **50-200** pieces of paper across **30+** different organisations³¹

³¹ International Chamber of Commerce. 2022. *Standards Toolkit for Cross-border Paperless Trade*. (<https://iccwbo.org/news-publications/policies-reports/standards-toolkit-for-cross-border-paperless-trade/>).

4.2 Trade finance pain points





Figure 11: Trade finance pain points from SMEs and Banks' perspectives³²

	SMEs	Banks
<p>Paper-based and inefficient processes</p>	<ul style="list-style-type: none"> SMEs often rely on manual processes for trade finance applications or drawdowns, leading to inefficiencies and increased error rates Trade finance process still relies on physical documents, wet signatures and manual checks, which delay the movement of goods and capital 	<ul style="list-style-type: none"> Banks face operational inefficiencies, higher costs and higher processing times when processes rely on handling of paper documentation Paper-based processes make it difficult to detect fraud perpetrated through doctored documents or duplicate financing
<p>Availability of trade finance for SMEs</p>	<ul style="list-style-type: none"> SMEs may face rigorous lending criteria and collateral requirements, which can make it difficult for them to obtain the necessary funding to support trade operations Lack of trade finance hampers SMEs' ability to expand and compete on a global scale, limiting their potential impact on Hong Kong's trade growth 	<ul style="list-style-type: none"> SMEs are often perceived by banks as higher risk compared to larger enterprises due to their smaller scale and limited collateral, leading to lower risk appetite It is challenging to evaluate the creditworthiness of SMEs due to limited financial data and lack of comprehensive financial records
<p>Due diligence and risk oversight efforts</p>	<ul style="list-style-type: none"> Banks often require extensive documentation to comply with regulations, placing a significant administrative burden on SMEs High costs associated with due diligence efforts are sometimes passed on to SME clients in the form of higher fees, increasing operational costs for these businesses 	<ul style="list-style-type: none"> Requires significant resources in terms of time, personnel and technology, increasing operational costs for banks Increased compliance risks, particularly in AML and sanctions screening, limit banks' risk appetite The high cost of these checks also erodes profitability
<p>Data availability and accuracy</p>	<ul style="list-style-type: none"> Data and documentation sits in disconnected silos making it more difficult and time consuming to compile information required for bank applications, leading to delays and potential rejections Limited access to technology prevents SMEs from efficiently managing and integrating data, affecting its accuracy Inaccurate data hinders SMEs' ability to demonstrate their credibility 	<ul style="list-style-type: none"> Lack of supplementary data to provide a more robust understanding of the SMEs' business operations Time-lagged and poor quality data fail to accurately reflect real-time cash-flow or profitability, making risk assessment challenging Banks rely on multiple, inconsistent data sources with varying levels of accuracy and consistency, which results in difficulties harmonising information

³² Project Cargo^x Expert Panel industry engagement and KPMG's desktop research.



Figure 11: Trade finance pain points from SMEs and Banks' perspectives³²

	SMEs	Banks
 <p>Digital trade infrastructure and undigitised trade documentation</p>	<ul style="list-style-type: none"> Undigitalised documentation leads to inefficiencies and increased processing times for SMEs Without digital data and systems, SMEs struggle to access real-time information regarding trade transactions Several digital trade infrastructure projects in Hong Kong have commenced but are not fully implemented 	<ul style="list-style-type: none"> Banks face operational delays and costs associated with processing undigitalised documents Limited adoption of digitalised trade documents, increasing susceptibility to errors and fraud Hong Kong lacks unique digital entity identifiers which could streamline verification and improve data accuracy
 <p>Insufficient trade connectivity and interoperability</p>	<ul style="list-style-type: none"> Fragmented systems and lack of interoperability can lead to inefficiencies and delays in transaction processing Lack of seamless integration leads to manual interventions, increasing the risk of errors and potential compliance issues such as inaccurate financial reporting 	<ul style="list-style-type: none"> Banks are required to aggregate essential data from multiple disparate sources to effectively manage trade finance processes Lack of end-to-end connectivity hinders banks' ability to efficiently verify the authenticity of trade data and documents especially for off-shore trade, increasing risk of fraud and errors

The current landscape of trade finance presents considerable challenges for both SMEs and banks. These include reliance on manual, paper-based processes, which lead to inefficiencies, higher costs, and increased susceptibility to errors and fraud. Furthermore, fragmented data, a lack of standardised information, and limited digital connectivity restrict access to finance for

SMEs and complicate risk assessment for banks.

These challenges highlight the need for establishing a robust foundational infrastructure in order to enable digital trade in Hong Kong, thereby alleviating many of these persistent pain points.

05

Digital Trade Finance Foundations

5.1 Digital infrastructure to support the trade finance ecosystem

To identify the global best practices of international trade hubs, a comprehensive framework was utilised, drawing on a number of global indices³³. While Hong Kong excels in trade integration and openness, reflecting its active participation in global trade networks and markets, analysis indicates that its digital trade infrastructure is currently lagging behind some of its international counterparts. Other leading international trade hubs including Singapore, the Netherlands, Chinese Mainland, and Germany provide insightful case studies.

While Chinese Mainland and Germany trade stems primarily from their large manufacturing industries, Singapore and the Netherlands, like Hong Kong, are re-export hubs, serving as gateways for their respective regions. Investigating the digital trade infrastructure in these leading markets offers unique perspectives and considerations for Hong Kong:



Singapore

Comprehensive Digital Integration Across Trade Facilitation

Singapore demonstrates strong overall performance in establishing domestic market foundations for trade facilitation. Corppass **digital identity**, which enables secure and efficient participant identification, has over 550,000 registered entities³⁴. Its **digital invoice** system is well-developed, with InvoiceNow widely adopted (60,000 registered businesses) and due to become mandatory for Goods and Services Tax-registered businesses in 2026³⁵. Singapore's TradeTrust uses decentralised identifiers and digital signatures for **trade document authentication**³⁶. SGTraDex and Networked Trade Platform (NTP) both support **document exchange**, however indications are that achieving widespread adoption and scalability beyond initial scope proved challenging. Singapore has a dedicated **Trade Finance Registry** to prevent duplicated financing³⁷, and adopted the United Nations Commission on International Trade Law's Model Law on Electronic Transferable Records (MLETR)-compatible legislation in 2021³⁸.

33 KPMG desktop research and modelling exercise.

34 MDDI. 2022. *Enhancements to the Singpass app*. (<https://www.mddi.gov.sg/newsroom/singpass-enhancements-factsheet-02032022/>).

35 IMDA. 2025. *Get your business future-ready with InvoiceNow*. (<https://file.go.gov.sg/invoicenow-brochure-2025.pdf>).

36 UNESCAP. 2025. *Best Practices in Utilizing Blockchain and Emerging Technologies for Trade Digitalization*. (https://www.unescap.org/sites/default/d8files/event-documents/Best%20Practices%20in%20Utilizing%20Blockchain%20and%20Emerging%20Technologies%20for%20Trade%20Digitalization_0.pdf).

37 Association of Banks in Singapore. 2025. *Trade Finance Registry*. (<https://abs.org.sg/industry-guidelines/compliance-and-risk-management/trade-finance-registry>).

38 Infocomm Media Development Authority. 2024. *The Electronic Transactions Act 2010*. (<https://www.imda.gov.sg/regulations-and-licensing-listing/electronic-transactions-act-and-regulations#:~:text=In%202021%2C%20the%20ETA%20was,trade%2C%20including%20digital%20payment%20processes.>).



The Netherlands

Advanced Digitalisation in Port and Logistics Data

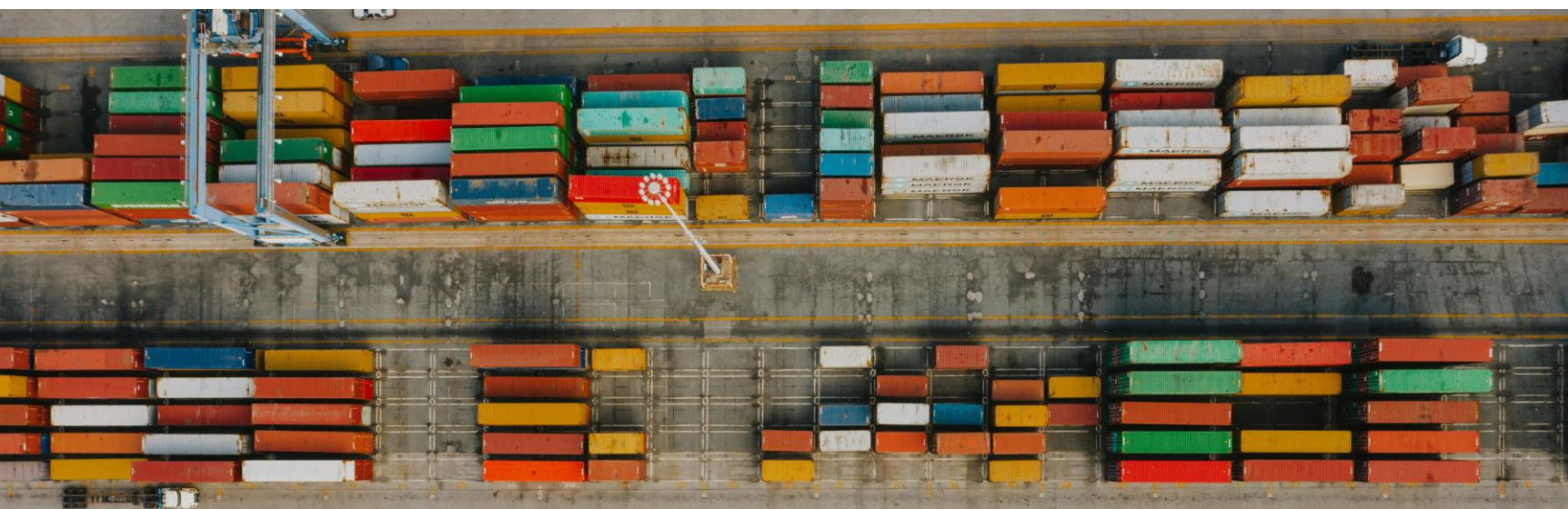
The Netherlands showcases significant success in digitalising its port and logistics operations. Its **digital identity** efforts are progressing with European Digital Identity (EUDI) pilots³⁹, and **e-invoicing** is expected to be fully implemented by 2030⁴⁰. The country's strength lies particularly in its **shipment and port data** integration, exemplified by Portbase, which connects numerous logistics stakeholders and offers extensive services⁴¹. This robust infrastructure supports efficient **e-submission of customs declarations** and facilitates seamless **trade document exchange**⁴². The Netherlands' federated data sharing model and API-based architecture are key to its broad cross-industry adoption and innovation in logistics. The Netherlands is in the early stages of its adoption of the **MLETR** with the submission of a legislative proposal in 2025 to recognise the e-Bill of Lading⁴³.



Germany

Establishing Legal Certainty for Digital Trade Documents

Germany's strength in digital trade facilitation is rooted in its methodical approach to legal and infrastructural development for digital documents. It has made significant progress in adopting UNCITRAL's **MLETR** standards, legally recognising key electronic documents like bills of lading. Adoption of **digital identity** (EUDI under pilot³⁹) and **e-invoicing** (full implementation by 2028⁴⁴) are in progress and set a legal foundation that enables the reduction of costs and time in cross-border trade documentation. Germany's **e-submission of customs declarations** is well-established through the ATLAS system⁴⁵, contributing to efficient **trade document exchange**.



39 European Commission. 2025. *EUDI Wallet Pilot Implementation*. (<https://digital-strategy.ec.europa.eu/en/policies/eudi-wallet-implementation>).

40 Edicom Group. 2025. *Electronic Invoicing*. (<https://edicomgroup.com/blog/netherlands-electronic-invoicing-digital-reporting>).

41 Portbase. 2025. *Corporate Story*. (<https://www.portbase.com/en/about-us/corporate-story/>).

42 UNTF Survey. 2025. *UN Global Survey on Digital and Sustainable Trade Facilitation*. (<https://www.untfsurvey.org/economy?id=NLD>).

43 Government of the Netherlands. 2025. *Electronic bill of lading to have same effect as paper version*. (<https://www.government.nl/latest/news/2025/05/14/electronic-bill-of-lading-to-have-same-effect-as-paper-version>).

44 European Commission. 2025. *eInvoicing in Germany*. (<https://ec.europa.eu/digital-building-blocks/sites/spaces/DIGITAL/pages/467108886/eInvoicing+in+Germany>).



Chinese Mainland

Centralised Digitalisation for Efficiency and Compliance

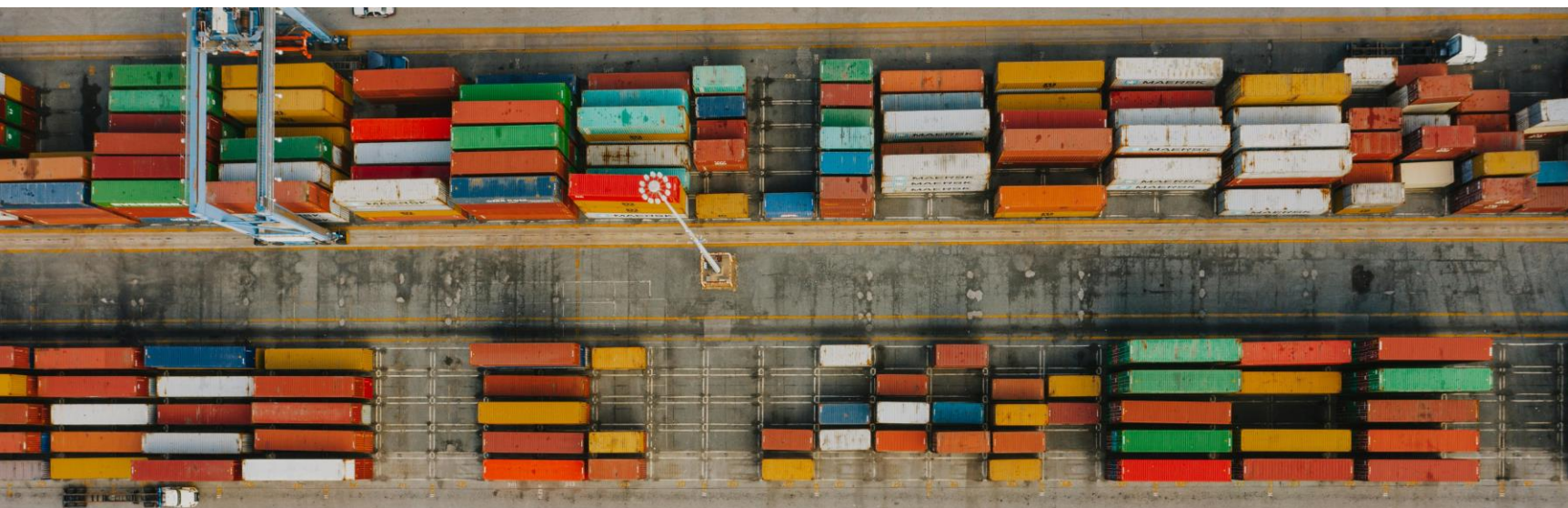
Chinese Mainland demonstrates a strong, centralised approach to digital trade facilitation, particularly in **digital invoices** through its e-fapiao initiative, which has achieved full nationwide rollout⁴⁶. In 2025, a digital identity for individuals was launched (CyberspaceID) but this does not yet extend to businesses⁴⁷, and its **shipment and port data** is aggregated from more than 20 ports⁴⁸. China's **e-submission of customs declarations** is highly efficient via its International Trade Single Window, processing 26 million average daily declarations⁴⁹. China is committed to **MLETR** adoption and has announced the e-Bill of Lading will be legally recognised as of May 2026⁵⁰.



Hong Kong

Building on Strong Trade Integration with Accelerating Digital Foundations

Hong Kong excels in global trade but there is room for development in its digital trade infrastructure. Its **digital identity**, CorpID, is set to be rolled out in 2026⁵¹ and it has a robust foundation in **shipment and port data** exchange through its Port Community System and HKIA Cargo Data Platform. **Import and export declarations**, cargo manifests (except road mode), certificates of origins and permits for dutiable commodities can be submitted electronically via the Government Electronic Trading Services. The **Trade Single Window (TSW)** is being implemented in three phases to provide a one-stop electronic platform for submission of 'business-to-government' documents for trade declaration and cargo clearance. TSW Phase 1 and 2 are in full operation, covering 42 types of trade documents, while Phase 3 services will be rolled out in batches from mid-2026⁵². Hong Kong is considering legislative amendments with reference to the **MLETR**. Industry consultation on the proposed legislative framework is underway and a legislative proposal is expected to be introduced in 2026⁵³.



45 Zoll. 2025. *Procedures*. (https://www.zoll.de/EN/Businesses/Movement-of-goods/Import/Duties-and-taxes/Entry-summary-declaration/Lodging-the-entry-summary-declaration-and-notification-of-arrival/lodging-the-entry-summary-declaration-and-notification-of-arrival_node.html).

46 State Taxation Administration. 2024. 国家税务总局关于推广应用全面数字化电子发票的公告. (<https://fgk.chinatax.gov.cn/zcfgk/c100012/c5236067/content.html>).

47 Biometric Update. 2025. *China approves Cyberspace ID as part of federated identity scheme*. (<https://www.biometricupdate.com/>).

48 YIDAIYILU. 2017. 中国将实现全球31个港口国际物流信息互联互通. (<https://www.yidaiyilu.gov.cn/p/33750.html>).

49 Recode Research. 2025. *Trade Facilitation Annual Report of China*. (http://www.recode-research.org/contents/research/tfarc/TFARC_2025.pdf).

50 Xinhua News. 2025. *China passes its newly revised Maritime Law*. (<https://english.news.cn/20251028/13bcc18908d44a1da434901c58eb33fc/c.html>).

5.2 Optimised and data-enabled trade finance

Automating the financing of trade

Process automation enabled by digital trade data and digital trade documents can significantly increase efficiency and accuracy in trade finance.

There are examples throughout the trade finance product lifecycle (see Figure 12) of how bank access to digital trade data would enable the automation of trade operational processes, enhance credit decisioning and enable new product development, ultimately leading to greater trade finance availability for Hong Kong's importers and exporters.

Figure 12: Trade finance lifecycle



51 GovHK. 2025. *Innovation, Technology and Industry*. (<https://www.gov.hk/en/about/about/hk/factsheets/docs/technology.pdf>).

52 Trade Single Window. 2025. *Trade Single Window Phase 3 Services – System-To-System Interface*. (https://www3.tradesinglewindow.hk/portal/en/news_and_media/whatsnew/2025/whatsnew_20250702_01.html).

53 Government of the Hong Kong SAR. 2025. *Government launches industry consultation on proposed legislative amendments to facilitate digitalization of business-to-business trade documents*. (<https://www.info.gov.hk/gia/general/202512/29/P2025122900233.htm?fontSize=3>).



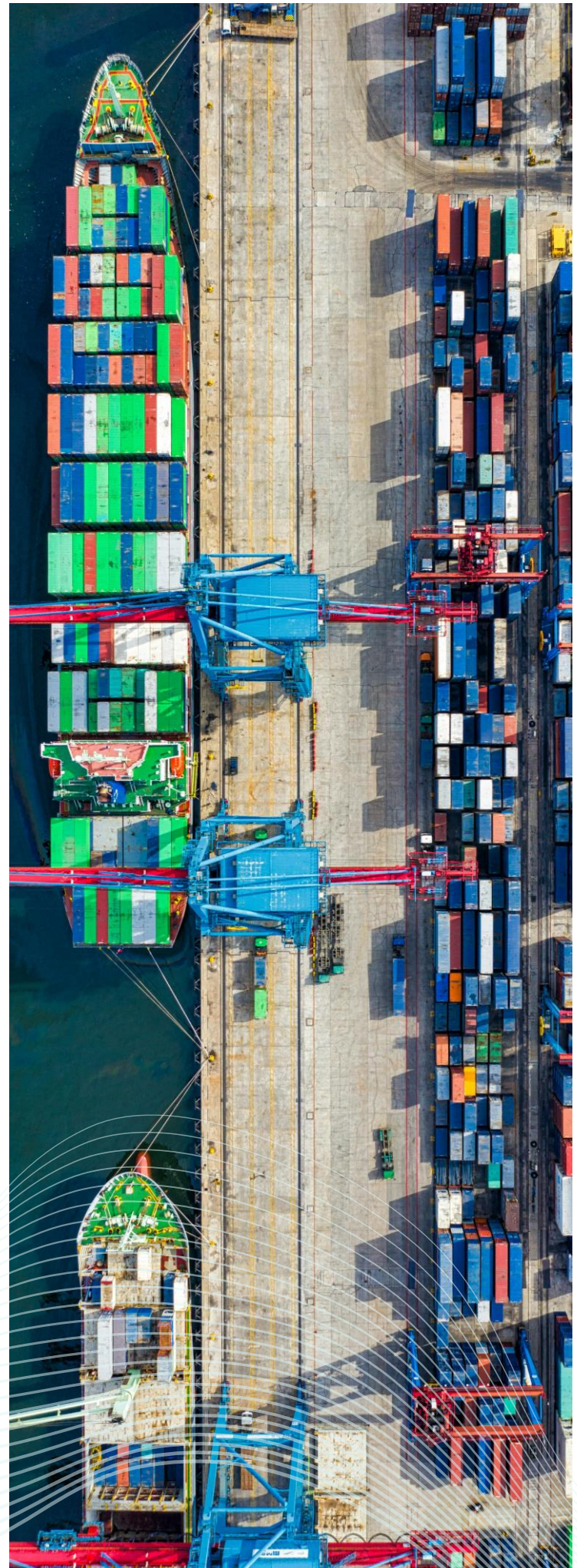
Trade finance in Hong Kong is primed for digital transformation. While the current system still relies on the manual handling of physical documents, availability of digital trade data would boost efficiency by reducing processing times and operational costs. Digitising trade finance documents also enhances visibility and traceability, thus reducing risks associated with human error, fraud, and financial crime.

Safeguarding digital trade data to ensure trust

Although cybersecurity and data privacy are not the primary focus of this report, it is crucial to address these challenges as trade finance undergoes digital transformation.

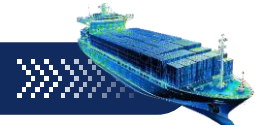
Implementing robust encryption and secure access controls is necessary to safeguard sensitive information, while adhering to data privacy frameworks is crucial for protecting stakeholder rights.

Additionally, the standardisation, validation, and authentication of data are essential for the successful automation of trade finance processes. By prioritising these measures, Hong Kong can strengthen its position as a secure and trusted digital trade finance hub.





5.3 Connectivity with key trade partners for seamless data exchange



Enhancing connectivity with key trade corridors

As global trade ecosystems become increasingly digitalised, jurisdictions achieving seamless data connectivity will gain a competitive advantage in trade facilitation and risk-based financing; areas where Hong Kong is well positioned.

Given the cross-border nature of trade, connectivity with different jurisdictions is essential to ensure efficient transactions. Investing in a robust digital trade infrastructure in Hong Kong is foundational but the benefits of reduced time and cost of processing trade transactions can only be fully unlocked through alignment with key trading partners on data standards and formats. An end-to-end digital process, from the exporter's jurisdiction to the importer's, can significantly reduce the time and cost associated with processing international trade transactions.

Hong Kong is actively exploring enhanced connectivity with some of its largest trade partners, Chinese Mainland and ASEAN, through pilot projects. The Shenzhen-Hong Kong Cross-boundary Data Validation Platform pilot was launched in May 2024 to test the use cases of validating credit reference reports and account opening documents. CDI connects directly to the Data Validation Platform, enabling Hong Kong banks to validate personal and corporate data with trusted Chinese Mainland providers¹.

The Commerce and Economic Development Bureau (CEDB) of Hong Kong, which oversees the policy and implementation of Trade Single Window (TSW) signed a Cooperation Arrangement on Single Window with the

General Administration of Customs of the People's Republic of China in May 2025 to further enhance system connectivity and collaboration between Hong Kong and the Chinese Mainland⁵⁴. In addition, Hong Kong and ASEAN are exploring a pilot project of exchanging the electronic Certificate of Origin documents between ASEAN Single Window and the Hong Kong TSW⁵⁵. The announcement of the ASEAN Digital Economy Framework Agreement (DEFA) represents a landmark regional initiative that will impact Hong Kong given the trade volumes with the trading bloc. The agreement aims to create an integrated digital economy across Southeast Asia by enhancing digital trade, promoting interoperability, ensuring seamless data flows, facilitating digital payments, and boosting the participation of SMEs. Negotiations are expected to conclude in 2026, with the goal of driving substantial digital growth throughout the region by 2030. These initiatives reflect the Chief Executive's commitment to deepening international economic and trade networks, a pledge that was re-emphasised in his 2025 Policy Address. Collectively, these pilots form a progressive roadmap towards a fully interoperable trade ecosystem.

However, continued commitment to achieving interoperability is crucial to foster trust and efficiency in global trade, and to enhance visibility and transparency in cross-border trade supply chains. A coordinated effort is required to enable the collection of relevant cargo and trade data and key trade documents from additional sources, across major trade corridors, to enhance the trade finance process for banks and SMEs. In turn, this will enable banks to more accurately assess credit risks and provide trade finance with greater confidence.

1 HKMA. 2025. *CDI – Our Partners*. (<https://cdi.hkma.gov.hk/our-partners>).

54 CEDB. 2025. *CEDB and GACC sign Cooperation Arrangement on Single Window between Mainland and Hong Kong*. (https://www.cedb.gov.hk/en/news/press_release/2025/pr19052025a.html).

55 CEDB. 2025. *Pilot project on e-trade document between Hong Kong and ASEAN*. (https://www.cedb.gov.hk/en/news/press_release/2025/pr26092025c.html).



06 The Way Forward



6.1 Project Cargo^x Strategy Recommendations



The following recommendations aim to address the critical need for accelerating the digitalisation and efficiency of trade finance solutions in today's complex global trade landscape. Recognising the challenges faced by businesses and SMEs, these recommendations focus on enhancing automation of trade operational processes, increasing trade finance availability, improving digital trade infrastructure, and strengthening connectivity to maintain Hong Kong's competitive edge as a global trade hub.

The Project Cargo^x Strategy

The recommended strategy outlined in Figure 13 articulates Hong Kong's pathway to becoming a leading global trade and finance hub, connecting Hong Kong with the rest of the world through a digitally connected ecosystem. The Project Cargo^x Strategy outlines an actionable blueprint that will enable Hong Kong to become a digitally connected global trade and financing hub, structured across five layers that translate the vision into execution:



The Vision: Defines the ultimate aspiration of Project Cargo^x – to position Hong Kong as a trusted, digitally enabled gateway and trade financing hub.



The Pillars: Represent the three core levers that enable Hong Kong's transition to a digital, connected trade finance ecosystem.



The Foundations: Outline the essential operational focus areas required to activate and sustain each pillar.



The Initiatives: Translate the strategic pillars into tangible projects and pilots that demonstrate measurable impact.



The Enablers: Provide the institutional and regulatory mechanisms that make strategy actionable and sustainable.

Figure 13: Project Cargo^x Strategy

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Automation of banks' trade processes**

Use digital trade data to automate issuance, drawdown and transaction monitoring processes

1**Integrate strategic government cargo and trade data sources and infrastructures****Responsible party**

HKMA – CDI

**Key input providers**

TLB, AAHK, CEDB and other Government B/Ds

Trade finance lifecycle

3. Product drawdown or issuance
4. Transaction & risk monitoring

Initiative Description

- Expedite data transmission between Airport Authority Hong Kong (AAHK)'s HKIA Cargo Data Platform, Transport and Logistic Bureau's Port Community System (PCS), and CEDB's Trade Single Window and data consumers via CDI, to cover logistics and customs data such as real-time tracking of sea, air, and land transport and import/export declaration data
- Access to digitised cargo, trade and import/export declaration data would allow trade finance banks to gain a more comprehensive picture of their customers' trade activities and supply chain relationships, and to reduce the manual operations in banking processes, particularly pre- and post-transaction monitoring
- Similar cargo data sources enable information exchange in Singapore (PORTNET), the United Arab Emirates (CARGOES) and the Netherlands (Portbase)



Goal: Connection of government data sources such as HKIA Cargo Data Platform, PCS, and Trade Single Window with CDI

Benefits

Data Consumers (i.e. Banks) can use logistics, cargo and import/export declaration data to better understand their customers and automate transactional processes, enabling more efficient and cost-effective financial services. CDI offers a single connection to many data sources, reducing operational burden and cost, whilst increasing transparency

Implementation complexity

Technical complexity associated with integrating data from different government systems and establishing a common data standard for logistics and customs data

Dependencies

PCS implementation commenced in January 2026 and connection to CDI depends on its timely implementation. Access to import and export declaration is dependent on the TSW Phase 3 roll-out in 2027

Data Flow

Govt. B/Ds
(e.g. HKIA Cargo Data Platform, PCS, TSW)

Cargo, trade and
import/export
declarations data



CDI

Cargo, trade and
import/export
declarations data



Banks

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Automation of banks' trade processes**

Use digital trade data to automate issuance, drawdown and transaction monitoring processes

2**Source commercial trade & logistics data****Responsible party**

HKMA – CDI

**Key input providers**

Private logistics, trade and cargo data providers

Trade finance lifecycle

3. Product drawdown or issuance
4. Transaction & risk monitoring

Initiative Description

- Prioritise connection to CDI of other non-government logistics and trade cargo data providers (e.g. FreightAmigo, GS1, Lloyd's List Intelligence, Tradelink) to expand CDI's data coverage, including trade and logistics documentation (e.g. purchase order, invoice, shipment notices), goods description (e.g. Harmonised System (HS) code), and transportation details (e.g. vessel tracking number). Data coverage should encompass both onshore shipments including cargo physically shipped in and transhipped via Hong Kong, and offshore shipments, where traders handle transactions even if goods are shipped directly from elsewhere to overseas buyers
- Banks can use this transactional data to automate pre-transaction controls, enhance trade finance efficiency, and conduct AML checks, sanctions screening, and continuous risk monitoring



Goal: Integration between CDI and non-governmental logistics and trade data providers, including FreightAmigo, GS1, Lloyd's List Intelligence and Tradelink

Benefits

Data Consumers can gain a deeper understanding of customer operations by accessing granular trade and logistics data alongside governmental data via CDI's single connection to multiple sources. This streamlined access reduces operational costs and data silos, enabling improved decision-making and risk management

Implementation complexity

Data integration and standardisation, establishing clear data ownership and usage policies, and developing incentive and commercial alignment models to build private sector trust and collaboration

Dependencies

Requires individual commercial agreements between Data Consumers and Providers, the commitment of Data Providers, and banks' willingness to use this data. Additionally, banks must undergo internal validation processes to integrate new data into financial processes

Data Flow

Non-government data providers
(e.g. FreightAmigo, GS1, Lloyd's List Intelligence, Tradelink)

Cargo and
trade data



CDI

Cargo and
trade data



Banks

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Automation of banks' trade processes**

Use digital trade data to automate issuance, drawdown and transaction monitoring processes

3**Facilitate diligence on trade counterparties****Responsible party**

HKMA – CDI

**Key input providers**

Private logistics, trade and cargo data providers

Trade finance lifecycle

1. Onboarding & due diligence
3. Product drawdown or issuance
4. Transaction & risk monitoring

Initiative Description

- Establish connection to CDI of data providers that can provide information on the counterparties (e.g. bank customer's suppliers/customers) of trade transactions to support bank's customer onboarding and transaction monitoring processes (e.g. Coface, Dun & Bradstreet, GS1)
- According to Expert Panel banks, comprehensive customer data is essential for addressing the lack of visibility into counterparty information
- Counterparty data can provide additional assurance regarding the authenticity of the transaction and aid in identifying related party transactions
- Using trading data to enhance global supply chain network mapping can enable new solutions that connect new buyers or sellers



Goal: Established connections between CDI and data providers capable of delivering counterparty information

Benefits

Access to verified counterparty data enhances transaction speed by reducing manual checks, streamlining customer onboarding, and accelerating processing. This data enables banks to map global buyer-seller networks, leading to more comprehensive risk assessment and informed lending decisions

Implementation complexity

Data integration and establishing common data standards for counterparty data requires clear rules on data ownership, usage, confidentiality, and incentive models to align commercial interests and build private sector trust

Dependencies

Data Providers' willingness and ability to participate, the use of standardised digital identifiers like CorpID or Legal Entity Identifier (LEI) for accurate identification, and the establishment of individual commercial agreements between Data Consumers and Providers

Data Flow

Counterparty data providers
(e.g. Coface, Dun & Bradstreet, GS1)

Counterparty data



CDI

Counterparty data



Banks

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Increased availability of trade finance**

Leverage trade data to enhance credit scoring and decisioning, while developing new financing solutions

4**Enable access to historical trade transaction data****Responsible party**

HKMA – CDI

**Key input providers**

Data providers

Trade finance lifecycle

- ① Onboarding & due diligence
- ③ Product drawdown or issuance
- ④ Transaction & risk monitoring

Initiative Description

- Enable access to trade companies' historical transaction data covering data attributes including, but not limited to, commercial counterparties, transaction volumes and frequencies, value of goods, description of goods, payment terms and methods, and shipping patterns (onshore and offshore)
- This will allow banks to evaluate creditworthiness of a company based on trade activities over a period of time on top of point-in-time financial statements
- According to Expert Panel banks, historical trade data is crucial for banks to perform accurate credit assessments, thus access to historical data may also enable SMEs to use their trading track record to qualify for trade financing



Goal: Integration between CDI and data providers offering consented historical transaction data from trade companies, combining logistics, commercial, and import/export declaration data

Benefits

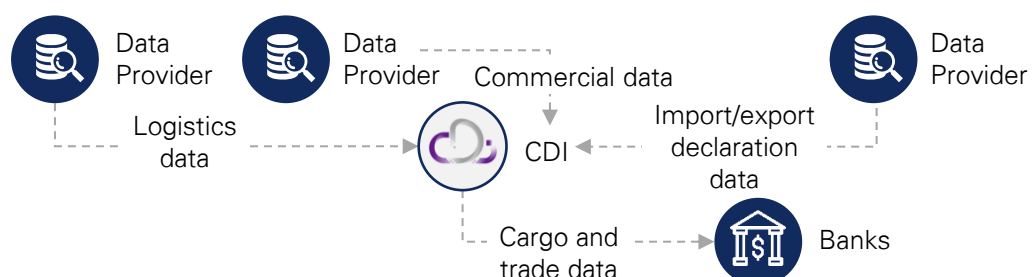
Banks can gain a deeper understanding of a company's financial and business behaviour, streamline and automate the underwriting process, and improve credit risk assessments. This comprehensive approach allows banks to extend trade financing, particularly benefiting SMEs with limited collateral but reliable trade histories

Implementation complexity

Complex integration and standardisation of historical transaction data from various sources to combine transport/logistics data, commercial and import/export declaration data for a holistic view of historical transactions. Clear data ownership, usage and confidentiality guidelines required to facilitate data sharing through CDI

Dependencies

High-quality, aggregated historical transaction data is crucial for banks' trade data analysis and risk processes. This requires traders' consent to share their data via CDI and relies on the bank's analytics capabilities

Data Flow

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Increased availability of trade finance**

Leverage trade data to enhance credit scoring and decisioning, while developing new financing solutions

5**Utilise e-commerce data to support underwriting****Responsible party**

HKMA – CDI

**Key input providers**

E-commerce platforms and other data providers

Trade finance lifecycle

① → ② → ③ → ④

1. Onboarding & due diligence
2. Trade facility app. & assess.
4. Transaction & risk monitoring

Initiative Description

- Partner with e-commerce platforms and other data providers to enable access to complementary trade transaction data such as order volumes, order value, inventory, and payment/settlement data
- These will serve as additional data points for traders' operation and track records, which banks can leverage to conduct KYC/KYCC and risk evaluation
- Allow traders to capitalise on the growth in e-commerce and enable banks to meet the increasing demand for trade finance



Goal: Connection between CDI and e-commerce platforms and other data providers to enable access to supplementary trade transaction data

Benefits

Offers a comprehensive view of a company's financial behaviour, enhancing credit scoring and risk assessment accuracy. This approach expands trade finance access by supporting credit limit decisions and streamlines the underwriting process to reduce manual effort, supporting new segment of trade customers that are not covered by traditional trade finance

Implementation complexity

Integrating diverse e-commerce data and establishing common standards requires clear rules on data ownership, usage rights, and confidentiality to build trust. Additionally, aligning incentive and commercial models between Data Providers and Consumers is essential

Dependencies

Active participation from e-commerce platforms and Data Providers is essential, along with individual commercial agreements between Data Consumers and Providers. The reputation of Data Providers will impact data utilisation, banks must be willing and to integrate this data into their financial processes

Data Flow

E-commerce platforms

Transaction data



CDI

Transaction data



Banks

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Increased availability of trade finance**

Leverage trade data to enhance credit scoring and decisioning, while developing new financing solutions

6**Combine trade flow and cash flow data for multi-dimensional credit assessment****Responsible party**

HKMA – CDI

**Key input providers**

Trade companies and banks

Trade finance lifecycle

① ② ③ ④

1. Onboarding & due diligence
2. Trade facility app. & assess.
4. Transaction & risk monitoring

Initiative Description

- Expedite secure, consent-based sharing of SME current and savings account data across banks leveraging the CDI platform's consent mechanism
- Enable digital access to comprehensive, timely cashflow histories across various operating bank accounts, replacing the need for physical bank statements. This allows banks to understand traders' transaction histories, invoice payments, and settlement timelines, even if primary accounts are with another bank
- Expert Panel banks advised that cash flow data is crucial for credit assessment and transaction validation. Banks may perform multi-dimensional risk assessments combining trade patterns and fund flow patterns



Goal: Utilisation of the CDI platform's consent mechanism to quickly and securely share SME current and savings account data between banks

Benefits

Enhances visibility into a company's financial health, improves credit risk accuracy, streamlines assessments, and reduces processing times, enabling better financing terms and capital access, especially for SMEs

Implementation complexity

Integrating diverse trade and cash flow data is technically challenging, requiring quality and standardisation for reliable credit scoring, alongside a robust data-sharing framework to ensure consent-based, confidential exchanges

Dependencies

Banks' willingness to share data depends on mutual consent, data level, and cooperation, with potential hesitation due to competitive concerns. Adoption relies on ease, cost, and system compatibility, while traders' trust is crucial for transparency

Data Flow

SME Bank A/B/C

Trade
flow/cash
flow data



CDI

Trade
flow/cash
flow data



Banks

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Increased availability of trade finance**

Leverage trade data to enhance credit scoring and decisioning, while developing new financing solutions

7**Enhance credit scoring model for SMEs**

Responsible party HKMA



Key input providers

Data providers and private credit reference agencies

Trade finance lifecycle

- ① Onboarding & due diligence
- ② Trade facility app. & assess.
- ④ Transaction & risk monitoring

Initiative Description

- Feed trade data (e.g. transaction volume, goods value, payment and settlement cycle) into the Commercial Credit Reference Agency (CCRA) 2.0 credit scoring model to provide banks with a quick understanding of the credit worthiness of potential borrowers operating in international trade
- Expert Panel banks confirmed that the use of trade data can enhance the credibility of the scoring model and enable validation of customer behaviour and performance (for customers operating in import/export)
- With the enhanced credit scoring, banks may be able to extend existing trade finance products to more SMEs while not compromising their own credit risk appetite



Goal: Integration of trade data, such as transaction volume, goods value, and payment cycles, into the CCRA 2.0 credit scoring model

Benefits

Historical trade data enables a more comprehensive and reliable view of a company's performance, strengthening banks' confidence in SME lending by using data-enabled credit scoring, reducing collateral needs and expanding trade finance access

Implementation complexity

Operational complexity in harmonising diverse data standards, developing explainable scoring models, and ensuring interoperability and scalability. Essential to address these for accurate credit assessments and aligning interpretations between data providers and banks, and ensuring adoptability of scoring model by banks

Dependencies

Depends on the progress of the CCRA 2.0 proof-of-concept project. Utilisation is dependent on alignment of the parameter weighting and scoring model and recognition by banks of the credit scoring derived from the updated model

Data Flow

Data Provider



Trade data

CDI

Trade data



CCRA 2.0



Banks

**PILLAR****"Data"**

Accelerate data-enabled trade finance automation and availability

**FOUNDATION****Increased availability of trade finance**

Leverage trade data to enhance credit scoring and decisioning, while developing new financing solutions

8**Develop innovative new products****Responsible party**

Banks

**Key input providers**

Banks, HKMA – CDI

Trade finance lifecycle

5. Product & proposition

Initiative Description

- Use digital trade data to create new solutions which adapt to the evolving trade finance landscape and meet unmet demand from traders, such as:
 - Embedded finance: integrate financing options directly into supply chain platforms, providing SMEs with point-of-need trade and working capital finance
 - Credit risk: insurers and lenders can integrate digitised trade data to enable automated, AI-driven underwriting
 - Freight forwarder proposition: digitised cargo and trade data can be used to support offering banking products to cargo services providers such as freight forwarders and third party logistics firms



Goal: Collaboration between Banks and the HKMA in leveraging digital trade data to develop new solutions that address the evolving trade finance landscape and fulfill traders' unmet demands

Benefits

Open up more financing opportunities for underserved SMEs and enable them to seize growth opportunities. Meet the emerging needs of traders as shift away from traditional documentary trade continues. Additionally, strengthen Hong Kong banks' competitiveness by offering value-added services which may not be available elsewhere

Implementation complexity

Traditional banks will need to undergo a significant cultural and operational shift to adapt from traditional credit products to new offerings. This will require banks to redesign their risk models, processes and procedures to accommodate new products

Dependencies

Developing and offering new products is a commercial decision for banks, requiring an adequate return on investment to justify such actions. Banks' ability to offer new products depends on the quality of their collaborations with key partners such as data providers and credit insurers

**PILLAR****"Infrastructure"**

Improve digital trade infrastructure

**FOUNDATION****Digital documents**

Advance trade efficiency and security through digital document adoption, legal alignment and data integration

9**Study full digitisation of trade documents and promote paperless trade**

Responsible party HKMA



Key input providers Government
B/Ds, industry
stakeholders

Initiative Description

- Support use of next-generation technologies such as tokenisation and blockchain, and encourage the increased adoption of the e-Bill of Lading and other digital document formats for enhanced efficiency and reduced fraud in trade
- Build upon the HKMA's Project Ensemble, which is exploring the tokenisation of e-Bills of Lading
- Encourage digital submission of trade and commerce information to Government Bureaux and Departments to encourage broader industry adoption. This government-first approach has proven successful in cases such as the rollout of the Peppol electronic invoicing standardisation initiative in Europe which now underpins the use of electronic invoicing in multiple jurisdictions globally
- Encourage data sharing to banks in digital format on consent basis



Goal: Comprehensive study of the advantages associated with full digitalisation of trade documents, and promote paperless trade through use of next-generation technologies and promoting the widespread adoption of digital documents

Benefits

Streamlined and paperless trade finance processes enable banks to automate issuance, drawdown and transaction monitoring processes, which may reduce processing times and cost to serve. Enhanced trade efficiency, security and transparency are enabled through digital document adoption, improving trust among stakeholders

Implementation complexity

Transitioning from paper-based to digital processes requires overcoming significant behavioural changes, particularly for resource-constrained SMEs who typically lack IT systems and technical expertise. This involves developing standard formats and protocols for document interoperability and implementing policies that comply with local and international digital trade laws

Dependencies

Alignment with the MLETR to provide a harmonised legal framework, ensuring their validity, recognition, and enforceability across jurisdictions. It is also dependent on the digital infrastructure readiness of trading partners, and industry collaboration for broad adoption and interoperability

**PILLAR****"Infrastructure"**

Improve digital trade infrastructure

**FOUNDATION****Digital documents**

Advance trade efficiency and security through digital document adoption, legal alignment and data integration

10 Align local legislation with the MLETR



Responsible party CEDB



Key input providers Government B/Ds, industry stakeholders

Initiative Description

- Align with the MLETR standards to provide legal basis for the digitalisation of business-to-business (B2B) trade documents, including but not limited to bills of lading, bills of exchange and promissory notes
- This may be achieved by amending existing legislation including the Electronic Transactions Ordinance (Cap. 553), the Bills of Exchange Ordinance (Cap. 19) and the Bills of Lading and Analogous Shipping Documents Ordinance (Cap. 440)
- It was announced in the Chief Executive's 2025 Policy Address that the government will introduce a legislative proposal within 2026 to facilitate the digitalisation of B2B trade documents



Goal: Alignment of legislation in Hong Kong with the MLETR to provide the legal basis for the digitalisation of B2B trade documents

Benefits

Provides a clear and robust legal framework that aligns Hong Kong with international standards, enhancing its competitiveness as a trade hub by ensuring legal certainty, improving cross-border interoperability, and facilitating efficient international trade while facilitating broader digital trade adoption

Implementation complexity

Amendments to existing legislation to provide legal basis for the digitalisation of B2B trade documents would take time. The industry would also need to develop the relevant technical solutions as well as facilitate interoperability between different systems and platforms based on their actual needs

Dependencies

Digital infrastructure readiness among the industry is required to support the creation, storage, and transfer of electronic records securely, as well as to facilitate the use of digital documents

**PILLAR****"Infrastructure"**

Improve digital trade infrastructure

**FOUNDATION****Digital documents**

Advance trade efficiency and security through digital document adoption, legal alignment and data integration

11**Evaluate the cost-benefit of a trade finance document registry**

Responsible party HKMA



Key input providers Banks, Service / infrastructure provider

Initiative Description

- Evaluate the cost-benefit of establishing a trade finance document registry utility in Hong Kong, where invoices and other trade documents can be submitted for duplicated trade finance detection
- A centralised registry utility would be designed to enhance the transparency and integrity of working capital financing, enabling early identification of duplicate financing attempts, thus enabling Hong Kong banks to respond swiftly and minimise losses from fraud
- The data submitted to the registry could also be used to authenticate transactions, and provide analytics to serve users
- Such registries have been successfully implemented in Singapore, among other countries, and have proven to reduce duplicate financing



Goal: Evaluation of the cost-benefit of establishing a trade finance document registry utility in Hong Kong, in collaboration with banks and service/infrastructure providers

Benefits

Enhances bank visibility, boosts fraud detection, and increases lender confidence, potentially expanding trade finance availability. It also provides real-time and historical data access, enabling more informed decision-making and effective risk management

Implementation complexity

Necessitates robust technical infrastructure with standardised data formats, advanced cybersecurity for data protection, process and system configuration for data upload by banks, and securing buy-in from banks, trade finance providers, and regulators

Dependencies

Successful implementation of the trade finance document registry depends on government policy support and funding, the labor-intensive upload of historical invoices for useful bank data, active participation from a majority of banks. Additionally, buy-in from traders and the wider industry is essential

**PILLAR****"Infrastructure"**

Improve digital trade infrastructure

**FOUNDATION****Digital identity and payments**

Adopt standardised digital identities and explore new payments methods to enhance trust and efficiency in trade

12 Promote digital identity in trade transactions**Responsible party**

Digital Policy Office

**Key input providers**

HKMA – CDI

Initiative Description

- Adopt standardised digital identities such as CorpID and LEI ensure that parties in trade transactions are verifiable and trustworthy, decreasing risk of fraud and fostering trust throughout the value chain
- The use of digital identities, combined with cryptographic techniques, can be used to standardise digital 'signing' of trade documents enable easier authentication
- Consistent adoption of digital identities would also support consent management in CDI for trade data sharing, enabling easier flow of data to banks in support of SME financing
- In addition to entity identifiers, globally recognised digital product level identifiers (such as GS1's GTIN) and location identifiers enhance accuracy and traceability throughout the supply chain



Goal: Promotion and adoption of standardised digital identities in trade finance data infrastructures in Hong Kong

Benefits

Builds trust among banks, businesses, and regulators, facilitating smoother and more secure transactions. Digital identities will also simplify onboarding processes for business and individuals, and simplify compliance with regulatory requirements related to identity verification, KYC/KYCC and AML screening

Implementation complexity

Integrating the CorpID system into trade finance platforms requires significant technical resources, standardised protocols for digital identity verification, and policies for issuance, management, and interoperability both domestically and internationally

Dependencies

Requires coordinated efforts between public and private sectors, including banks and Fintechs, for seamless integration in trade finance, supported by the adoption of Model Law on Identity and Trust services to ensure a standardised legal framework for cross-jurisdictional validity and enforceability

**PILLAR****"Infrastructure"**

Improve digital trade infrastructure

**FOUNDATION****Digital identity and payments**

Adopt standardised digital identities and explore new payments methods to enhance trust and efficiency in trade

13**Explore innovative payment mechanisms**

Responsible party HKMA



Key input providers Banks, Fintechs

Initiative Description

- Explore new payment methods such as Central Bank Digital Currencies (CBDCs), tokenised deposits and licensed stablecoins for trade finance to reduce costs, enhance security, and improve settlement efficiency
- Encourage the use of CBDC, tokenised deposits and/or licensed stablecoins in trade settlements and cross-border payments through measures such as the HKMA's Project Ensemble
- Integrate the payment data (e.g. on-chain data) into CDI to enable more transparency on trade payment flow



Goal: Continue conducting investigations into new payment methods such as CBDC, tokenised deposits and/or licensed stablecoin. Encourage their adoption for trade settlements and cross-border payments, integrating the payment data into CDI

Benefits

Reduced transaction costs and intermediaries' fees, along with near real-time payment settlements providing quicker access to working capital. Enhanced transparency, programmability and traceability of payment flows reduces money laundering and fraud risks

Implementation complexity

Developing technical infrastructure, such as blockchain and digital wallets, requires compliance with complex regulations and compatibility with existing financial systems and digital payment solutions

Dependencies

The implementation of a robust legal and regulatory framework for licensed stablecoins, as outlined in Hong Kong's 2025 Policy Address. Additionally, support from banks, business and regulatory bodies

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Connectivity with key trade corridors**

Strengthen connectivity with other jurisdictions to support trade flows with key trade corridors

14 Strengthen Chinese Mainland connectivity

Responsible party HKMA, CEDB



Key input providers Relevant Chinese Mainland authorities

Initiative Description

- To further deepen economic and trade cooperation between Chinese Mainland and Hong Kong, enhance connectivity across the trade data ecosystem, including enabling data interchange between digital infrastructures in Hong Kong and relevant Mainland data providers such as Credit Reference Agencies via CDI, while enhancing connectivity between the single windows of the Chinese Mainland and Hong Kong
- CEDB and the General Administration of Customs of the People's Republic of China (GACC) signed the Cooperation Arrangement on Single Window in May 2025 to strengthen collaboration and enhance system connectivity. The Mainland-Hong Kong "Single Submission for Dual Declaration" Scheme was launched and will be reprovisioned in Phase 3 of Trade Single Window
- Deepen GBA multimodal integration to support increased cross-boundary trade from shift of maritime transport to Chinese Mainland ports and increased use of Hong Kong airport for high-value, low-weight goods



Goal: Integration with the Chinese Mainland's trade data ecosystem and ports, including data interchange between digital infrastructures in Hong Kong and Chinese Mainland Credit Reference Agencies via CDI, and system connectivity between the single windows of Chinese Mainland and Hong Kong

Benefits

Positioning Hong Kong as a premier international trade hub, the integration of GBA's transport networks and adoption of shared data standards enhances competitiveness, efficiency, and transparency, boosting access to trade finance and services while connecting Chinese Mainland to ASEAN and the Middle East

Implementation complexity

Establishing connection to CDI of Chinese Mainland platforms either directly or via other data providers. Agreeing common data standards between Chinese Mainland and Hong Kong, alongside harmonising regulations, to ensure seamless and legal data exchange

Dependencies

Seamless data exchange between Chinese Mainland and Hong Kong requires mature digital infrastructure, legal frameworks, and active support from businesses, government agencies, and stakeholders

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Connectivity with key trade corridors**

Strengthen connectivity with other jurisdictions to support trade flows with key trade corridors

15 Explore ASEAN Single Window connectivity

Responsible party CEDB



Key input providers Relevant ASEAN member state
Government B/Ds

Initiative Description

- Explore the merits of establishing connections with ASEAN Single Window to facilitate data exchange of trade documents, as announced in the 2025 Policy Address ("the Government will discuss the possibility of connecting the TSW with ASEAN Single Window")
- In theory, by enabling digital exchange of trade documents (e.g. Certificates of Origin) among Hong Kong and ASEAN member states through single window cooperation, it would enhance the efficiency, transparency and security of trade transactions between both sides
- As production diversifies, ASEAN member states are emerging as key trade partners for Hong Kong, and Export Panel banks are seeing greater volumes of trade with these jurisdictions



Goal: Establish connections with ASEAN Single Window

Benefits

Streamlining customs processes and exchanging data through single windows could potentially improve compliance and traceability, reduce fraud, and support trade finance automation, enhancing credit access and Hong Kong's position as a preferred ASEAN trade hub

Implementation complexity

Technical integration between Hong Kong's TSW and ASEAN Single Window requires compatibility, adoption of common data formats and protocols, aligned legal frameworks, and coordinated customs procedures

Dependencies

Mature digital infrastructures and strong partnerships between Hong Kong and ASEAN member states, along with active involvement from regional businesses, government agencies, and logistics providers, are essential for supporting TSW connectivity

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Connectivity with key trade corridors**

Strengthen connectivity with other jurisdictions to support trade flows with key trade corridors

16**Connect with overseas trade corridors**

Responsible party HKMA



Key input providers International data providers

Initiative Description

- Connect data providers, such as e-ports, from jurisdictions of key trading partners and key trading regions (e.g. ASEAN, Regional Comprehensive Economic Partnership, etc.) into the CDI platform to expand trade data availability
- Access to digitised cargo and trade data would allow trade finance banks to gain a more comprehensive picture of their customers' trade activities and supply chain relationships, reducing the manual operations in bank processes such as Know Your Customer, Know Your Customer's Customer, trade finance application and drawdowns, and transaction monitoring processes



Goal: Connection with data providers, including e-ports from other jurisdictions such as ASEAN, to the CDI platform to expand trade data availability

Benefits

Access to comprehensive data from multiple jurisdictions enhances analysis and decision-making. Automated data exchange reduces processing time, speeds up transactions, and improves trade finance visibility for efficient fraud detection

Implementation complexity

Integrating logistics data involves technical challenges in standardisation and legal complexities related to data sharing and usage rights from participating platforms

Dependencies

Data exchange requires individual commercial agreements, with adoption influenced by data aggregation methods and the willingness of international Data Providers to connect with CDI

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Connectivity with key trade corridors**

Strengthen connectivity with other jurisdictions to support trade flows with key trade corridors

17**Adopt globally interoperable data and documentary standards**

Responsible party ICC DSI



Key input providers BSIH and relevant Government B/Ds

Initiative Description

- Align Hong Kong's adoption of standards for trade and commercial data with global best practice to ensure interoperability of data exchange with other jurisdictions
- Establish common definitions and formats aligned with international standards (UN/EDIFACT) for seamless trade documents and data exchange, and to enable end-to-end digital transmission
- Establish data structure that harmonises with existing standards set by international organisations, for data fields including location (e.g. UN/LOCODE, GS1 GLN, ISO 3166-1), party identifiers (e.g. LEI ISO 17442, DNB DUNS, W3C DID), goods description (HS codes, GS1 GTIN, UN/ECE Codes for Unit of Measure Used in International Trade, UNDG dangerous goods), equipment and vessel ID (e.g. IDO 6436, IATA ULD, IMO Ship ID, ICAO aircraft registration)



Goal: Align Hong Kong's trade and commercial data standards with global best practices, establishing common definitions and formats, while harmonising with standards set by international organisations like ISO, WTO, and ICC

Benefits

Facilitating efficient cross-border data and document exchange reduces processing time, customs friction, and manual intervention, enhancing Hong Kong's leadership in digitising and modernising trade

Implementation complexity

Alignment on optimal data standards and protocols, compliant with local laws, requires ongoing governance to adapt to evolving global standards in Hong Kong

Dependencies

Relies on legal frameworks that align with global standards and the corresponding legislation and administrative processes of foreign jurisdictions

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Overall ecosystem enhancements**

Enhancements to supply chain and related financial ecosystem

18**Enhance Hong Kong's supply chain and related financial ecosystem****Responsible party**

HKMA and relevant Government B/Ds, banks

**Key input providers**

Industry stakeholders

Initiative Description

- Riding on the digitalisation initiatives and leveraging on Hong Kong's strengths as an international financial centre, to explore further development of Hong Kong's supply chain and related financial system by introducing a set of comprehensive policy measures, such as:
 - Strengthen Hong Kong's position as a global supply chain hub by incentivising multinational corporations to expand corporate treasury and headquarter activities in the city
 - Enhance the banking sector's network capabilities and expertise in the regional markets to better serve corporates operating across Southeast Asia and other emerging markets



Goal: Develop Hong Kong as a global hub for supply chain and related financial activities

Benefits

Developing Hong Kong as a global hub for supply chain and related financial activities will boost its attractiveness for multinational companies and SMEs to set up supply chain headquarters, while creating new business opportunities for Hong Kong's financial sector

Implementation complexity

Implementing new initiatives requires cross-departmental coordination, comprehensive study, business case development, and the facilitation of knowledge-sharing across sectors

Dependencies

Establishing active and collaborative dialogues between the banking industry and key supply chain stakeholders, and securing engagement from multinational corporations and global logistics providers are crucial for sustainable development

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Overall ecosystem enhancements**

Enhancements to supply chain and related financial ecosystem

19**Enhance receivables financing in trade financing**

Responsible party HKMA



Key input providers Industry stakeholders

Initiative Description

- Encourage banks to provide efficient receivables financing to supplier of major anchor buyers
- Engage with banks to identify key friction points
- Facilitate discussions and explore solutions with the industry to streamline the operations



Goal: Streamline the assignment of receivables for financing

Benefits

Improving liquidity for SMEs and global suppliers, reducing the trade finance gap by enabling the assignment of receivables for financing, and strengthening Hong Kong's position as a leading supply chain finance hub

Implementation complexity

Establish support from the industry that fully enables the assignment of receivables

Dependencies

Alignment among the industry to design and adopt common receivables financing products tied to invoices

**PILLAR****"Connectivity"**

Increase connectivity and maintain Hong Kong's competitiveness as a trade hub

**FOUNDATION****Overall ecosystem enhancements**

Enhancements to supply chain and related financial ecosystem

20 Increase trade credit insurance availability

**Responsible party**

Trade credit insurers

**Key input providers**

Banks, HKMA

Initiative Description

- Expand trade credit insurers' reach by extending their product offerings to include investment insurance products to provide risk mitigation for investments in foreign markets, aligning with offerings of other Export Credit Agencies (e.g. United Kingdom, France) and multilateral banks (World Bank, Asian Development Bank (ADB))
- Promote increased availability by banks of export guarantee or insurance policy financing, which uses the trade credit insurers' guarantee or insurance as a mitigant for the risk of non-payment or default, to help companies access more financing and liquidity by unlocking the cash value of insurance policies
- Encourage trade credit insurers to enhance efficiency and streamline operations (e.g. underwriting, due diligence, claims) by leveraging data-driven processes through the use of trade and cargo related data



Goal: Expansion of trade credit insurers' product range that includes investment insurance products, and promotion of bank policy financing

Benefits

Reducing financial risks boosts confidence among Hong Kong companies, encouraging international trade, increasing SME access to trade finance, facilitating larger deals, and enhancing Hong Kong's competitiveness as a global trade hub

Implementation complexity

Extending into new product lines will require developing robust risk assessment models and specialised expertise, and implementing extensive marketing and customer education efforts

Dependencies






Cooperation between insurers, banks, and trade organisations, is needed to promote trade credit insurance and develop standardised processes and guidelines



6.5 Benefits to stakeholders



Hong Kong's status as a leading trade finance hub requires a collaborative effort among all stakeholders within the trade finance ecosystem. Implementing the 20 actionable recommendations outlined in the Cargo^x vision, will bring the following benefits to each stakeholder in the ecosystem:

	BENEFITS
 SMEs	<ul style="list-style-type: none"> • SMEs will gain greater control over their data ownership, enabling them to effectively utilise it in trade financing • Enhanced access to financing options, and improved cash flow • Streamlined trade finance processes leading to cost and time savings • Increased global market reach and competitiveness
 Data Consumers / Banks	<ul style="list-style-type: none"> • Improved risk management and decision-making through better data insights. • Reduction in processing times and costs with alternative data and automated solutions • Expanded client base through enhanced service offerings
 Data Providers	<ul style="list-style-type: none"> • Increased customer loyalty and demand for analytical services as data consumers are able to access the relevant data more efficiently • Opportunities for co-development of digital tools and solutions
 Logistics Service Providers	<ul style="list-style-type: none"> • Reduced paperwork and manual errors, increasing efficiency in managing logistics and supply chains • Faster and more cost-effective shipment processing
 Hong Kong	<ul style="list-style-type: none"> • Modernisation of Hong Kong's trade finance ecosystem will lead to more robust and advanced digital infrastructure • Strengthened position as a global trade hub and enhanced reputation as a leader in digital trade finance solutions • Economic growth through increased trade volumes and connections

07

Roadmap

7.1

Project Cargo^x Roadmap

The future roadmap for implementing the recommendations set forth in this report (Figure 14) is designed to strategically guide Hong Kong's trade finance sector toward enhanced competitiveness and sustainable growth. It balances immediate and future goals to foster a digitally integrated trade hub.

The HKMA will play a critical role in implementing the roadmap by collaborating with relevant public bodies, private organisations, and the Expert Panel to execute the report's recommendations. Additionally, the HKMA will convene targeted meetings with specific Expert Panel members as needed to gather insights and feedback for the pilot trials.

Horizon 1: Short term impact

In the short term, Horizon 1 actions focus on increasing trade data availability and laying the foundations for digital trade. Integrating strategic government logistics and customs data into the Commercial Data Interchange (CDI), banks gain access to crucial digital trade data, enabling to address key trade finance use cases more effectively. Over time, additional sources of trade-related data from other providers will be connected to CDI to complement these government datasets. Overlaying borrower cash flow data and developing credit scoring models developed specifically for SMEs further increases banks' ability to streamline data flows,

improve credit assessments, and enhance the efficiency of trade finance operations.

Horizon 2: Building on momentum

The second horizon commences upon the successful completion of several foundational trade infrastructure projects. These include the comprehensive rollout of CorpID digital identification, the full implementation of the Trade Single Window (TSW), and the enactment of legislation aligned with the MLETR. With these essential elements in place, the focus of this next phase will shift to leveraging the newly enhanced trade infrastructure to accelerate the adoption of digital trade documents and to increasing connectivity with key international trade corridors that enable the seamless flow of digital trade documents and data.

Horizon 3: Broadening connectivity

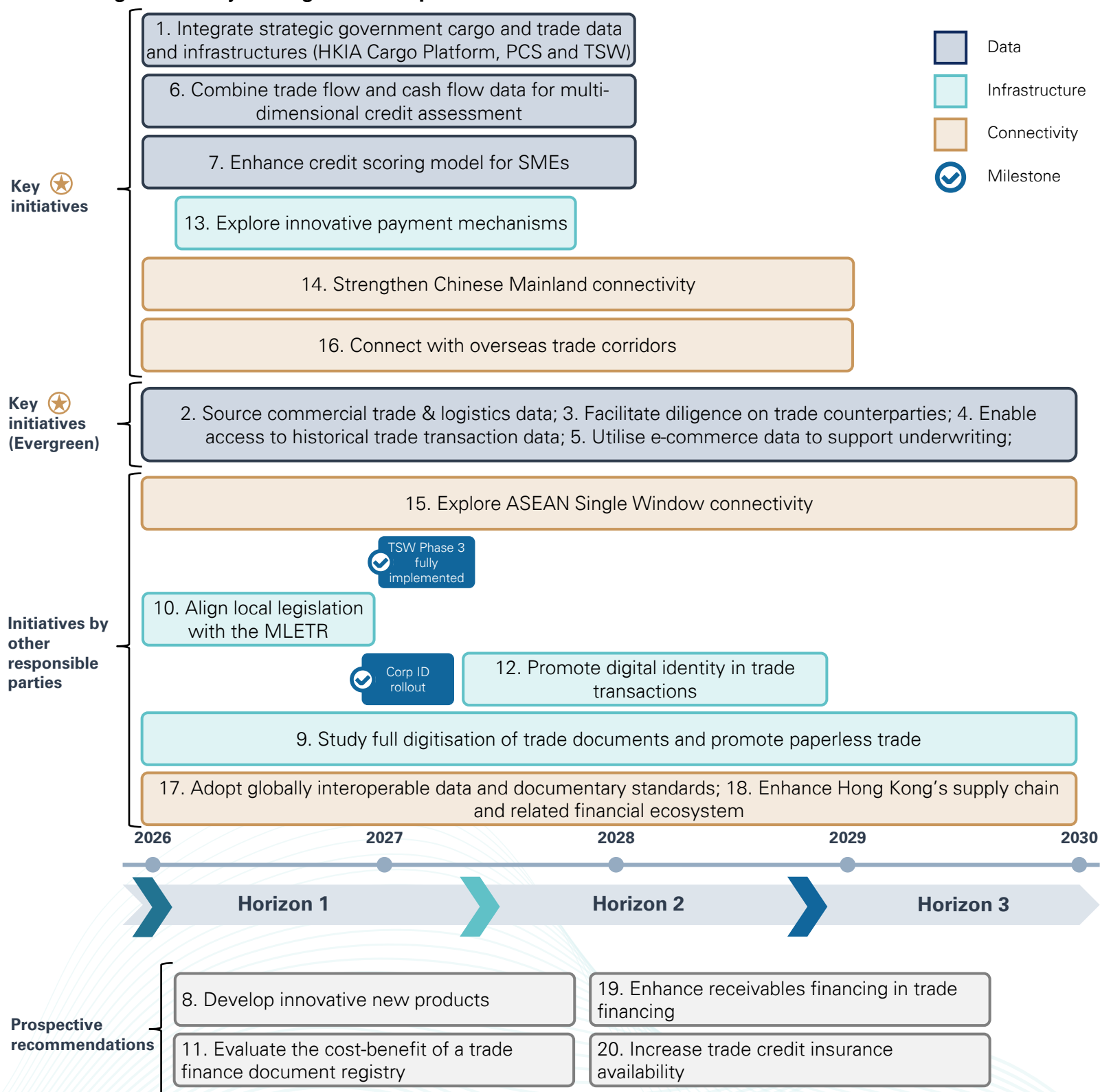
Horizon 3 marks the full realisation of Hong Kong's vision as a globally connected digital trade hub. Building on the robust infrastructure and enhanced connectivity from Horizon 2, Project Cargo^x will fully leverage these foundations to expand digital capabilities and seamlessly integrate data exchange with international partners. By its conclusion, Hong Kong will stand as a leading, highly efficient, and globally integrated digital trade hub.

Beyond these distinct horizons, the roadmap also incorporates a set of 'evergreen' initiatives. These are continuous efforts designed to ensure sustained growth and adaptation within the digital trade ecosystem, focusing on ongoing data integration, promoting paperless trade, adopting global standards, and enhancing Hong

Kong's role as a supply chain hub.

Collectively, this comprehensive roadmap provides a robust framework for action. It aims to cement Hong Kong's position as a leader in digital trade, boosting its competitiveness, and ensuring sustainable growth well into the future.

Figure 14: Project Cargo^x Roadmap





08 Appendix

8.1 Acknowledgements



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Project Cargo^x Inaugural Meeting, April 2025



Members of the Expert Panel on Cargo^x (in alphabetical order)

- Airport Authority Hong Kong
- Bank for International Settlements Innovation Hub Hong Kong Centre*
- Bank of China (Hong Kong) Limited
- Bank of East Asia, Limited (The)*
- Coface Greater China Services Limited
- Commerce and Economic Development Bureau*
- Dah Sing Bank, Limited*
- DBS Bank (Hong Kong) Limited*
- Dun & Bradstreet (HK) Limited
- FreightAmigo Services Limited
- Fung Group (participating through HKUST Li & Fung Supply Chain Institute)
- GS1 Hong Kong
- Hang Seng Bank Limited
- Hong Kong Export Credit Insurance Corporation
- Hong Kong Monetary Authority
- HongKong and Shanghai Banking Corporation Limited (The)
- Industrial and Commercial Bank of China (Asia) Limited*
- International Chamber of Commerce Digital Standards Initiative
- Lloyd's List Intelligence*
- Logistics and Supply Chain MultiTech R&D Centre
- Shanghai Commercial Bank Limited
- Standard Chartered Bank (Hong Kong) Limited
- Tradelink Electronic Commerce Limited
- Transport and Logistics Bureau



The Cargo^x Year-End Forum, held in December 2025, convened 24 expert panel members both in person and virtually to finalise the Recommendation Report

Note: * indicates new members who have joined after the Expert Panel for Project Cargo^x was established in April 2025



8.2 Estimated trade finance gap calculation methodology



The estimated trade finance gap in Hong Kong was calculated using two different approaches, establishing a range for the gap. The assumptions underlying these calculations were validated by the Expert Panel.

Approach 1

The first approach started with the total approved outstanding trade finance loans and advances to customers in 2024 (HKD 500.9b), as reported in bank annual reports and published on the HKMA's Register of AIs & LROs²⁹. The average credit application approval rate the Asian Development Bank (ADB) estimated²⁶ (65.7%) was then used to extrapolate the amount of trade finance that was applied for, but not approved (HKD 261.5b). The amount of trade finance required, but for which a loan application was not submitted, was estimated using the average number of SMEs that reported needing but not having applied for credit in the Census and Statistics Department Monthly Survey on the Business Situation of SMEs % of companies, between 2022-2024⁵⁶. This yielded an estimate trade finance gap in Hong Kong of HKD 519b³³.

Approach 2

The second approach sought to identify the trade finance gap for SMEs specifically. Starting with the total number of SMEs in Hong Kong as at June 2025¹⁰ (353,075), the number of SMEs with trading activities that would be eligible for trade and working capital finance was estimated by sector – representing 51 % of SMEs, or 181,480 companies. An average loan size of HKD 5m and the ADB's average global rejection rate of 34.3%²⁶ were applied, yielding an estimate trade finance gap for SMEs of HKD 311.2b³³.

Combining these two different approaches, an estimated trade finance gap range in Hong Kong of HKD 311.2b – 519.1b was derived.

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8.3 List of Abbreviations



- **AAHK:** Airport Authority Hong Kong
- **AML:** Anti-Money Laundering
- **ASEAN:** Association of Southeast Asian Nations
- **B/D:** Bureaux / Departments
- **BISIH:** Bank for International Settlements Innovation Hub
- **CAGR:** Compound annual growth rate
- **CBDC:** Central Bank Digital Currency
- **CCRA:** Commercial Credit Reference Agency
- **CDI:** HKMA's Commercial Data Interchange
- **CEDB:** Commerce and Economic Development Bureau
- **CorpID:** Digital Corporate Identity
- **DPO:** Digital Policy Office
- **EUDI:** European Digital Identity
- **GBA:** Guangdong–Hong Kong–Macao Greater Bay Area
- **GDP:** Gross Domestic Product
- **Govt.:** Government
- **HKSAR:** Hong Kong Special Administrative Region
- **HKD:** Hong Kong Dollar
- **HKIA:** Hong Kong International Airport
- **HKMA:** Hong Kong Monetary Authority
- **ICC:** International Chamber of Commerce
- **ICC DSI:** The ICC Digital Standards Initiative
- **Int'l:** International
- **ISO:** International Organisation for Standards
- **ITIB:** Innovation, Technology and Industry Bureau
- **KYC:** Know Your Customer
- **KYCC:** Know Your Customer's Customers
- **L/C:** Letter of Credit
- **LEI:** Legal Entity Identifier
- **MLETR:** Model Law on Electronic Transferable Records
- **Orgs:** Organisations
- **PCS:** Port Community System
- **SME:** Small and Medium Enterprise
- **TFR:** Trade Finance Registry
- **TLB:** Transport and Logistics Bureau
- **TSW:** Trade Single Window
- **UN:** United Nations
- **UNCITRAL:** United Nations Commission on International Trade Law
- **USD:** United States Dollar
- **WTO:** World Trade Organisation



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