

Project Summary Report

Study on Best Practices in APEC Customs Administrations' Responses to Cross-Border E-Commerce

APEC Sub-Committee on Customs Procedures

July 2026



**Asia-Pacific
Economic Cooperation**



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1. Executive summary

This report presents the results of the APEC project proposed by the Republic of Korea and co-sponsored by Japan; Peru; and the United States, titled “Study on Best Practices for Using New Technologies and Innovative Solutions in Cross-Border E-Commerce: Focus on Customs Risk Management System and Customs-Business Cooperation.”

Following the COVID-19 pandemic, one of the most significant changes in global trade has been the rapid expansion of cross-border e-commerce (CBEC). As a result, there has been an explosive increase in low-value and small consignments delivered through express carriers and international postal services.

In response to this evolving customs environment, the project aimed to explore ways to ensure both the smooth and expedited clearance of e-commerce goods at the border and the effective management of associated risks. It further sought to enhance the customs administration capacity across the APEC region by facilitating the exchange of innovative solutions and new technologies among member economies.

To achieve these objectives, the project carried out two main activities—a research study and a workshop—under the auspices of the APEC Sub-Committee on Customs Procedures (SCCP).

The research systematically collected and analyzed key practices related to customs procedures, de minimis thresholds, advance electronic data, risk management, technology adoption, and public–private cooperation. This analysis was based on a review of major international discussions and a survey of APEC member economies. Drawing on these findings, the study derived customs administration strategies and policy implications for effectively managing the CBEC environment.

The APEC CBEC Workshop brought together officials from the customs administrations of international organizations and APEC member economies,

as well as private-sector experts. Through presentations and discussions, participants shared experiences and best practices, contributing to the capacity building of customs officials and stakeholders.

Through these activities, the project identified four key elements essential for effectively responding to the CBEC environment:

- Advanced data-driven risk management
- Specialized customs models for e-commerce
- Expanded application of advanced technologies, including AI
- Strengthened customs–private sector cooperation

2. Introduction

Cross-border e-commerce has shown continuous growth over the past several years and has now become a core component of international trade. As global consumers are increasingly able to purchase a wide range of foreign products directly through online platforms, micro, small, and medium-sized enterprises (MSMEs) have gained broader access to international markets and new opportunities for growth.

The APEC region, home to many of the world’s leading e-commerce platforms and logistics networks, is widely regarded as the center of global e-commerce growth. Consequently, customs policies and clearance procedures related to cross-border e-commerce hold significant importance within the APEC framework.

However, cross-border e-commerce differs fundamentally from traditional business-to-business (B2B) trade. Its defining features—consumer-oriented transactions (B2C and C2C), low-value and small consignments, express and postal delivery channels, and shorter transaction cycles—have revealed the limitations of existing customs clearance systems. These structural shifts have led to challenges such as clearance delays, gaps in risk management, and difficulties in revenue collection.

Recognizing the need for a new customs administration paradigm suited to

the e-commerce environment, APEC member economies have increasingly sought to identify and share best practices. This project was designed in response to that recognition, with the aim of exploring and disseminating exemplary approaches to CBEC-related customs procedures and risk management.

3. Background and Overview of Common challenges

The rapid expansion of cross-border e-commerce has presented a set of common challenges for customs administrations across the APEC region.

First, the surge in low-value and small consignments has significantly increased the workload of customs authorities. Since e-commerce shipments are processed on an individual transaction basis, they have placed substantial pressure on existing customs personnel and infrastructure.

Second, there is a lack of customs procedures and systems tailored to e-commerce. In many member economies, the conventional B2B-oriented clearance framework is still applied, resulting in limitations in processing efficiency and scalability.

Third, there is an increased risk of illicit and hazardous goods entering through e-commerce channels. Cases involving narcotics, counterfeit goods, and prohibited or restricted items concealed within small parcels have been on the rise. However, limited inspection personnel, insufficient monitoring equipment, and constraints in data utilization make it difficult to effectively identify high-risk shipments.

Fourth, tax evasion through the abuse of de minimis thresholds has become a growing concern. Practices such as under-declaration and splitting orders have led to revenue losses and raised issues of tax fairness.

Fifth, there remain institutional and capacity gaps among member economies. Differences in digital infrastructure, legal and regulatory frameworks, and

human resource capacity hinder the consistency and predictability of customs clearance processes across the region.

4. Project Overview and Methodology

This project was conducted through an integrated approach combining research and capacity-building workshops.

First, a research report analyzing APEC member economies' adaptation efforts for cross-border e-commerce (CBEC), including policy, regulatory, and operational practices, was completed in September 2025. The study conducted a comprehensive review of key issues—such as simplified clearance procedures, de minimis thresholds, the use of advance electronic information, risk management, the adoption of new technologies, and public–private partnerships—based on a literature review and questionnaire surveys.

Building on the research findings, an APEC CBEC Workshop was held in July 2025 in Songdo, Republic of Korea, to disseminate the results and promote experience sharing among member economies. The workshop featured presentations by experts from both the public and private sectors.

The main outputs of this project are as follows:

- A research report analyzing the current status and common challenges of APEC member economies in responding to cross-border e-commerce (CBEC), and documenting best practices in customs administration using new technologies and innovative solutions
- An APEC CBEC Workshop that shared cases in policy and technology implementation as well as on-site operational practices, and promoted capacity building
- A customs administration exhibition showcasing AI-based solutions currently applied in e-commerce clearance

The research and workshop outcomes confirmed that data-driven risk management, e-commerce–specific clearance models, the strategic use of

advanced technologies, and strengthened cooperation between customs authorities and the private sector are key elements for effectively responding to the cross-border e-commerce environment.

5. Workshop Background

During the Second APEC SCCP Meeting held on 30 July 2025, a face-to-face workshop on cross-border e-commerce took place.

The workshop provided an opportunity for customs officials and private-sector experts from each economy to exchange knowledge and experiences. Based on the discussions, participants were able to further enhance and strengthen their customs administration capacities and response measures to address the rapid growth of e-commerce volumes.

Public- and private-sector experts in CBEC from 21 APEC member economies participated in the workshop, with one participant from each travel-eligible economy supported by APEC travel funding.

Presentations and discussions focused on the latest trends in e-commerce, trade facilitation measures, advanced clearance procedures, and best practices for strengthening cooperation between customs authorities and businesses.

Following the workshop, an “Exhibition of AI-Driven Customs” was held to showcase innovative solutions adopted by government agencies and industry. The exhibition provided a platform for member economies to share their experiences and best practices in using artificial intelligence to streamline customs procedures for CBEC goods.

Both the workshop and the exhibition received positive feedback from participants, reaffirming the importance of public–private cooperation and technological innovation in enhancing the efficiency and security of cross-border e-commerce within the APEC region.

6. Workshop Session Summary and Key Points

Session 1: Cross-Border E-Commerce Issues and Global Trends

Session 1 examined the structural changes that the rapidly growing volume of cross-border e-commerce within the APEC region is bringing to customs clearance, risk management, and taxation systems. The session discussed relevant international standards and policy directions to address these challenges. Speakers highlighted common issues such as processing delays caused by increasing shipment volumes, tax evasion through undervaluation and split shipments, data inconsistencies, and the rise in high-risk goods.

They emphasized the importance of pre-arrival data-based risk management, standardized data exchange, the adoption of international standards and technologies, and strengthened regional cooperation.

1.1 Presentation of the Project Background & Key Contents

This presentation aimed to outline the impact of the rapid growth of cross-border e-commerce in the APEC region on customs procedures, risk management, and taxation systems, and to propose practical measures for improvement.

The global e-commerce market expanded from USD 2.9 trillion in 2018 to USD 5.8 trillion in 2023, representing an average annual growth rate of 14.6%. As frequent shipments of low-value, small parcels have become the norm, APEC customs administrations are facing unprecedented challenges, including severe workload pressures and data inconsistencies.

The presentation identified the following key challenges arising from these changes:

- Processing delays due to surging cargo volumes
- Incompatibility with existing clearance procedures
- An increase in high-risk goods

- Inconsistent data exchange across e-commerce platforms and express carriers
- Shortages of workforce and facilities
- Growing tax evasion through undervaluation and split shipments

In particular, difficulties in securing accurate and relevant data were identified as a major factor undermining the accuracy of customs risk analysis.

To address these challenges, the following countermeasures were proposed:

- Digital transformation of risk management systems based on pre-arrival data
- Development of e-commerce–specific clearance models
- Expanded use of advanced technologies such as AI, X-ray scanners, and data analytics
- Reassessment of taxation frameworks for low-value goods
- Enhanced data sharing and public–private cooperation across e-commerce platforms, express carriers, and postal operators
- Harmonization of relevant international standards and procedures

In conclusion, the presentation emphasized the need for APEC customs administrations to move away from traditional bulk-cargo–oriented systems and jointly develop new clearance and risk management frameworks tailored to e-commerce at the regional level.

1.2 Framework of Standards on Cross-Border E-commerce

This presentation aimed to explain the structure and key principles of the World Customs Organization (WCO)'s Framework of Standards on Cross-Border E-Commerce (FoS) and to introduce the implementation tools, best practices, and update mechanisms available to Member administrations.

With 186 Members across six regions and coverage of approximately 98% of global international trade, the WCO's FoS functions in practice as a global common framework. The presentation highlighted that, alongside the rapid growth of global e-commerce, the growing frequency of low-value shipments has intensified customs workloads as well as taxation, safety, and security risks.

To address these challenges, the following components of the FoS were introduced:

- 16 Standards
- 8 Guiding Principles
- The E-Commerce Package
- Best Practices
- Regular update mechanisms

The presentation explained how each of these elements can be used by Member administrations in the design and implementation of domestic e-commerce policies and procedures.

Recognizing that cross-border e-commerce is driving structural changes that require a fundamental redesign of traditional customs systems, the presentation emphasized that customs administrations should refer to the WCO FoS to simultaneously pursue:

- Pre-arrival data-based risk management
- A balance between streamlined customs procedures and fair revenue collection
- Active adoption of advanced technologies
- Promotion of public-private cooperation and capacity building

1.3 Technological Innovation and Investment Support Programs

This presentation aimed to review the current status of e-commerce facilitation in the Asia-Pacific region and to examine the need to facilitate trade through technological innovation and investment support programs.

According to the results of the UN Global Survey on Digital and Sustainable Trade Facilitation, the implementation rate of General and Digital Trade Facilitation Measures in the APEC region stands at 87%, significantly higher than the global average of 70.4%. However, disparities remain among economies in specific areas such as legal frameworks, pre-arrival data exchange, and the adoption of immediate release and AEO systems.

The presentation provided a balanced assessment of both the potential and limitations of emerging technologies such as blockchain and artificial intelligence (AI). It emphasized the need to systematically promote the following through support programs offered by regional and international organizations, including ASEAN, the EU, the Pacific region, and the United Nations:

- Institutional modernization
- Regulatory harmonization
- Expansion of digital infrastructure

In conclusion, while the APEC region already demonstrates relatively high levels of trade and digital capacity, the presentation highlighted that regulatory harmonization, interoperability among digital trade systems, and the development of dedicated support programs for e-commerce facilitation should be key priorities going forward.

Session 2: Customs Administration for E-commerce Clearance Facilitation

Session 2 shared, in presentation order, the e-commerce clearance challenges and customs response strategies of Chile; Japan; Korea; Thailand; and the United States.

Japan and Thailand reported that the rapid growth of e-commerce imports has been accompanied by risks such as the misuse of low-value thresholds, undervaluation, and an increase in intellectual property rights (IPR)

infringements and narcotics. They presented hybrid clearance models that combine simplified procedures with risk-based inspections.

Korea (KCTDI) introduced a public–private cooperation model centered on airport and seaport express cargo centers, integrating risk management, X-ray inspections, and automated sorting systems. The presentation highlighted achievements such as reduced clearance times and lower logistics costs.

Chile presented a digital VAT system that shifts the point of VAT collection from the border to the point of sale and assigns collection and reporting responsibilities to platforms, sellers, and payment service providers, thereby addressing revenue leakage.

The United States shared its data-driven pilot initiatives, including the Section 321 Data Pilot and the Entry Type 86 Test, which were launched to respond to the surge in de minimis shipments. These initiatives demonstrated tangible benefits such as enhanced pre-arrival data collection, earlier identification of high-risk goods, and reduced administrative workloads.

2.1 Challenges and Customs Responses (JAPAN)

This presentation aimed to explain the key challenges faced by Japan Customs in response to the rapid growth of cross-border e-commerce, as well as the measures taken to address them.

Over the past five years, Japan’s e-commerce import volumes have increased dramatically, with:

- Air cargo rising by 319%
- Sea cargo rising by 212%

In parallel, the number of detected cases involving intellectual property rights (IPR) infringements and narcotics has also increased, leading to a sustained accumulation of customs workloads. In addition, e-commerce–specific risk factors have been identified, including false declarations by non-resident importers, declaration errors when using fulfillment services, and undervaluation.

To respond to these challenges, Japan Customs has implemented the following measures:

- Introduction of simplified clearance procedures for low-value shipments, with expansion to sea cargo from 2025
- Strengthened information sharing and cooperation with e-commerce platforms (e.g. Amazon, Rakuten)
- Establishment of a pre-arrival data exchange system with the express delivery industry
- Expansion of risk management data elements (mandatory inclusion of e-commerce platform name, e-commerce indicator, delivery address, etc.)
- Improvement of the Customs Procedures Agent (CPA) system for non-resident importers

The presentation concluded by emphasizing that the expansion of cross-border e-commerce is structurally transforming Japan's customs environment and that establishing an effective response framework is an urgent priority for Japan Customs.

2.2 Challenges and Customs Responses (THAILAND)

Thailand's presentation focused on the cross-border e-commerce consignments by land transport and highlighted the clearance risks that have emerged as a result of the recent increase in low-value shipments, along with the corresponding response measures.

Between 2022 and 2024:

- The value of shipments increased by approximately 604%
- The volume of shipments increased by approximately 327%

Various risk factors were identified, including the misuse of low-value thresholds, undervaluation, and the concealment of prohibited and restricted goods.

In response, Thailand Customs is implementing:

- Enhanced risk management–based inspections
- Strengthened pre-arrival security screening requirements for express carriers

Given the rapid pace of growth in shipment volumes, the presentation emphasized that continuous institutional improvements and strengthened public–private cooperation are essential.

2.3 Facilitation of Express Cargo Clearance (KCTDI)

Since 2016, Korea has progressively established Express Cargo Centers at major airports and seaports to respond to the rapidly growing volume of express cargo and the increasing demand for fast cross-border e-commerce (CBEC) clearance.

These centers operate under an integrated structure that brings together key procedures, including:

- Risk management
- Automated inspections (X-ray)
- Electronic declarations
- Automated sorting

The system is based on a public–private partnership model between the Korea Customs Service (KCS) and the Korea Customs and Trade Development Institute (KCTDI).

As a result of these operations, tangible outcomes have been achieved, including:

- Reduced average clearance time
- An increased proportion of shipments cleared within 150 seconds
- Lower logistics costs

Looking ahead, the presentation outlined plans to further advance toward a more intelligent clearance system through:

- AI-based risk management
- Upgraded automation equipment
- The development of a multilateral data connectivity platform

2.4 Challenges and Customs Responses (CHILE)

Between 2019 and 2024, Chile received more than 50 million CBEC shipments annually through international postal (UPU) and courier channels. As of 2024, the volumes had increased to approximately:

- 32.8 million express shipments
- 21.1 million postal shipments

With this surge in volume, several challenges have intensified, including:

- Reduced traceability
- Congestion in logistics networks
- An increase in high-risk goods
- VAT revenue losses associated with low-value shipments

To address these gaps, the Chilean government enacted Law No. 21.713 (effective October 24, 2025), which shifted the point of VAT collection from the border (import stage) to the point of sale. Under this digital VAT system, platforms, sellers, and payment service providers are responsible for collecting and reporting VAT. All low-value goods are now subject to VAT.

The expected policy impacts include:

- Faster clearance of compliant shipments
- Reduced VAT evasion for low-value imports
- Audit focus shifts from VAT control to broader customs risks

Need for increased efficiency despite rising volumes. At the same time, the implementation strategy and coordination included dialogue with platforms, payment processors, and logistics operators; unification and harmonization of operating procedures across postal(UPU) and express(courier) channels; focus on integrating electronic data flows between platforms, carriers, tax and customs authorities; development of early transmission and validation systems for shipment-level VAT accreditation; facilitation of VAT collection and proof of payment at origin, enabling simplified clearance.

2.5 Challenges and Customs Responses (USA)

As of 2024, more than 90% of all import transactions in the United States consist of cross-border e-commerce (CBEC) shipments, with a record volume of 1.369 billion consignments.

The expansion of CBEC has placed increasing pressure on the existing customs system through:

- A rise in de minimis shipments
- Insufficient traceability
- An increase in high-risk goods

In response, U.S. Customs and Border Protection (CBP) has introduced the Section 321 Data Pilot and the Entry Type 86 Test to advance innovations such as:

- Risk-based data collection
- Supply chain verification

- Enhanced pre-screening

Key outcomes highlighted include:

- Same-day expedited clearance
- Earlier identification of high-risk goods
- Reduced CBP workload
- A 90% reduction in holds placed on online platform shipments

Looking ahead, the United States aims to strengthen its structural response to CBEC-related risks by expanding:

- Data interoperability
- Verifiable credentials
- AI- and machine learning–based risk analysis
- Pre-screening technologies

Session 3: Adoption of New Technologies for E-Commerce and Supply Chain Security

Session 3 discussed ways to enhance supply chain security and risk management through the adoption of digital platforms and new technologies tailored to e-commerce clearance. The Korea Customs Service (KCS) presented its plan to develop a dedicated e-commerce customs clearance platform that proactively collects order, payment, and delivery data. The presentation also outlined measures to protect the Personal Customs Clearance Code (PCCC), provide a user-oriented portal, and design a supply chain–based risk management framework. URIELSOFT introduced a web-based AI X-ray CBT (Computer-Based Training) system that continuously and systematically enhances the image interpretation capabilities of on-site inspection personnel. China Customs shared its management framework based on the E-Commerce Law and supervisory codes (9610, 9710, 9810, 1210), explaining how different transaction types are regulated. The

presentation also introduced digital supervision, risk management, and revenue management strategies aligned with the WCO CBEC Framework. DEEPNOID presented a model that leverages AI-based X-ray analysis technology to support real-time detection of prohibited and high-risk goods, risk scoring, and identification of manipulated images, thereby advancing automated and precision-based risk management in the e-commerce clearance environment.

3.1 Development of E-Commerce Customs Clearance Platform

To respond to the rapid growth of e-commerce import volumes and the increase in direct purchases by individual consumers, the Korea Customs Service is developing a dedicated e-commerce customs clearance platform separate from conventional import procedures.

The main objective is to obtain order–payment–delivery information in advance and process e-commerce shipments through a dedicated workflow, thereby eliminating inefficiencies arising from the mixed handling of general imports and e-commerce shipments. The system will also distinguish supply chains by transaction type, standardize the required data elements for each category, and clearly define data submission responsibilities to establish a data-driven clearance framework.

In response to the increasing misuse of Personal Customs Clearance Codes (PCCC), KCS plans to introduce two-step verification using validity checks and one-time passwords (OTP) to prevent fraudulent use. To improve user convenience, a separate consumer-oriented portal will be launched in addition to the enterprise-focused UNIPASS system. The portal will provide individualized information on product clearance status, PCCC management, duty payment and drawback, and guidance on personal customs clearance procedures.

Furthermore, a supply chain–based risk management system integrating transaction and cargo data will be applied to redesign the e-commerce clearance process by:

- Granting simplified clearance benefits to trusted supply chains
- Strengthening document reviews and physical inspections for high-risk supply chains

This project will be implemented from 2024 to 2026, with full-scale operation targeted after the rollout and stabilization phase in 2026.

3.2 Introduction of Training System to Improve X-ray Inspection Skills

This presentation introduced the web-based AI X-ray CBT (Computer-Based Training) system developed by URIELSOFT. In response to the increasing complexity and sophistication of X-ray image interpretation in customs operations driven by the growth of e-commerce, the system aims to systematically strengthen inspection capabilities by providing a realistic training environment and AI-based personalized learning functions.

The key objectives of the training system are to:

- Enhance the practical response capabilities of X-ray inspection personnel
- Improve the accuracy of detecting high-risk goods amid rising e-commerce volumes
- Enable large numbers of trainees to learn simultaneously through a web-based platform without location constraints

Through these features, the system seeks to improve both the speed of on-site responses and the accuracy of X-ray image interpretation.

3.3 Innovation and Technology Adoption in E-Commerce Customs Clearance

China Customs regulates the clearance procedures of CBEC operators under

the E-Commerce Law of People's Republic of China and manages major CBEC transaction models through dedicated supervisory codes 9610, 9710, 9810, and 1210, which classify:

- Retail imports and exports (B2C)
- B2B exports
- Overseas warehouse exports
- Bonded zone imports

From a digital perspective, China Customs introduced a comprehensive approach aligned with the WCO Framework of Standards on Cross-Border E-Commerce, focusing on:

- Advance collection of electronic data
- Risk management
- Revenue collection
- Safety and security assurance
- Strengthened partnerships
- Performance measurement and analysis
- Adoption of transformational technologies

3.4 Strengthening Risk Management through AI-Based X-ray Inspection System

This presentation introduced technologies developed by DEEPNOID to strengthen risk management through an AI-based X-ray inspection system. With the growth of e-commerce, improving X-ray image interpretation accuracy, automating the detection of prohibited goods, and enhancing the identification of high-risk items have become essential tasks. DEEPNOID aims to improve both the efficiency and precision of inspections at customs

sites through the use of multimodal AI models, real-time risk detection, and automated learning-based image interpretation systems.

DEEPNOID's AI-based X-ray image analysis system provides the following capabilities:

- Real-time detection of prohibited and high-risk goods
- Analysis based on multimodal X-ray images
- AI models trained on high-quality datasets
- Risk scoring of shipments
- Detection of anomalous image patterns

Through these features, the system demonstrates its potential to contribute to the automation and advancement of customs risk management.

Session 4: Innovative cases for e-commerce promotion

Session 4 focused on public–private cooperation for e-commerce facilitation, global logistics strategies, integrated IT and tax solutions, and business strategies responding to changes in de minimis regulations.

GEA highlighted the scale and importance of global express networks, emphasizing the need for trade facilitation centered on compliant operators and for information sharing on risks and non-compliant businesses between governments and express carriers.

DHL stressed that real-time data integration among platforms, logistics providers, tax authorities, and governments is a key determinant of transparency, speed, and cost efficiency in cross-border e-commerce. Based on this perspective, DHL introduced its integrated solutions, including MyDHL+, MyGTS, and the Landed Cost API.

CJ Logistics shared cases demonstrating how K-Logistics has strengthened its global competitiveness through TES (Technology–Engineering–System)-

based automation, a global e-fulfillment hub network, and partnerships with major platforms and sellers.

Expeditors analyzed the impact of changes to the U.S. de minimis regime on e-commerce logistics and presented practical insights on preparing for tighter regulations, such as standardizing data flows and introducing automated compliance functions within ERP and TMS systems.

4.1 Public-Private Cooperation for Advancing Cross-Border E-commerce

This presentation aimed to highlight the role of the global express industry in the expansion of e-commerce and the importance of public–private cooperation. GEA, representing major express carriers such as DHL, UPS, and FedEx, operates a global network spanning 220 economies, 1,500 aircraft, 300,000 vehicles, and 1.5 million personnel, providing services for high-value and time-sensitive cargo.

The presentation noted that while the importance of express courier services is increasing with the growth of e-commerce, the burden caused by non-compliant operators is also rising. In particular, it pointed out that regulatory measures often impose additional costs even on compliant businesses, emphasizing that trade facilitation initiatives should primarily benefit companies that adhere to regulations.

Furthermore, the presentation stressed that sharing risk information and data on non-compliant operators (“bad actors”) between governments and businesses, as well as establishing early identification mechanisms at the upstream stages of logistics, are key strategies for reducing the burden on border management.

4.2 Convergence & Innovation in logistics: Transforming cross-border e-commerce

This presentation introduced DHL’s integrated logistics–tax–data solutions

developed in response to the rapid growth of cross-border e-commerce and increasing demands for digital transformation. Key market drivers highlighted included the expansion of trade between the APAC and U.S. regions, the rising share of CBEC in online retail, and the growth of mobile commerce.

DHL defined the CBEC ecosystem around five key pillars:

Merchants – Platforms – Logistics Providers – Tax Authorities – Consumers, and emphasized that data integration and real-time connectivity are the core sources of competitiveness.

The main solutions presented were as follows:

- MyDHL+: Advance collection of customs clearance data
- DEC: Automated linkage of order and shipment data
- MyGTS: AI-based HS code classification and tax and duty calculation
- Shopify API: Display of total landed cost at the purchase stage
- Integration with Global-e: Localized payment, pre-collection of duties and taxes, and return process support

The presentation concluded that the level of integration among platforms, logistics providers, tax systems, and regulatory authorities is a decisive factor in determining the transparency, speed, and cost efficiency of cross-border e-commerce.

4.3 E-commerce business strategy & innovation achievements

This presentation aimed to share CJ Logistics' global e-commerce logistics strategy and operational innovation cases. The session focused on global network expansion, the adoption of logistics automation and digital technologies, fulfillment and Regional HUB operations, and cross-border delivery structures.

CJ Logistics highlighted its efforts to improve processing speed and accuracy by introducing robotics and automated sorting systems in logistics centers, thereby enhancing operational efficiency while reducing lead times and logistics costs.

In addition, the company has established a global network connecting Asia and the Americas with Korea as a central hub, and operates intercontinental delivery structures based on Regional Hubs (Global Distribution Centers). Through this model, CJ Logistics presented a global logistics operation framework tailored to the e-commerce environment, aiming to strengthen the international competitiveness of K-Logistics.

4.4 Business Strategies and Innovative Achievements in E-commerce

This presentation explained the U.S. de minimis regime for low-value CBEC shipments and the potential market impacts of upcoming regulatory changes. Approximately 4 million de minimis shipments enter the United States daily, with goods valued under USD 800 subject to simplified declaration procedures. However, the presentation noted growing concerns about increased regulatory burdens under potential policy revisions.

Expeditors outlined a standardized end-to-end process covering order placement, transportation, customs clearance, tax payment, and post-clearance settlement, while identifying key operational challenges such as data delays, information created outside the ERP system, and insufficient compliance verification.

As practical solutions, Expeditors proposed:

- Pre-defined routing and approval procedures
- Improved origin notification process for broker selection
- Automated compliance screening within ERP and TMS systems

The presentation concluded by emphasizing that, even in a tightening regulatory environment, strengthening data management and compliance frameworks is essential to ensure the sustainability of cross-border e-commerce business operations.

Key points

This workshop reaffirmed that the rapid expansion of cross-border e-commerce across the APEC region is driving structural changes in the overall customs environment, and that traditional clearance systems designed primarily for bulk cargo are reaching their operational limits. Common challenges shared across APEC economies include surging shipment volumes, abuse of de minimis thresholds, data inconsistencies, the growing circulation of high-risk goods, and tax revenue leakage. These developments highlight the need for new policy, technological, and cooperation frameworks that reflect the unique characteristics of e-commerce.

Participating economies identified the following common challenges:

- Logistics congestion and customs clearance delays
- Increased tax evasion and false declarations through undervaluation and shipment splitting
- Data fragmentation among platforms, express carriers, and customs authorities
- Limited capacity to identify and intercept high-risk goods
- Trade distortions arising from divergent regulatory regimes across economies

In response, the workshop emphasized the importance of harmonizing procedures, strengthening data interoperability, ensuring fair taxation, and enhancing risk management based on international standards and norms, particularly the WCO Framework of Standards on Cross-Border E-Commerce (FoS). Digital customs platforms, AI-based X-ray image analysis, automated

tracking and identification technologies, and electronic data-driven risk analysis were highlighted as key tools to support these efforts.

The workshop also confirmed that expanding public–private partnerships (PPPs) with platforms and logistics providers is a major driver of improved customs efficiency, transparency, and compliance. Case studies on data integration among logistics, tax, and regulatory authorities demonstrated tangible benefits, including shorter processing times, earlier interception of high-risk shipments, and reduced operational costs.

Based on the workshop discussions, the following policy directions were identified for customs administrations in the APEC region:

- Strengthening data-driven risk management based on advance electronic information
- Ensuring data standardization, procedure digitalization, and system interoperability
- Promoting technological innovation in inspection and enforcement (e.g., automation, AI, sensor technologies)
- Enhancing cooperation among customs, platforms, express carriers, and payment service providers
- Redesigning taxation and regulatory frameworks to reflect the evolving needs of e-commerce

In conclusion, the sustainable growth of cross-border e-commerce requires a coordinated regional approach, accelerated technological innovation, expanded public–private partnerships, and the reduction of regulatory and institutional gaps. This workshop served as an important milestone in building a safe, transparent, and efficient CBEC clearance environment across APEC economies. Continued policy dialogue, capacity-building, and standardization efforts will be essential to achieving the dual objectives of trade facilitation and the protection of public interests.

7. Ex-post Evaluation Results

Following the conclusion of the workshop, a post-event evaluation survey was conducted to assess its overall performance and effectiveness. A total of 49 participants responded to the survey. Each question was rated on a three-point scale:

Strongly Agree = 1, Agree = 2, Disagree = 3.

For analytical purposes, responses were quantified, with lower scores indicating more positive evaluations.

(Quantitative Evaluation Results)

Overall, the workshop received highly positive evaluations across all major assessment categories. The average scores for key evaluation items were as follows:

- Expert Preparedness: 1.02
- Content Organization: 1.06
- Relevance of Topics: 1.08
- Clarity of Objectives: 1.12
- Sufficiency of Time: 1.16
- Achievement of Objectives: 1.18
- Usefulness of Materials: 1.19
- Gender Inclusion: 1.63

In particular, the Expert Preparedness and Content Organization categories received exceptionally high ratings, demonstrating that the workshop was delivered with strong professionalism and a well-structured program design.

By contrast, the Gender Inclusion item received a comparatively lower score, indicating an area for improvement in future workshops.

(Knowledge and Capacity-Building Impact)

An analysis of changes in participants' knowledge levels showed that 37 out

of 49 respondents (75.51%) reported an improvement in their understanding and knowledge of cross-border e-commerce (CBEC) and related customs administration after the workshop.

This indicates that the workshop made a tangible contribution to strengthening capacities to address CBEC challenges among customs administrations in the APEC region.

(Qualitative Evaluation and Key Outcomes)

Based on the qualitative feedback collected through open-ended survey questions, participants identified the following key outcomes:

First, enhanced understanding of e-commerce trends, regulatory approaches, and economy-specific best practices. Participants noted that they gained practical insights from various member economy cases that could be applied to improve their own domestic policies and systems.

Second, recognition of shared challenges and the need for cooperation. By sharing common difficulties and objectives arising from the growth of e-commerce, the importance of continued APEC-level cooperation and coordinated responses was reinforced.

Third, increased awareness of new technologies and innovative solutions. Discussions on AI-based customs administration, data utilization, and global e-commerce standards demonstrated concrete opportunities for the digitalization and simplification of customs procedures.

Fourth, enhanced understanding of public–private cooperation. By integrating both public- and private-sector viewpoints, the workshop highlighted the role of cross-border e-commerce in supporting supply chain resilience and trade facilitation.

(Future Tasks and Areas for Improvement)

Building on the project outcomes, participants proposed the following follow-up actions:

- Expanding time for in-depth discussions on key topics
- Continuing to share best practices on AI applications in customs and e-commerce
- Strengthening information exchange on regulatory compliance
- Providing policy guidelines and practical manuals based on concrete case studies

In addition, participants emphasized the need to improve future APEC projects by expanding capacity-building programs, improving session planning and time management, strengthening advance distribution of materials, and increasing the participation of small and medium-sized enterprises (SMEs). Overall, the workshop was evaluated as having made a meaningful contribution to strengthening experience-sharing and cooperation among public- and private-sector experts across the APEC region. It also provided valuable direction for the future development of customs administration that can simultaneously enhance efficiency and security in the cross-border e-commerce environment.

8. Conclusion

This report has been produced with the objective of analyzing the structural impacts of the rapid expansion of cross-border e-commerce (CBEC) on customs administration across the APEC region, and of identifying best practices in policy, institutional frameworks, technology, and cooperation to address these challenges. Through an analysis of the research report and the APEC CBEC Workshop held in Songdo, Republic of Korea, in July 2025, member economies' shared challenges and practical response experiences were comprehensively discussed.

The findings from the research and workshop reaffirmed that traditional customs clearance systems designed primarily for bulk cargo are no longer sufficient to effectively manage the unique characteristics of e-commerce shipments, which are typically low-value, small-volume, and frequent

shipments. Common challenges identified across many member economies included surging shipment volumes, revenue leakage resulting from the abuse of de minimis thresholds, limitations in risk management due to data fragmentation, and the increasing inflow of illegal and high-risk goods. These trends indicate that customs administration now requires a structural transformation tailored specifically to the e-commerce environment, rather than incremental procedural improvements alone.

To support this transition, the project clearly highlighted several key policy directions: strengthening data-driven risk management, developing e-commerce-specific clearance models, strategically utilizing advanced technologies such as AI, automation, and data analytics, and expanding cooperation between customs authorities and private-sector stakeholders. In particular, the use of advance electronic information and enhanced data linkage with platforms and express carriers were identified as critical tools for simultaneously improving customs efficiency and transparency.

In addition, by disseminating research findings through workshops and exhibitions, the project contributed to promoting policy dialogue and capacity-building among APEC member economies. Post-event evaluation results showed that many participants experienced improvements in their knowledge and understanding, demonstrating that the project generated tangible capacity-building outcomes beyond academic research alone.

Overall, the project strengthened a shared APEC-level understanding and cooperation framework for responding to the evolving CBEC environment. It also laid an important foundation for future policy discussions and follow-up cooperation aimed at achieving a balanced approach to both trade facilitation and supply chain security across the region.

Finally, in order to respond to the evolving customs environment driven by the continued expansion of cross-border e-commerce (CBEC) and to ensure the sustainability of the project's outcomes, it is proposed that future follow-up actions be systematically pursued through issue-specific pilot programs.

- **(New technology application)** Pilot programs should be implemented focusing on e-commerce clearance platforms, AI-based inspection, and logistics automation in order to verify the effectiveness and feasibility of these technologies. Technologies that have been successfully validated should then be gradually disseminated across APEC member economies.
- **(Customs–e-commerce stakeholder cooperation)** Joint pilot programs should be carried out with e-commerce platforms, express carriers, logistics companies, and payment service providers to enhance the timeliness and consistency of data provision, while strengthening efforts to support regulatory compliance and prevent the entry of high-risk and illicit goods.
- **(MSMEs support)** Key challenges faced by MSMEs in participating in cross-border e-commerce should be identified, and pilot programs aimed at strengthening effective support should be implemented to develop appropriate education, training, and assistance measures, thereby narrowing capacity gaps.

Appendix 1. Agenda of the workshop

Workshop on 『Cross-Border E-Commerce』

Incheon, Republic of Korea

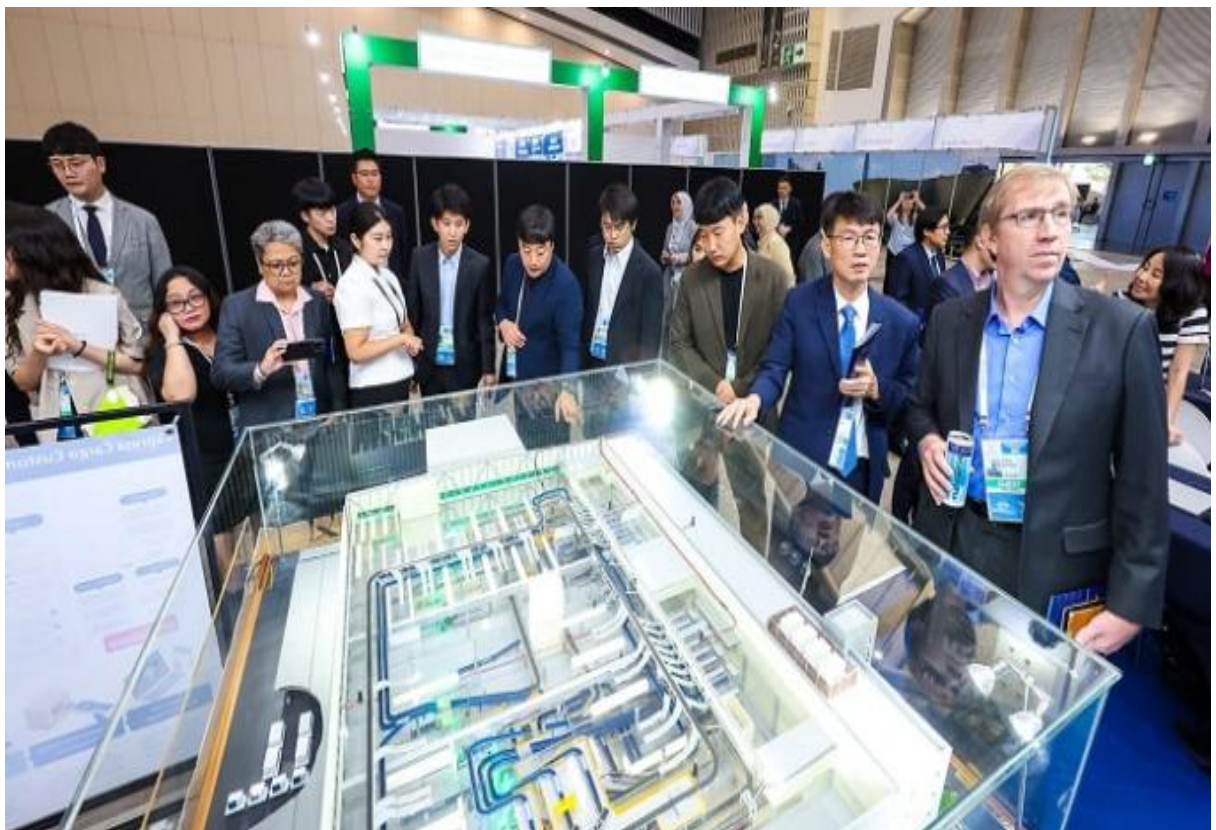
Monday, 28 July 2025

Venue : *Convensia Songdo*

TIME	TOPIC	PRESENTER
09:30-09:40	Opening remarks and Introduction of the program	SCCP Vice Chair
09:40-09:50	Welcoming remarks by the Director General of International Cooperation Bureau of Korea Customs Service	KCS
09:50-10:05	Introduction of participants and group photo	Workshop Organizers, Delegations, Guests
SESSION 1: Cross-Border E-Commerce Issues and Global Trends		
10:05-10:20	1.1 Presentation of the project background & key contents (Background, survey results, expected outcomes, etc.)	Korea Customs and Trade Development Institute (KCTDI)
10:20-10:40	1.2 Framework of Standards on Cross-Border E-Commerce	WCO (video)
10:40-11:00	1.3 Technological Innovation and Investment Support Programs for E-commerce Facilitation	UNESCAP
Morning Break (11:00~11:20)		
SESSION 2: Customs Administration for E-commerce Clearance Facilitation		
11:20-11:30	2.1 Challenges and Customs Responses in Cross-Border E-Commerce	JAPAN
11:30-11:40	2.2 Challenges and Customs Responses	THAILAND

	in Cross-Border E-Commerce	
11:40-11:50	2.3 Facilitation of Express Cargo Clearance(Express Cargo Centers)	KCTDI
11:50-12:00	2.4 Challenges and Customs Responses in Cross-Border E-Commerce	CHILE
12:00-12:10	2.5 Challenges and Customs Responses in Cross-Border E-Commerce	USA
Lunch (12:10~14:00)		
SESSION 3: Adoption of New Technologies for E-Commerce and Supply Chain Security		
14:00-14:20	3.1 Development of E-Commerce Customs Clearance Platform	KCS
14:20-14:40	3.2 Introduction of Training System to Improve X-ray Inspection Skills	URIELSOFT
14:40-15:00	3.3 Innovation and Technology Adoption in E-Commerce Customs Clearance	CHINA
15:00-15:20	3.4 Strengthening Risk Management through AI-Based X-ray Inspection System	DEEPNOID
Afternoon Break (15:20~15:40)		
SESSION 4: Innovative Cases for E-Commerce Promotion		
15:40-16:00	4.1 Public-Private Cooperation for Advancing Cross-Border E-commerce	GEA
16:00-16:20	4.2 Business Strategies and Innovative Achievements in E-Commerce	DHL
16:20-16:40	4.3 Business Strategies and Innovative Achievements in E-Commerce	CJ Logistics
16:40-17:00	4.4 Business Strategies and Innovative Achievements in E-Commerce	Expeditors
17:00-17:10	Wrap Up of Workshop and Closing Remarks	Vice Chair
17:10-17:20	Post-event survey	Vice Chair

Appendix 2. Workshop & Exhibition Photos



Appendix 3 Workshop Evaluation Report

WORKSHOP ON CROSS-BORDER E-COMMERCE 2025 EVALUATION

WORKSHOP EVALUATION

At the close of the workshop, attendees were invited to provide feedback on both the overall workshop and its content. A total of 49 attendees completed the evaluation form (see attached form for details).

All questions used a three-point scale—"Strongly Agree," "Agree," and "Disagree." For analysis purposes, these responses were assigned numerical values: Strongly Agree = 1, Agree = 2, and Disagree = 3, meaning lower scores indicate a more favorable evaluation.

Table 1 presents the evaluation results for the key attributes of the general workshop.

	Attribute	Score
1	Clarity of objectives	1.12
2	Achievement of objectives	1.18
3	Relevance of Topics	1.08
4	Content Organization	1.06
5	Gender Inclusion	1.63
6	Expert Preparedness	1.02
7	Usefulness of Materials	1.19
8	Sufficiency of time	1.16

The results were highly encouraging overall. Expert Preparedness received the highest score at 1.02, followed closely by the Content Organization at 1.06. While all scores were consistently positive, gender inclusion, at 1.63, showed the most room for improvement.

The form also assessed participants' knowledge levels before and after the workshop. Among 49 respondents, 37 reported an improvement in their knowledge level, representing 75.51% of the total.

To complement the quantitative data, participants were also asked to provide qualitative feedback through open-ended questions, covering the most valuable results and achievements from the workshop. The survey included questions on the next steps for APEC, ways to link the project's outcomes to future collective or economy-level initiatives, and suggestions for improving future workshops. Participants offered valuable insights in response to these questions.

1. Key Results and Achievements

The project delivered the following key outcomes:

- **Enhanced Knowledge and Skills:** Participants gained insights into e-commerce development, regulatory approaches, and best practices from various economies, with potential applications in their own contexts.
- **Identification of Common Challenges:** Participants recognized shared difficulties and mutual goals among economies, underscoring the importance of continued cooperation in addressing cross-border e-commerce (CBEC) growth.
- **Introduction of Innovative Solutions:** The workshop explored new technologies such as AI applications in customs, discussed the adoption of a global e-commerce standards framework, and emphasized the value of information-sharing to simplify and digitalize customs procedures.
- **Public–Private Perspectives:** Attendees benefited from a comprehensive overview of e-commerce issues from both public and private sectors, highlighting the role of e-commerce in strengthening supply chain security.

These results highlight the value of ongoing collaboration and capacity-building efforts to meet the evolving challenges of CBEC across the APEC region.

2. Next Steps for APEC

Participants proposed the following actions to build on the project's outcomes.

- **Allocate More Time for In-Depth Discussions:** Extend future session durations to allow for deeper dialogue on key topics and to provide more extensive updates on previously discussed ideas.

- **Advance AI Applications:** Continue exploring and sharing best practices for the application of AI in customs and e-commerce processes.
- **Address Regulatory Compliance Issues:** Facilitate ongoing information exchange on regulatory compliance challenges and effective solutions across economies.
- **Provide Practical Case Studies and Policy Guidance:** Incorporate concrete case studies and detailed policy explanations to support the practical application of workshop insights.

These recommendations aim to ensure that the project's outcomes are effectively carried forward through subsequent collective actions within APEC fora and to individual initiatives by member economies.

3. Suggestions for Project Improvement

Participants proposed the following measures to enhance future projects.

- **Expand Capacity-Building Activities:** Provide more opportunities for skills development and knowledge exchange.
- **Enhance Session Planning and Time Management:** Adopt a structured schedule, circulate presentation materials in advance, and collect participant inputs prior to the event.
- **Increase Information Sharing:** Facilitate broader dissemination of workshop materials and real-time data among participants.
- **Broaden Stakeholder Engagement:** Involve more SMEs in future activities, strengthen customs training programs, and establish clear objectives with measurable outcomes.

These suggestions aim to improve the effectiveness, inclusivity, and overall impact of future APEC initiatives.

In conclusion, the APEC Workshop on Cross-Border E-Commerce (CBEC) successfully brought together public and private sector experts from across the region and received highly positive feedback. Quantitative evaluation results indicated consistently favorable scores across all attributes, with particularly high ratings for **Expert Preparedness (1.02)**, **Content Organization (1.06)**, and **Relevance of Topics (1.08)**. **Gender Inclusion (1.63)** was identified as the main area for improvement. In the pre- and post-workshop knowledge assessment, 75.51% of respondents reported an improvement in their knowledge level.

Qualitative feedback confirmed that the workshop effectively facilitated the **exchange of experiences, regulatory approaches, and innovative customs solutions** — such as AI-driven technologies and potential global e-commerce standards—while

also identifying common challenges. Discussions incorporated both **public and private sector perspectives**, underscoring the role of CBEC in enhancing supply chain security and trade facilitation.

Participants also outlined priority follow-up actions: **allocate more time for in-depth discussions, sharing AI application practices, strengthen dialogue on regulatory compliance, and provide practical case studies with policy guidance.** Suggestions for project improvement included **expanding capacity-building activities, enhancing session planning and time management, increasing real-time data and material sharing, and broadening SME participation.**

Overall, the workshop reaffirmed the need for **sustained regional cooperation, robust information sharing, and ongoing capacity building** to address the evolving demands of CBEC, while demonstrating its potential to significantly improve efficiency and security in cross-border e-commerce across the APEC region.

EVALUATION FORM

APEC Project Evaluation Survey : Workshop on “Cross-Border E-commerce”

APEC Project : Study on Best Practices for Using New Technologies and Innovative Solutions in Cross-Border E-Commerce : Focus on Customs Risk Management System and Customs-Business Cooperation(SCCP_201_2024A)

Date : 28. July. 2025

Participant Information

Organisation/Economy : _____

Name : _____

Email : _____

Gender : M / F

Instructions : Please indicate your level of agreement with the statements listed in the table below.

For statements marked(*), please check the level and provide your comments as they are required.

[General Workshop Evaluation]

	Strongly Agree	Agree	Disagree	COMMENTS (Continue on back if necessary)
The objectives of the workshop were clearly defined				
The project achieved its intended objectives				

The agenda items and topics covered were relevant				
The content was well organized and easy to follow				
Gender issues were sufficiently addressed during implementation				
The experts or facilitators were well prepared and knowledgeable about the topic				
The materials distributed were useful				
The time allotted for the workshop was sufficient.				

1. How relevant was this project to you and your economy?

5 4 3 2 1
 very mostly somewhat a little not much

Explain: _____

2. In your view what were the project's results/achievements?

Explain: _____

3. What new skills and knowledge did you gain from this event?

Explain: _____

4. Rate your level of knowledge of and skills in the topic prior to participating in the event:

5	4	3	2	1	
very high		high	medium	low	very low

5. Rate your level of knowledge of and skills in the topic after participating in the event:

5	4	3	2	1	
very high		high	medium	low	very low

Explain: _____

6. How will you apply the project's content and knowledge gained at your workplace? Please provide examples (e.g. develop new policy initiatives, organise trainings, develop work plans/strategies, draft regulations, develop new procedures/tools etc.).

Explain: _____

7. What needs to be done next by APEC? Are there plans to link the project's outcomes to subsequent collective actions by fora or individual actions by economies?

8. How could this project have been improved? Please provide comments on how to improve the project, if relevant.

Thank you. Your evaluation is important in helping us assess this project, improve project quality and plan next steps.