Supply Chain Integration 4.0 through APEC Single Window Interoperability Action Plan

Proposed by Chile, China and Peru

I. Introduction

This initiative promotes and seeks to enhance interoperability among APEC economies trade electronic single window systems (single windows), taking into account important advances in the development of domestic single windows and current examples of interoperability in the APEC region and worldwide. The main goal is to position each economy in a better level of competitiveness within international markets and supply chains, through improving processing times and decreasing costs of foreign trade operations. Public institutions and trade-related agencies will also benefit from across border electronic exchange of documents.

In this context, an Action Plan is proposed for the advancement and promotion of the interoperability of single windows within APEC. The aim of the Action Plan is to develop activities for the implementation of the interoperability among single windows. The Action Plan should have a duration of at least three years: For the first year, a ‘Compendium of Best Practice Technology Solutions for Single Window Interoperability’ will be developed by holding a workshop during September in 2019 during the margins of the Inter-American Single Window Conference. For the second year, a workshop on ‘Supply Chain Integration 4.0’ will be held to discuss the pilot model, pain points in cross-border supply chain management, and the role of TradeTech in solving the pain points. The test pilot will start the third year following a discussion amongst pilot stakeholders on the documents to be exchanged. Finally, the project is aimed at the terminology, technology and documents requirements for single window interoperability in the APEC region.

II. Background

As part of APEC’s effort to support stronger regional integration, connectivity has been high on its agenda. In 2014 in Beijing, the 2015-2025 APEC Connectivity Blueprint (ACB) was endorsed to further connect the region through enhanced efforts on physical, institutional and people-to-people connectivity with a view to building a seamless and comprehensively connected and integrated Asia-Pacific. As an action to advance institutional connectivity, ACB encourages economies to promote international interoperability between Single Window systems and paperless trading. The APEC Policy Support Unit (PSU) “Study on Single Window Systems’ International interoperability: Key Issues for its Implementation” (APEC Policy Support Unit, 2018) also recommended economies work on a limited pilot for interoperability.
The 2016 APEC Economic Leaders’ Meeting (AELM) also endorsed the Suggested Framework of the Supply Chain Connectivity Framework Action Plan 2017-2020 (SCFAP II), seeking to address five identified chokepoints or pillars of supply chain connectivity:

- **Chokepoint 1**: Lack of coordinated border management and underdeveloped border clearance and procedures;
- **Chokepoint 2**: Inadequate quality and lack of access transportation infrastructure and services;
- **Chokepoint 3**: Unreliable logistics services and high logistical costs;
- **Chokepoint 4**: Limited regulatory cooperation and best practices;
- **Chokepoint 5**: Underdeveloped policy and regulatory infrastructure for e-commerce.

The era of 4th Industrial Revolution is calling for Integration 4.0 that can provide a data-driven, logistics-dependent and machine-intermediated trade network. The Supply Chains Integration 4.0 can be made possible by cutting-edge technologies of ABCD, i.e. artificial intelligence (AI), blockchain technology or distributed ledger technology (DLT), cloud computing and big data. For example, blockchain technology can enable automated and reliable information sharing among distant supply chain stakeholders with synchronized, transparent and tamper-resistant distributed ledgers. Participants in the blockchain-based network can collectively maintain a common record of cross-border trade. The emergence of Trade Technology (TradeTech) is likely to transform cross-border trade in many aspects and make it increasingly smarter.

The **APEC Customs 3M Strategic Framework**, which was adopted at the 2014 Annual Ministerial Meeting, aims to promote customs cooperation through “Mutual Recognition of Control, Mutual Assistance of Enforcement and Mutual Sharing of Information”.

**Tracking**

To enhance the competitiveness of supply chains, shippers and logistics operators need to be able to share information and documents with operators and administrators of other ports and be aware of the events and incidents/delays taking place elsewhere to obtain visibility of traffic flows “end-to-end”. In this way, shippers and logistics operators can provide better customer experience by contributing to the visualization of cross-border logistics, allowing the optimization of business pre-planning. After the entry into force of WTO Agreement on Trade Facilitation, international trade single window is now globally recognized for processing import, export and transit-related data and procedures. The international interoperability of single windows could help ensure harmonized and compatible implementation of the TFA
commitments, so as to reduce costs and lost productivity for stakeholders and governments.

III. The Action Plan:

The Action Plan will have a duration of three years from 2019-2021.

The presenters of this proposal support Chile and Peru’s concept note which identifies the current practices and main obstacles in implementing single window international interoperability based on economies’ experiences. It is important to note that during 2019, Chile and Peru are proposing a concept note for a “Workshop for promoting interoperability among Single Window Systems” that will conclude with the Compendium. It is expected that the Compendium and the discussion among economies during the workshop will lead to recommendations on a model for interoperability in the APEC region, as well as how to leverage the interoperability to render 3T services to more public and private sectors.

In the second year, volunteer economies should discuss the documents and information to be exchanged, and the governance and sustainability concerns regarding single window interoperability. Economies will also define the scope, and design the model of a pilot to interoperate single windows. The scope of the pilot may be defined using blockchain or other relevant technologies. This initiative is in accordance with the 2016 APEC Minister Responsible for Trade Statement on Single Window Systems’ International Interoperability which encouraged economies to begin discussions on establishing pilot projects on voluntary basis project on voluntary basis. This was supported by the conclusions of the APEC PSU “Study on Single Window Systems’ International interoperability: Key Issues for its Implementation” which advised that APEC recommend an interoperability pilot in order to demonstrate ‘trust, efficiency and effectiveness alongside usability and scalability’ of interoperable single windows in APEC.

The development and implementation of the pilot will be the focus of the second year.

Specifically, this initiative proposes to promote interoperability among single windows, starting with this Action Plan that includes activities for getting the most convenient solution

1 https://www.apec.org/Meeting-Papers/Sectoral-Ministerial-Meetings/Trade/2016_trade
to interoperate single window systems, using an adequate technology that guarantees trust, efficiency, and effectiveness among others.

Although some member economies may have single window systems in different stages, interoperability among these systems is the next step for advancing trade facilitation and increasing benefits at the regional level. In the first year of the project, the Compendium and the Workshop will take into account the different stages of development of each economy’s single window in order to identify the best technology solution.

More specifically, interoperability could bring multiple benefits such as the facilitation of, and increase in, the flow of goods among economies; reduction of costs and time for exporters and importers, and for improving the productivity and competitiveness of each economy.

IV. **Alignment – Forum**

The APEC 2017 Tasking Statement for 2018 established that SOM and CTI have the responsibility to undertake the actions under the work program of connectivity. Furthermore the CTI and SCCP strategic includes the following actions: Promote the development of, and interoperability between, single windows of APEC economies; and strengthen each economies’ single window by sharing and developing best practices. More specifically, the Action Plan supports the SCFAP 2017-2020 under CTI as well as the APEC Customs 3M Strategic Framework under SCCP.

**Time Plan**

**2019**

**CTI 1** – Present and discuss this initiative and the accompanying concept note for the workshop at CTI

**Intersessional discussion**

**SCCP** – Circulate for information and comments

**CTI 2** – Approve proposal of the Action Plan and the concept note for the workshop.

**After SCCP2/CTI 3** - Workshop for promoting interoperability among Single Window Systems that will be the basis for a Compendium of best practices and recommendations for the best solution for interoperability.
CTI/SCCP – Circulate draft compendium for consideration and comments

CSOM – Approve ‘Compendium of Best Practices for Single Window Interoperability’

2020

Before CTI 1 and SCCP1 – Volunteer economies for the pilot:

Start discussion for defining the scope of the pilot in close consultation with SCCP.

Economies should provide their inputs on the scope of the pilot, including the kind of document(s) to be exchanged, the legal framework.

CTI 1 – Submit project of pilot defined for CTI consideration (pilot member economies confirmed, the solution or technology they are going to adopt to work on interoperability and the general design of processes).

SCCP – Present the project in SCCP for information

CTI 2 and SCCP – Present a progress report on the scope of pilot related to the specific design.

Intersessional work: Volunteer economies should work on their developments for interoperating their single windows.

2021

CTI 1 and SCCP - Present a progress report of the development of each volunteer economy.

CTI 2 - Report the progress of the development and the Testing period of the pilot.

CTI 3 - Draft Completion Report of the pilot developed and certified.

CSOM - Endorsement of the Pilot Report.