



WORLD CUSTOMS ORGANIZATION  
ORGANISATION MONDIALE DES DOUANES

Established in 1952 as the Customs Co-operation Council  
Créée en 1952 sous le nom de Conseil de coopération douanière

PERMANENT TECHNICAL  
COMMITTEE

- IN-PERSON MEETING -

-  
239<sup>th</sup>/240<sup>th</sup> Sessions  
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PC0718Eb

Brussels, 6 April 2023.

**Cross-border Regulatory Data Exchange Framework**

**(Item VIII on the Agenda)**

**SUMMARY**

**Purpose of document**

During its 237<sup>th</sup>/238<sup>th</sup> Sessions, the Permanent Technical Committee (PTC) suggested an Agenda item on “Single Window Interoperability (SWI)” to be discussed by the Committee at its next sessions. Under this Agenda item at the upcoming sessions, the PTC will be invited to discuss different cross-border regulatory data exchange modalities, including SWI and Globally Networked Customs (GNC), and to share their national practices in this area.

In addition, the PTC will be updated on several developments and ongoing work by the WCO in the area of Cross-Border Data Exchange.

The PTC will also be invited to examine and endorse the “Study on the Digitalization of the Certificate of Origin”, which includes key findings on Members' practices regarding Certificate of Origin data exchange.

**Action required of the Permanent Technical Committee**

The Permanent Technical Committee is invited to:

- share and discuss Members' experience of cross-border data exchange;
- take note of available cross-border data exchange frameworks;
- note the WCO's ongoing activities relating to cross-border data exchange; and
- examine and endorse the “Study on the Digitalization of the Certificate of Origin”, attached as Annex I to this document.

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## I. Background

1. Customs-to-Customs cooperation can help Customs administrations enhance their efficiency and effectiveness in performing their roles and fulfilling their responsibilities at borders, including the roles and responsibilities of trade facilitation, protection of society, fair revenue collection, and ensuring security and controls. The Revised Kyoto Convention (RKC) outlines Customs-to-Customs cooperation in Standard 6.7 of the General Annex<sup>1</sup>, which states: “*The Customs shall seek to co-operate with other Customs administrations and seek to conclude mutual administrative assistance agreements to enhance Customs control.*”
2. In addition to the RKC, Customs-to-Customs cooperation is also outlined in different international instruments and tools, such as Article 12.2 of the World Trade Organization (WTO) Trade Facilitation Agreement (TFA)<sup>2</sup>, which reads: “*Members shall exchange the information set out in subparagraphs 6.1(b) and/or (c) for the purpose of verifying an import or export declaration*”. Moreover, the first pillar of the SAFE Framework of Standards (FoS)<sup>3</sup> is dedicated to Customs-to-Customs cooperation, specifically outlining Customs-to-Customs data exchange under Section 2.1.4.
3. The RKC Guidelines on Customs Control<sup>4</sup> provides information on several use cases and benefits of Customs-to-Customs cooperation, such as obtaining pre-arrival information on goods bound for the Customs territory. Such cooperation practices could complement Customs controls which are based solely on the goods declaration, cargo declaration and supporting documents submitted by the declarant on the arrival of the goods in the Customs territory. Additionally, the Guidelines provide another form of cooperation, as outlined in Standard 11, whereby the Customs administration carries out specific controls on behalf of, and shares the control results with, the requesting administration.
4. As well as pre-arrival data exchange and mutual recognition of controls, Customs administrations might implement Customs-to-Customs cooperation for different purposes, such as compliance management (e.g. sharing of Authorized Economic Operator (AEO) master data and Trader Identification Number (TIN); enforcement (e.g. sharing seizure or intelligence information in the context of a joint operation).
5. In the context of Coordinated Border Management (CBM) and Single Window (SW), Customs-to-Customs cooperation could be expanded beyond Customs processes. For instance, it could cover cooperation between Customs and the competent authority in the area of certification of agricultural products (phytosanitary certification), food safety, movements of hazardous and non-hazardous waste, trade in endangered species and animal health checks.
6. Data exchange is one of the core features of, and an enabler for, Customs-to-Customs cooperation. Application of information technology could transform Customs-to-Customs cooperation into a seamless, automated cross-border interconnectivity ecosystem. Such an interconnectivity ecosystem will require the implementation of international standards (e.g. international standards for data requirements and electronic message formats, i.e., the WCO Data Model) to ensure interoperability.

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<sup>1</sup> [https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf\\_revised\\_kyoto\\_conv/kyoto\\_new/gach6.aspx](https://www.wcoomd.org/en/topics/facilitation/instrument-and-tools/conventions/pf_revised_kyoto_conv/kyoto_new/gach6.aspx)

<sup>2</sup> <https://www.wcoomd.org/en/topics/wco-implementing-the-wto-atf/atf/customs-cooperation.aspx>

<sup>3</sup> <https://www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/instruments-and-tools/tools/safe-package/safe-framework-of-standards.pdf>

<sup>4</sup> <https://www.wcoomd.org/-/media/wco/public/global/pdf/topics/wto-atf/dev/rkc-guidelines-ch-6.pdf>

7. The sharing of Members' experience of cross-border interconnectivity could help the PTC enrich and mature each interconnectivity use case and further understand different aspects of cross-border interconnectivity, such as the objectives and, governance mechanisms, change management, regulatory and legal requirements (e.g. data protection, purpose use of the data, confidentiality), business processes, data standardization and harmonization, technical specifications and security management. Members' experience-sharing will contribute to identifying key challenges, lessons learned and success factors in implementing cross-border interconnectivity.
8. In this regard, the PTC may wish to consider discussing and providing guidance on the necessary steps to support and promote cross-border interconnectivity, such as examining the need to review and further develop existing instruments and tools (e.g., the Globally Networked Customs Handbook and the Compendium on "Building a Single Window Environment") or discussing common datasets for Cross Border Regulatory Data Exchange (CBRDE).

## **II. Cross-border Interconnectivity Frameworks**

9. Cross-border interconnectivity may be established globally or at bilateral/regional levels. As the number of interconnectivity partners increases, so too does the complexity of the interconnectivity, potentially leading to fragmentation and to a "spaghetti bowl" phenomenon in which different interconnectivity solutions need to be developed to account for slight differences in the requirements of different partners.
10. An interconnectivity framework could help address such challenges by fostering the harmonization of different interconnectivity programmes. Such a framework helps streamline and make different interconnectivity projects interoperable at a global level, even though they have been developed at bilateral/regional levels. Some of the available interconnectivity frameworks include:

### **II.a. Globally Networked Customs (GNC)**

11. GNC<sup>5</sup> is an interconnectivity framework developed by the WCO and containing a set of principles necessary for establishing cross-border interconnectivity. GNC is a voluntary arrangement between two or more Members to exchange cross-border information seamlessly at a Customs-to-Customs level using a standardized approach based on existing WCO instruments. GNC is gradually moving away from the current individually hand-crafted method for negotiating international agreements towards using a disciplined and common methodology to industrialize the process.
12. The GNC concept includes the Utility Block (UB), a functional subset of the GNC offering a tangible value proposition to Customs administrations by meeting specific needs through the sharing of information. A UB addresses some of the interconnectivity aspects relevant to a specific part of Customs' business and describes what is needed for information exchange, including the reasons for following this approach, listing the specific data elements required, the alignment of processes, the necessary communication mechanisms and IT interface and message specifications.
13. GNC and UBs encompass key components of interoperability, classified into three main categories: 1. Business case and legal framework (name of the UB, purposes, benefits and legal basis), 2. Process alignment (business rules, trigger, entities and

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<sup>5</sup> <https://www.wcoomd.org/en/topics/facilitation/activities-and-programmes/gnc.aspx>

data cluster), and 3. Technical interoperability (service interface, communication and integration).

14. Several UBs were shared by Members and published on the [WCO Members' website](#). The PTC could consider the development of hypothetical UBs, covering specific areas of data sharing that Members might want to use as a guiding template, best practices and harmonized terminologies to facilitate implementing bilateral/regional interconnectivity.

### **II.b. Single Window Interoperability (SWI)**

15. Recommendation No. 36 on Single Window Interoperability<sup>6</sup> by the United Nations Economic Commission for Europe (UNECE) provides guidelines for achieving interoperability between SW systems by using common data formats, standards and web services. The UNECE's Recommendation on SWI enables a seamless exchange of data and information between different systems, which in turn reduces trade barriers, enhances trade facilitation and promotes economic growth.
16. From a Customs perspective, a SW system is not a prerequisite for establishing cross-border interconnectivity. Customs administrations may exchange Customs-related information, such as the export declaration, cargo declaration, certificate of origin or AEO master data, in the absence of a SW. Some Customs administrations have implemented cross-border interconnectivity between the Customs system at one end and a SW system at another, and vice versa.
17. However, the SW system is appropriate for establishing cross-border data exchange involving cross-border procedures where other competent authorities are lead agencies (as outlined in paragraph 5 of this document regarding the Customs-to-Customs cooperation in the context of CBM).

### **III. Ongoing activities**

18. The WCO is continuously undertaking activities to promote and support the implementation of cross-border data exchange based on GNC-UB by Members and to develop new instruments and tools as required. The WCO's ongoing activities in this area include the following:

#### **III.a. Interconnectivity on cross-border movement of e-waste**

19. At the 86<sup>th</sup> Session of the WCO Policy Commission held in June 2022, "Green Customs" was identified as a focus area of the WCO Strategic Plan 2022-2025. The Policy Commission endorsed the related Implementation Plan 2022-2023, which includes activities to pilot the business process mapping of waste imports with volunteer Members in order to harmonize the most relevant processes in the context of CBM and the development of specific GNC UBs for Customs-to-Customs data exchange related to the waste trade.
20. In this regard, the WCO Secretariat will lead a regional workshop in July 2023 to support the East African Community (EAC) in piloting a business process analysis on the import of e-waste and in developing a GNC UB for the exchange of data between importing and exporting countries specifically to monitor and control products and substances regulated by the Basel Convention on the Control of Transboundary

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<sup>6</sup> [https://unece.org/DAM/trade/Publications/ECE-TRADE-431E\\_Rec36.pdf](https://unece.org/DAM/trade/Publications/ECE-TRADE-431E_Rec36.pdf)

Movements of Hazardous Wastes and their Disposal. There are also plans to include the digitalization of the notification process for the transboundary movement of hazardous e-waste in the UB.

21. This workshop will form part of the Trade Facilitation and Customs Modernization Programme for Sustainable Development in Sub-Saharan Africa, in partnership with the Swedish International Development Co-operation Agency (Sida-WCO Trade Facilitation and Customs Modernization (TFCM) Programme).

### **III.b. Capacity building programme on interconnectivity for Southern Africa**

22. The Sida-WCO TFCM Programme, in cooperation with the Southern African Development Community (SADC), is committed to helping SADC Member States achieve interconnectivity between Customs systems based on the WCO GNC, Data Model and Unique Consignment Reference (UCR). This ongoing initiative resulted in the drafting of a regional GNC UB in October 2022, based on the existing UB on "your export is my entry"<sup>7</sup>. Furthermore, based on previous capacity building and technical assistance programmes between the WCO and the Southern African Customs Union (SACU), there is ongoing interconnectivity implementation between the SACU Member States at a bilateral level using GNC, the WCO Data Model and the UCR. Within SACU, some countries, such as Eswatini, have gone a step further by utilizing the Customs data exchanged to develop internal data analytics reports and other reports to support clearance and release processes.
23. The main purpose of this regional customs interconnectivity is establish a standardised Customs data exchange across the region for purposes of clearance of goods. This will support risk analysis real time, decongest borders through advance data on goods and conveyances as well as support post clearance Customs interventions. Added benefits include business analytics on the shared data to establish trends, compliance and other trade facilitation objectives.
24. Botswana and Zambia have rolled out Customs interconnectivity that involves pre-population of the Customs import declaration based on the export transactional data already completed by the exporting country. Implementation monitoring shows growing levels of data matching using the UCR as the key between imports and exports. Zambia and Zimbabwe and Zambia and Malawi are in the development phase of interconnectivity using the UCR as the key to achieving automatic pre-population of import Customs declaration based on exchanged export declarations.
25. It is envisaged that the regional SADC GNC UB will be completed and adopted at SADC level in 2024, paving the way for more comprehensive regional implementation beyond the current beneficiary countries. Recent efforts by the WCO under the Sida-WCO TFCM Programme, among others, are providing capacity building and technical assistance to officials of the beneficiary Members regarding the application of GNC, the WCO Data Model and UCR, with a view to building sustainable knowledge and expertise to maintain GNC-compliant Customs interconnectivity. This includes the capacity to develop and maintain WCO Data Model "My Information Packages" at a national level. The Programme also aims to support the beneficiaries at the data utilization level through capacity building and technical assistance in the data analytics domain.

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<sup>7</sup> <https://www.wcoomd.org/-/media/wco/public/global/pdf/topics/facilitation/activities-and-programmes/gnc/gnc-repository/bilateral-multilateral-export--transit-data-exchange.pdf?la=en>

### **III.c. Feasibility Study on the “Interconnectivity Framework of Certificate of Origin (CoO)”**

26. In February 2023, the 41<sup>st</sup> Session of the Technical Committee on Rules of Origin (TCRO) discussed its Work Programme. The “Interconnectivity Framework of Certificate of Origin” activities consist of three sub-activities entailing (i) undertaking a Feasibility Study on a Common Business Process Model (BPM) for e-CoO Exchange; (ii) reviewing and updating the e-CoO common dataset; and (iii) undertaking a Feasibility Study on the Production of an Interconnectivity Framework of CoO. The Work Programme activities were adopted in principle, noting the reservation by several Members which would be further clarified by the WCO Secretariat during the intersession.
27. The objective of the Work Programme is to look for the possibility to develop an interconnectivity framework for CoO data exchange that will be consistent with the GNC methodology. This would offer a great deal of support to Members on the proper use of technology and connections between administrations and on the increasing digitalization of origin procedures, not only with respect to facilitation for traders but also to Customs controls covering areas such as origin fraud. It would simplify and harmonize the process of establishing data exchange and/or interconnectivity of CoO between parties.
28. The Work Programme activities were proposed by considering the findings of the WCO Survey on the Digitalization of the CoO, in response to which Members indicated that the data exchange format and business process model were the respective challenges and success factors when establishing a data exchange system between parties.
29. The WCO Secretariat conducted the above-mentioned Survey in September 2022. A total of 84 responses were collected, analysed and consolidated into the “Study on the Digitalization of the Certificate of Origin”.
30. The Study presented the state of play of Members' practices relating to origin certification, and particularly to the digitalization of the CoO. It further identified the challenges and difficulties faced by Members and highlighted the success factors mentioned by the latter. The findings provide a useful resource to inform future technical assistance activities by the WCO.
31. The PTC is invited to endorse the “Study on the Digitalization of the Certificate of Origin”, attached as Annex I to this document.

### **III.d. Feasibility Study on a Global Customs Data Exchange**

32. In June 2022, the Policy Commission and Council approved a four-track approach (data track, legal track, technology track and commercial track.) and timeline for the proposed Feasibility Study for establishing a global Customs data exchange platform (the platform) managed by the WCO. The outcomes of the Feasibility Study could be considered as a UB that facilitates Customs-to-Customs data exchange at global level.

## **IV. Action required of the PTC**

33. The PTC is invited to:

- share and discuss Members' experience of cross-border data exchange;
  - take note of available cross-border data exchange frameworks;
  - note the WCO's ongoing activities relating to cross-border data exchange; and
  - examine and endorse the “Study on the Digitalization of the Certificate of Origin”, attached as Annex I to this document.
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