E-COMMERCE
How Customs is responding to the challenge
eTrade Hubs
A One-Stop Entry Point For Trade Tools & Information

Tools

- **Trade & Tariff Information**
  This is the Classification Tool that helps users find their specific Tariff code with intelligent search functions.

- **Duty Estimator**
  The Duty Estimator provides an estimate of the duties and levies for goods. Discover detailed information about Custom Duty, Tax and Levies of destination region or country.

- **Trade Management**
  Turn the trade information into trade. The trade management module allows you to create and manage your import and export supply chain from a single platform.

- **Knowledge Zone**
  Get all the information you need about the portal and get resources to learn about trade in Africa.
24 DOSSIER USCBP latest initiatives to strengthen enforcement capacity for e-commerce shipments

27 DOSSIER How Korea Customs Service leverages technology to supervise e-commerce

55 DOSSIER A look at recent changes in China regarding the administration of rules of origin

70 FOCUS Handling obsolete NII equipment

80 POINT OF VIEW Extending the ISO Audit Data Collection Standard to improve Customs audits
5 FLASH INFO
5 The COLIBRI Geoportal: a mapping tool for enforcement
8 Discover the WCO Trade Tools
12 EIA launches Global Environmental Crime Tracker
13 The OIE calls on Customs officials to increase vigilance against African swine fever

16 DOSSIER: E-COMMERCE
17 Now is the time for implementation
20 Reviewing the e-commerce clearance process: the experience of Argentina
24 USCBP latest initiatives to strengthen enforcement capacity for e-commerce shipments
27 Blockchain, artificial intelligence and big data: how Korea Customs Service leverages technology to supervise e-commerce
31 Peru develops new processes and services to facilitate and secure cross-border e-commerce

36 PANORAMA
36 Dubai Customs launches an app to help with goods classification
37 African Continental Free Trade Area: Background and Role of Customs
44 The illegal wildlife trade: modus operandi and transport routes in West and Central Africa
48 Brand new facility for the training of Customs officials in Morocco
52 An overview of Uzbekistan Customs’ reform journey
55 Improving the business environment through reform and innovation: a look at recent changes in China regarding the administration of rules of origin
58 SACU Members make progress in enhancing the uniform application of their Common External Tariff
61 Remote validation of AEO Programme applicants: the experience of Guatemala
63 A look at the RCEP from a Customs perspective

69 FOCUS: NON-INTRUSIVE INSPECTION
70 Handling obsolete NII equipment
74 The challenges of X-ray image analysis and the value of training

80 POINT OF VIEW
80 Extending the ISO Audit Data Collection Standard to improve Customs and indirect tax audits and bring some innovation into this field
85 Governments should consider waiving taxes on transport costs until we are back to “normal”
The COLIBRI Geoportal: a mapping tool for enforcement

By the COLIBRI Project team, WCO Secretariat

At the start of 2019, in partnership with the European Union, the WCO Secretariat launched the COLIBRI Project to help administrations responsible for enforcement in Latin America, the Caribbean and West Africa to implement effective controls in general aviation. General aviation covers all civil aviation other than commercial activities (sports and leisure aviation, private aviation, business aviation and aerial work).

Behind the project lies the recognition that the law enforcement authorities find it very difficult to carry out effective controls on small aircraft and detect the unlawful use of aircraft, owing to a serious lack of expertise. This is in addition to an absence of high-quality data on this particular segment of aviation and on existing clandestine infrastructures, such as isolated airstrips and secondary aerodromes – the kind of data that enable a thorough risk assessment of both the means of transport and the territory.

As the designers of the project, we therefore planned to develop a capacity building programme dedicated exclusively to general aviation and to create and provide to the beneficiary administrations a mapping tool (Geoportal) using the new information and communication technologies (mobile application) alongside a global database of small private aircraft.

A presentation of the Geoportal was given in the pages of this magazine a few months ago, when we were still in the development phase. Now that this phase is over, the intention of this article is to provide a more detailed account of the functionalities of this tool and how it is used.
An international database dedicated to general aviation

The objective of the COLIBRI Geoportal is to bring together in one place data relevant to the effective surveillance of movements by general aviation. It therefore includes a database containing:

- the data sheets giving the registration and characteristics of aircraft operating within the territory. Aircraft registered with the various national civil aviation agencies are already included in the COLIBRI database. Any aircraft not included may be added by the operator who comes across it. The objective over time is to obtain a comprehensive, reliable database on all aircraft operating within a territory, which would be accessible to all the countries taking part in the Project;

- sundry documents, including, in particular, the civil aviation codes. These documents are filed by country and can be viewed only by users from the country concerned;

- the four types of forms – on observations, runways, seizures and controls – that operators in the field can complete. This information is geolocalized, and access to it is limited to national level.

The forms are filled in by “ground operators” or field officers using a mobile application. Among the fields of the “runway” form are location (the location of the telephone if it is connected to a network), the designation of the runway, the aerodrome (drop-down list based on the IATA code), the status of the runway (closed, in service, abandoned) and its measurements (length, altitude, direction). The fields of the “observation” form include the country, the airport, the runway, the registration of the aircraft, the place and the information collected itself. The “seizures” form contains similar fields and fields concerning the details of the goods seized: quantity, value, detection method, nature, etc. The same applies to the “control” form, which describes the type of control carried out. Photos can be added to all the different types of forms.

Operators can use the application in places that are not covered by a telecommunications network and send the form once a connection has been made. A form can be saved and reopened in case of need, for example to complete or amend a field, as long as the form has not been sent to the COLIBRI database.

The objective of the database is to provide a means to track the history of controls on an aircraft from its registration, at national level at least, and to geolocalize a series of events.

The Geoportal, a tool for geolocalization and assistance in the organization of controls

A map viewer presents all of the data entered into the database, overlaid on a base map. Users can zoom in on a particular area, such as an aerodrome, and use filters that let them choose precisely which information to display and the available base maps. This tool is intended primarily for security services with mobile patrols.

The information reported in the forms is, therefore, not as detailed as that given by the seizure reports of the Customs Enforcement Network (CEN), which makes available to Members of the WCO, for consultation, a central repository of information relating to enforcement. Here, we are concerned with offering the opportunity to create maps from base maps, and from information and events from the database.

As regards the Geoportal, users will be able to choose between several base maps:

- OpenStreetMap, an online geographical database managed by a foundation incorporated in England, crowdsourced and published under an open licence. Anyone who has created an account on the database website can contribute. Members of the satellite imagery community and bodies like land registries have also offered their data to the platform. By clicking on an object or a “spatialized vector datum” of the map, created by one of these bodies or by an individual, the user can find out who produced it and when.

- The images generated every five days by the Sentinel2 satellite constellation that forms the space element of the European Union’s Copernicus Programme. The satellites offer different layers of information by subject area, such as agriculture or forests, for example. It will not be possible to view a territory in real time, but, on the other hand, analysts will be able to appreciate the dynamics by comparing images.
taken over time. In some countries, the available images date back as far as 2015.

Aware of the importance of providing Members’ analysts with a tool already including information on runways and aerodromes, so that it would be useful from the first day of its deployment, the project designers developed a database on aerodromes and runways covering the 13 countries participating in the Project. The sources used were mainly open sources, such as those of the national civil aviation agencies, OurAirports, OpenStreetMap, ICAO and IATA. There were too many data; choices had to be made, and priority was given to certain sources that were more reliable or more comprehensive than others, the criteria being the origin of the information, its relevance (mandatory information fields), the volume of data, their structure and usability.

Users also have measurement tools for calculating a distance or a surface area and creating vector objects to pinpoint an event (runways, observations, controls or seizures). For example, if the maps show a field without a runway, but an operator has evidence that there is a runway there, the operator can add a vector object to the map and attach photos and descriptions.

The users of the Geoportal will, therefore, be able to view both public geographical data and events relating to controls, observations or seizures which, for their part, will be reported by users in the field using the mobile application. A colour and an icon have been attributed to each type of form, and filters will be available so that the user can choose which type of information should be displayed on the map and highlight aspects of it by adjusting the intensity of the icon’s colour (transparency). The area displayed on the screen can be printed and a description or a note can be added.

The layers of information created by a Customs administration are accessible only to that administration and are recorded only in the COLIBRI database. In other words, the events reported in country X cannot be viewed by country Y, which gives the tool an important guarantee of confidentiality, as requested by the beneficiary administrations.

One source widely used by aircraft surveillance services could not be integrated into the Geoportal: Flightradar24. This application makes it possible to track, in real time, all aircraft equipped with ADS-B (Automatic Dependent Surveillance-Broadcast) that are in flight or about to take off. Analysts are invited to compare the two data sources. The mobile application, moreover, provides a link to Flightradar24.

Training designed to achieve optimum utilization of the tool’s functionalities

Exhaustive training, not only on the functionalities of the tools, but also on the way in which they were designed, has been delivered to the national representatives of the countries participating in the COLIBRI Project who will, in turn, be responsible for training their peers. Much of the information provided during this training is covered in this article.

For the Secretariat of the WCO, the key concern was to ensure that the users of the tool are well aware of what an open information source is and to review the recommended practices for the use of these sources. Among other issues discussed were the criteria by which the quality of the data is determined and the questions that should be addressed before using open information source.

Support of the WCO Secretariat

The Geoportal consists of a new technology that is both intuitive and easy to use. By employing the new information and communication technologies that are used daily by the general public, it marks a new chapter in the surveillance and control of general aviation. It is now up to the countries participating in the Project to make the commitment and provide the resources needed to develop their database. The more data there are in the database, the more useful it will be to the analysts of the administrations responsible for combating organized crime in general and the fraudulent use of this mode of transport in particular.

More information

Drugsprogramme@wcoomd.org
Discover the WCO Trade Tools

Harmonized System (HS)
- Advanced search engine
- Direct view of the most recent HS updates
- Legal Notes, Explanatory Notes* and Classification Opinions*
- A comparison tool* enabling the user to view, side by side on the same page, two different editions and/or two different language versions of an HS code and its corresponding Legal Notes, Explanatory Notes or Classification Opinions
- A history tool* tracking the evolution of HS codes at subheading level across different editions
- Option to add comments, tags, save searches and create folders which are accessible through the homepage and in the user’s personal area*
Preferential Rules of Origin

- The legal texts of over 350 FTAs are available, together with their annexes and samples of corresponding certificates of origin*
- Possibility to search if a product is covered by an FTA by entering related HS code or keyword as well as an origin and a destination*
- A search tool by HS code or product description to look for Product Specific Rules*
- Comparison tool enabling the user to view, side by side on the same page, two different FTAs including Product Specific Rules of Origin*
Valuation
- Texts of the WTO Valuation Agreement
- Decisions taken by the WTO Committee on Customs Valuation*
- Instruments prepared by the WCO Technical Committee on Customs Valuation*
- Search tool*
- Alphabetical and subject indexes*

Subscription
Features followed by an asterisk* are available to subscribers only. When choosing your subscription, you can opt for a multi-user account which enables several users to access the platform at the same time, chat, and share comments, tags and folders.

Coming soon
Sign-up for the newsletter to keep informed of the new features to be added to the platform. We will shortly be publishing the Explanatory Notes and Classification Opinions for the HS 2022. We will also be presenting other WCO standards, such as the Revised Kyoto Convention, in a user-friendly way.

Licences and application programming interface (API) solution
Organizations and companies wishing to incorporate the features offered by WCO Trade Tools into their applications and online services can do so thanks to our API solution or our licence options. You may, for example, already have an application to calculate Customs duties and wish to offer your customers a search engine to find their way around the HS (API solution) or to give them access to HS Legal Notes, Explanatory Notes or Classification Opinions (API and Licence options). By connecting with our platform, you simplify the work required to do so.

More information
publications@wcoomd.org
https://www.wcotradetools.org
BILLIONS OF SHIPMENTS.
NO SHIPMENT GOES UNVETTED.

Publican is a digital shipment inspection system, allowing Customs agencies to increase tax collection, assure the safety and security of goods entering the country and streamline operational performance.
EIA launches Global Environmental Crime Tracker

The Environmental Investigation Agency (EIA), a non-governmental organization dedicated to combating environmental crime, has developed the first public-domain online platform collating data on seizures, arrests and prosecution records which contextualize the dynamics of the illegal wildlife trade. The tool uses data collected from publicly available information, including government reports, enforcement agency press releases and non-governmental and academic papers. News media coverage in several languages as well as information provided by partner NGOs is also used to paint a picture of criminal activities in Asia, Africa and Europe. Given the nature of criminal markets, differences in reporting and limitations in public access to law enforcement information across the world, the tool does not provide an exhaustive dataset and likely represents only a fraction of actual enforcement and illegal trade activity globally.

This platform, or Tracker, consists of dashboards and maps that illustrate the trafficking hotspots and transportation routes, and charts the links between the criminal networks and key individuals involved. The online Tracker is open-access and is a useful tool, particularly for Customs authorities as well as the transport industry. EIA has developed a demo video which explains how to use the Tracker, and bespoke training on the use of this tool is available upon request to EIA.

More information
Rachel Mackenna
rachelmackenna@eia-international.org
https://eia-international.org/global-environmental-crime-tracker
The OIE calls on Customs officials to increase vigilance against African swine fever

By the World Organisation for Animal Health (OIE)

Several countries around the world are facing the devastating effects of the African swine fever (ASF), a deadly pig disease of viral origin. The virus can travel from one country to another through people carrying infected pigs or contaminated pork products or clothing. Customs officials can play a key role in preventing the spread of the disease by setting up effective controls. By doing so, not only are they safeguarding animal health, but also food security and the global pork industry.

What is African swine fever (ASF)?
ASF is a highly contagious disease of domestic and wild pigs. Mortality rates may be as high as 100%. This disease is transmitted mainly by humans, as the virus can survive on clothes, boots, wheels, and other materials. It can cross borders if adequate measures are not implemented. Currently, there is no approved vaccine against ASF. Prevention in ASF-free countries is reliant on the implementation of appropriate import policies and border controls to ensure that neither infected live pigs nor pork products are introduced into these areas, as well as on the rollout of an effective information campaign to inform travellers of action and behaviour to be avoided.

Why is it important to stop the spread of this disease?
The recent upsurge of ASF around the globe was responsible for massive losses in pigs and drastic socio-economic consequences. This disease is not a danger to human health. However, it poses a major threat to pig health and welfare and, therefore, to the pig production systems. Considering that pigs represent a main source of animal protein among a growing human population, ASF not only impacts the livelihoods of small and large-scale pig producers, but also threatens food security worldwide.
Why is ASF an issue today?

Due to its complex epidemiology, the disease has spread relentlessly, affecting more than 50 countries in Africa, Europe and Asia since 2018. Only in Asia, over 6 million animal losses have been reported after the introduction of the disease into this region. More recently, ASF has entered the Americas for the first time in almost 40 years, as in July 2021, the Dominican Republic reported the first case in the region.

After disseminating an official alert through its World Animal Health Information System (OIE-WAHIS), the World Organisation for Animal Health (OIE), jointly with the Food and Agriculture Organization (FAO), mobilised its networks of experts in order to provide support to other countries of the Americas region. The OIE and FAO experts called on countries, among other actions, to reinforce their border controls with the aim to mitigate the risk of disease circulation across countries.

How can Customs officials help?

Customs officials are at the forefront of international passenger mobilisation. By increasing their vigilance, they contribute to prevent this deadly pig disease from crossing borders. In case of noticing any suspicious products of animal origin, Customs officials should contact the Veterinary Services of the country immediately.

To reduce the risks of ASF dissemination, it is equally important that Customs officials remain informed on the countries currently affected by the disease. This information can be found from the OIE-WAHIS, the main source of animal health data.

It is also critical that all those who could be involved in the direct and indirect transmission of ASF are aware of the impact of their actions. In this scenario, efficient risk communication becomes an essential component of the disease response. As part of the “ASF kills pigs” awareness campaign, the OIE has produced communication tools for travelers, as well as a campaign guide that shows how to use and disseminate these tools at different stages of passenger transit by air, see, or land, including at Customs checkpoints. All the tools are available in English, French, Spanish, Mandarin and Russian. By disseminating them, Customs officials can help raise awareness on the disease.

The cooperation between different actors is of utmost importance to curb the spread of ASF. The OIE would like to express its sincere gratitude to the World Customs Organization and its members for their support in the fight against ASF, and for being engaged in the protection of animal health and of the livelihoods of some of the world’s most vulnerable populations from this devastating pig disease.

More information

https://wahis.oie.int
https://trello.com/b/GloiZoik/african-swine-fever-oie
CARGO SCANNING & SOLUTIONS TO COMBAT TRADE FRAUD, SMUGGLING, & TERRORISM

Secure your port of entry and enhance operational efficiencies. Our industry-leading cargo inspection technology helps to uncover threats and contraband while our data integration platform collects and combines information from your operation to automate processes, control workflows, and deliver actionable intelligence. With decades of experience in cargo scanning and solutions, we can define and deliver the ideal screening program for your mission.

rapiscan-ase.com
E-commerce

How Customs is responding to the challenge
Now is the time for implementation

By Kunio Mikuriya, WCO Secretary General

In many countries, statistics show a strong uptake of online sales and a big increase in the market share of online as opposed to offline retail since the start of the pandemic. In COVID-19 and e-commerce: a global review, the United Nations Conference on Trade and Development reported that Latin America’s online marketplace Mercado Libre, for example, sold twice as many items per day in the second quarter of 2020 as during the same period in the previous year; African e-commerce platform Jumia reported a 50% jump in transactions during the first six months of 2020.

The three members of the Global Express Association (DHL, FedEx and UPS) have also seen a massive increase in the volumes of non-document shipments they carry. During the first wave of the pandemic – February to June 2020 – their volumes grew by 50%. Part of this increase was medical equipment (PPEs, masks, etc.), but a substantial proportion was made up of other types of items.

Consumers went online – many millions of them for the first time – because they could not go out to the shop round the corner. Some observers believe that many will return to the shops when they re-open, but many will continue to shop online. In other words, the volumes of shipments of goods purchased online will stay strong during the recovery from the pandemic.

It is more difficult to find data on international online sales, but here as well, volumes are reported to be increasing. When the COVID-19 outbreak became global early in 2020, initial uncertainty and transport disruption caused a dip in international online sales, but according to cross-border e-commerce solution provider eShopWorld, they rebounded in April 2020 and then rose to unprecedented levels throughout the course of 2020.

It has in fact been pointed out that facilitating cross-border e-commerce could help with the economic recovery, provided there is due emphasis on the need to ensure that the smallest traders can avail themselves of the export opportunities this brings.

Many countries have established thresholds below which no duties and taxes are levied and only minimal information is required to be provided when a consignment enters a country. While the value of this threshold varies a lot, in most countries the exponential increase in the sale of physical products online translates into an increasing number of “low-value” shipments crossing a border. Controlling this particular flow of goods to prevent the movement of prohibited and restricted goods, and identify consignments which have been split and/or undervalued to evade duties and taxes, presents a number of challenges.

The pressing issue is how to manage this time-sensitive flow of goods effectively without placing a strain on control operations and on the capacity
of logistics service providers, and without creating complex procedures and a heavy workload for small businesses and individuals who have limited capacity to meet complex trade regulations.

**WCO standards and guidance material**

To address this issue, WCO Members have been working through a multi-stakeholder Working Group on E-Commerce (WGEC) on the development of international norms and guidance material, which have been brought together in an E-Commerce Package including not only a Framework of Standards on cross-border e-commerce (E-Commerce FoS), but also many tools to support its implementation.

The Framework provides 15 baseline global standards with a focus on the exchange of advance electronic data (AED) for effective risk management. It also encourages the use of the Authorized Economic Operator (AEO) concept, non-intrusive inspection (NII) equipment, data analytics, and other cutting-edge technologies to support safe, secure and sustainable cross-border e-commerce.

Now is the time for implementation, and a broad capacity building action plan which will guide the WCO Secretariat’s activities in the coming months has recently been added to the Package, along with key performance indicators (KPIs) which will make it possible to monitor the implementation of the WCO standards and identify capacity building needs.

In January 2021, the Secretariat started rolling out regional workshops to ensure that all WCO Members had a good knowledge of the Package; these workshops included representatives of the Universal Postal Union (UPU), the Organisation for Economic Co-operation and Development (OECD), the Global Express Association (GEA) and e-commerce stakeholders.

As a next step, in 2022 national workshops will be planned for administrations that have notified their intention to implement the E-Commerce FoS, completed an assessment using the WCO KPIs and made an official request to the Secretariat. The Secretariat has already accredited 11 Technical and Operational Advisers on E-Commerce so it can respond positively to such requests for assistance.

**Main challenges and topics discussed**

Areas posing specific challenges were identified during the regional workshops. They include the collection of electronic advance information on e-commerce shipments, the improvement of compliance and data quality, the simplification of duty and tax payment procedures which are often too complex, and the strengthening of risk analysis capacities. The topics discussed included expanding the concept of Authorized Economic Operator (AEO) to include e-commerce stakeholders, the use of advanced technologies, and cooperation with stakeholders such as marketplaces, fulfilment centers and free zones/warehouses.

Graph 1 - Elements of the E-Commerce Package

In 2022, national workshops will be planned for administrations that have notified their intention to implement the E-Commerce FoS, completed an assessment using the WCO KPIs and made an official request to the Secretariat.

---

1 The Working Group comprised representatives from governments, the private sector, international organizations, E-Commerce stakeholders, and academia.
Governments and business need to meet this challenge together

In the same spirit as the regional workshops, on 28 and 29 June 2021 the Secretariat held its Second Global Conference on Cross-Border E-Commerce, thanks to the financial support of the Customs Cooperation Fund of Japan. Some speakers highlighted the tremendous degree of dynamism and also the variety observed in countries nowadays in the area of cross-border e-commerce approaches, legislation and capacity; for example, the ability to analyse data for risk assessment purposes varies a lot between national agencies and countries. Moreover, while the underlying technology enabling data exchange may be similar in terms of its fundamental logic, the requirements differ from one administration to another.

One of the objectives of the workshops and the Conferences has been to enable Customs to share processes and procedures, as well as to better understand the e-commerce “ecosystem” and its business models. Other forums also exist at the national level, with more and more Customs administrations creating working groups with e-commerce stakeholders as they review their legal and operational frameworks. At a higher level, companies have started building their own cooperation frameworks with some governments in order to explore new policies and rules in support of trade.

Dossier contents

For the “Dossier” in this Edition, we have invited several administrations to share information on the initiatives they are taking to enhance their capacity to control the compliance of “low value” shipments.

We start with an article by Argentina Customs, explaining how the Administration is reviewing its legal, policy and operational framework to ensure it is aligned with the WCO E-Commerce FoS and other WCO guidance material. The article does not describe the procedures in place to process the flows of goods generated by online sales in Argentina, but interested readers can consult the WCO Compendium of Case Studies on E-Commerce to which Argentina Customs contributed. Instead, the article focuses on the various steps of the review process.

This is followed by an article by United States Customs and Border Protection about two test programmes it recently conducted to assess the possibility of collecting certain advance data related to shipments potentially eligible for release under its de minimis entry process, and to implement a new entry process for such shipments.

Next, the use of three types of technology to enhance targeting capacities is described in an article by the Korea Customs Service. These technologies are blockchain, artificial intelligence and big data. The Administration also shares some interesting lessons, highlighting the fact that successful technology-focused projects aim to find solutions to actual issues faced by operational officers, and that teamwork between ICT and Customs experts is critical.

The last article introduces Peru Customs’ new clearance process for express shipments, as well as the web platform and mobile application it has developed to enable importers to track the status of their shipments and pay duties and taxes at authorized banking institutions. Not only has the new process enabled the Administration to improve its risk management procedures, it has also significantly reduced the time required for the release of goods.

Even if every country’s situation is unique, I believe that it is still important to ensure experiences are shared and initiatives explained. More and more Customs administrations are looking at how to review or enhance their legal and operational frameworks in line with WCO standards and guidance tools. I warmly encourage them to contact us should they wish to communicate on their efforts and achievements.
The WCO defines cross-border e-commerce as “All transactions which are effected digitally through a computer network (e.g. the internet), and result in physical goods flows subject to Customs formalities”.1 Like many countries, when talking about cross-border e-commerce shipments, Argentina Customs includes shipments transported by postal operators and express couriers.

In this article, we will not describe the procedures in place to process these specific flows of goods. Interested readers can consult the WCO Compendium of Case Studies on E-Commerce.2 Instead, we will explain how the Administration is reviewing its legal, policy and operational framework in terms of alignment with the WCO Cross-Border E-Commerce Framework of Standards and other WCO guidance material.

Working Groups
Argentina Customs created an Internal Working Group with the mandate of undertaking a diagnostic on cross-border e-commerce soon after the WCO Framework was adopted in June 2018. The Group consisted of 12 officials in charge of project coordination, process reengineering, technical and operational matters, and institutional relations. All had extensive knowledge of the discussions which had taken place at the WCO E-Commerce Working Group since 2016 or at the WCO Permanent Technical Committee. Some had also supported the WCO Secretariat capacity building efforts on e-commerce by participating in the WCO Global Conferences on Cross-Border E-Commerce and in regional and national workshops, among other things.

The Internal Working Group members held regular (virtual) meetings with various departments to discuss issues such as advance information, risk management, revenue collection and security. In July 2021, the Group came up with a diagnostic report, a list of recommendations and a roadmap for their implementation.

Diagnostic
The diagnostic addressed each standard of the WCO Framework: for each standard, a list of questions was drafted, with the aim of shedding light on existing procedures and practices related to the standards.

The diagnostic highlighted the need to develop specific import and export regulations adapted to

---

the various existing e-commerce business models. To this end, it recommended setting up four working groups (WGs) to address the following topics:

- Advance Electronic Information and Risk Management (WG1)
- Trade Facilitation and Control (WG2)
- Revenue Collection (WG3)
- Security (WG4)

One of the members of the Internal Working Group, Ms. María Florencia Róvere, participated in the WCO Fellowship Programme from May to June 2021. The research work she carried out under the supervision of WCO Secretariat experts was related to cross-border e-commerce. As a result, Argentina Customs was able to incorporate a series of recommendations drafted together with the WCO. Among those is a list of the data which could be required and which takes into account WCO Reference Data elements for cross-border E-Commerce (see Table 1).

Roadmap implementation
The Internal Working Group then organized a meeting with focal points from each Customs Sub-Directorate General. They discussed the conclusions of the diagnostic and the roadmap, agreeing on the way forward in terms of priorities and working methods. Each focal point agreed to participate in the four working groups, and that representatives from their area (or Sub-Directorate General) would participate in the working groups when needed. A report listing the actions to be carried out was then submitted to the Director General of Customs, who gave her consent to begin work on implementation.

In mid-August 2021, the working groups began meeting virtually. They established a work plan with performance indicators and deadlines, based on the initial diagnostic report.

Members of WG1 on Advance Electronic Information and Risk Management started mapping out stakeholders in the e-commerce chain, harmonizing data required under the current clearance process, aligning the sets of data with the WCO Data Model, and discussing the use of anticipated data, including their usefulness and relevance.

Members of WG2 on Trade Facilitation and Control worked on clarifying procedures for re-dispatches and returns, outlining the UPU Customs Declaration System (CDS) functionalities, and building flowcharts.

Members of WG3 on Revenue Collection identified problems associated with payments, and analysed complaints and assistance requests (for example, concerning the returns process, payment methods, and delays in the accreditation of payments). They also started reviewing collection models.

Finally, Members of WG4 on Security looked at how to clarify issues relating to prohibited/restricted merchandise and address the way in which problems associated with such goods can be reduced. They also analysed possible liaison with security forces regarding investigations.

In line with WCO Framework Standard 11 on public/private partnerships, all groups agreed to set up working tables open to private sector representatives to enable the latter to keep informed of the Administration’s progress and to express their views.

In mid-August 2021, the working groups began meeting virtually. They established a work plan with performance indicators and deadlines, based on the initial diagnostic report.

Members of WG1 on Advance Electronic Information and Risk Management started mapping out stakeholders in the e-commerce chain, harmonizing data required under the current clearance process, aligning the sets of data with the WCO Data Model, and discussing the use of anticipated data, including their usefulness and relevance.

Members of WG2 on Trade Facilitation and Control worked on clarifying procedures for re-dispatches and returns, outlining the UPU Customs Declaration System (CDS) functionalities, and building flowcharts.

Members of WG3 on Revenue Collection identified problems associated with payments, and analysed complaints and assistance requests (for example, concerning the returns process, payment methods, and delays in the accreditation of payments). They also started reviewing collection models.

Finally, Members of WG4 on Security looked at how to clarify issues relating to prohibited/restricted merchandise and address the way in which problems associated with such goods can be reduced. They also analysed possible liaison with security forces regarding investigations.

Roadmap implementation
The Internal Working Group then organized a meeting with focal points from each Customs Sub-Directorate General. They discussed the conclusions of the diagnostic and the roadmap, agreeing on the way forward in terms of priorities and working methods. Each focal point agreed to participate in the four working groups, and that representatives from their area (or Sub-Directorate General) would participate in the working groups when needed. A report listing the actions to be carried out was then submitted to the Director General of Customs, who gave her consent to begin work on implementation.

In mid-August 2021, the working groups began meeting virtually. They established a work plan with performance indicators and deadlines, based on the initial diagnostic report.

Members of WG1 on Advance Electronic Information and Risk Management started mapping out stakeholders in the e-commerce chain, harmonizing data required under the current clearance process, aligning the sets of data with the WCO Data Model, and discussing the use of anticipated data, including their usefulness and relevance.

Members of WG2 on Trade Facilitation and Control worked on clarifying procedures for re-dispatches and returns, outlining the UPU Customs Declaration System (CDS) functionalities, and building flowcharts.

Members of WG3 on Revenue Collection identified problems associated with payments, and analysed complaints and assistance requests (for example, concerning the returns process, payment methods, and delays in the accreditation of payments). They also started reviewing collection models.

Finally, Members of WG4 on Security looked at how to clarify issues relating to prohibited/restricted merchandise and address the way in which problems associated with such goods can be reduced. They also analysed possible liaison with security forces regarding investigations.

In line with WCO Framework Standard 11 on public/private partnerships, all groups agreed to set up working tables open to private sector representatives to enable the latter to keep informed of the Administration’s progress and to express their views. The Administration started a stakeholder analysis and mapping exercise to ensure the process was inclusive.

The plan at a later stage is to invite other government agencies to participate in the working groups. Afterwards, the working groups intend to request technical assistance from the WCO, once implementation of the work plan is more advanced.

Conclusion
The review of policies and procedures related to e-commerce is an ambitious task, but one which Argentina Customs is confident it can complete successfully with the help of this new collaborative approach.

More information
dgacet@afip.gob.ar
Table 1 – Analysis of the data elements which could be captured to enhance risk management (numbers after hyphens refer to the WCO Reference Data elements for cross-border E-commerce)

<table>
<thead>
<tr>
<th>Data Elements</th>
<th>Description</th>
<th>Current situation</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Information Related to the E-Commerce Platform or Marketplace</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Platform] - Name - 25</td>
<td>Name of the platform where the sale operation associated with the goods contained in a shipment was made</td>
<td>No No</td>
</tr>
<tr>
<td>[Platform] - Order number - 31</td>
<td>Unique purchase order number of the trading platform/marketplace</td>
<td>No No</td>
</tr>
<tr>
<td>[Platform] - Country</td>
<td>Country in which the company associated with the platform where the trading transaction was made is located</td>
<td>No No</td>
</tr>
<tr>
<td>[Platform] - Trading platform/marketplace website - 26</td>
<td>Website of the platform where the trade transaction was made</td>
<td>No No</td>
</tr>
<tr>
<td>[Platform] - Retail price in export country &amp; listed price on marketplace - 41</td>
<td>Real commercial value of the goods contained in a shipment</td>
<td>No No</td>
</tr>
<tr>
<td><strong>Payment Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Purchase] - Payment method for transportation - 39</td>
<td>Payment method for transportation, codified</td>
<td>No No</td>
</tr>
<tr>
<td>[Purchase] - Credit card number (last 4 digits)</td>
<td>Last 4 digits of the credit card with which the purchase of the goods contained in a shipment was made via e-commerce platform</td>
<td>No No</td>
</tr>
<tr>
<td><strong>Buyer Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Buyer] - Identifier - 6</td>
<td>Identifier tax ID (CUIT for Argentina) or similar of the party to which merchandise is sold</td>
<td>No No</td>
</tr>
<tr>
<td>[Buyer] - Name and address - 4</td>
<td>Name [and address] of the party to which merchandise is sold</td>
<td>No No</td>
</tr>
<tr>
<td>[Buyer] - Phone and email - 5</td>
<td>Phone and email of the buyer of the goods contained in a shipment</td>
<td>No No</td>
</tr>
<tr>
<td><strong>Consignor Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Consignor] - Address - 8</td>
<td>Sender's address</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>[Consignor] - Place whence consigned - 10</td>
<td>Name of the place in country from which the goods were initially dispatched to the importing country</td>
<td>No No</td>
</tr>
<tr>
<td>[Consignor] - Name - 7</td>
<td>Sender's name</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>[Consignor] - Country - 11</td>
<td>Sender's country (starting point)</td>
<td>No No</td>
</tr>
<tr>
<td>[Consignor] - Phone and email - 9</td>
<td>Sender's phone and email</td>
<td>No No</td>
</tr>
<tr>
<td><strong>Seller Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Seller] - Identifier - 2</td>
<td>Identifier tax ID (CUIT for Argentina) or similar of the party selling merchandise to a buyer</td>
<td>No No</td>
</tr>
<tr>
<td>[Seller] - Name and address -1</td>
<td>Name [and address] of the party selling merchandise to a buyer</td>
<td>No No</td>
</tr>
<tr>
<td><strong>Consignee Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Consignee] - Final delivery party (name/address) - 15</td>
<td>Name and address of who received the shipment</td>
<td>No No</td>
</tr>
<tr>
<td>[Consignee] - Address - 13</td>
<td>Details relating to the address of the consignee</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>[Consignee] - Name - 12</td>
<td>Name of the party to which goods are consigned</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>[Consignee] - Phone and email - 14</td>
<td>Consignee's phone and email</td>
<td>No No</td>
</tr>
<tr>
<td><strong>Shipping Information</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>[Shipment] - Number of packages - 16</td>
<td>Number of items contained in a shipment</td>
<td>Yes Yes</td>
</tr>
<tr>
<td>[Shipment] - Detailed description</td>
<td>Detailed description (as reported by the e-commerce portals) of the goods contained in a shipment</td>
<td>No No</td>
</tr>
<tr>
<td>Data Elements</td>
<td>Description</td>
<td>Current situation</td>
</tr>
<tr>
<td>---------------------------------------------------</td>
<td>------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>[Shipment] - Additional documentation - 45</td>
<td>Type of additional documentation associated with a shipment, coded</td>
<td>Postal Operator</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Courier</td>
</tr>
<tr>
<td>[Shipment] - Additional document reference number - 44</td>
<td>Document ID</td>
<td>No</td>
</tr>
<tr>
<td>[Shipment] - Scan - 24</td>
<td>Corresponding image(s) with possible scans of the goods contained in a shipment</td>
<td>No</td>
</tr>
<tr>
<td>[Shipment] - Invoice number - 46</td>
<td>Identifier of the invoice(s) corresponding to the sale of the goods contained in a shipment</td>
<td>No</td>
</tr>
<tr>
<td>[Shipment] - Date of declaration - 49</td>
<td>Date corresponding to the declaration of a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Statement identifier - 48</td>
<td>Identifier corresponding to a declaration of a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Image - 22</td>
<td>Corresponding images or images with the goods contained in a shipment</td>
<td>No</td>
</tr>
<tr>
<td>[Shipment] - Goods - 21</td>
<td>Description and quantities of the goods contained in a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Gross weight -18</td>
<td>Gross weight of goods contained in the shipment transported, including packaging</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Product weight -19</td>
<td>Net weight of goods contained in the shipment transported</td>
<td>No</td>
</tr>
<tr>
<td>[Shipment] - Port, terminal, or border crossing through which it arrives - 34</td>
<td>Customs and operating point by which a shipment enters</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Tracking - 32</td>
<td>Unique identifier for a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - URL of purchase - 23</td>
<td>URL/link associated with the purchase of the goods contained in a shipment</td>
<td>No</td>
</tr>
<tr>
<td>[Shipment] - Customs value -40</td>
<td>Customs value of the goods contained in a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Road</td>
<td>Country entry/egress route of a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Classification -43</td>
<td>Tariff classification (or the type of classification adopted under the relevant regime) of the goods contained in a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>- Item</td>
<td>Yes</td>
</tr>
<tr>
<td>[Shipment] - Freight, insurance and other expenses and other expenses - 42</td>
<td>Freight, insurance and other expenses associated with a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>Transport Information</td>
<td></td>
<td></td>
</tr>
<tr>
<td>[National carrier] - Name - 30</td>
<td>Name of carrier transporting a shipment within the country from which it is exported (cases where the same task is not performed by the same export manager)</td>
<td>No</td>
</tr>
<tr>
<td>[Carrier] - Name - 28</td>
<td>Name of carrier who transported a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>[Carrier] - Country - 29</td>
<td>Country in which the transport is located that transferred a shipment</td>
<td>Yes</td>
</tr>
<tr>
<td>(Carrier) Shipment initiator -3</td>
<td>Shipment initiator (name/address &amp; phone number)</td>
<td>No</td>
</tr>
<tr>
<td>(Carrier) Transport charges method of payment, coded -20</td>
<td>Code specifying the payment method for transport charges (DM ID 098)</td>
<td>No</td>
</tr>
</tbody>
</table>
USCBP latest initiatives to strengthen enforcement capacity for e-commerce shipments

By United States Customs and Border Protection

E-commerce is a growing segment of the economy of the United States. It made up 10.7% of the total retail sales in 2019 and 14% in 2020¹. In 2020 alone, e-commerce sales in the U.S. grew over 40% and reached $791.8 billion U.S. dollars in value².

The growth of e-commerce presents many challenges. Although e-commerce shipments pose the same health, safety, and economic security risks as containerized shipments, United States Customs and Border Protection (CBP) lacks full visibility into the e-commerce supply chain due to the complex and dynamic nature of the industry. The overwhelming volume of small packages also makes it difficult for CBP to identify and interdict packages presenting high risk. Further, vague and inaccurate electronic data provided by certain trade entities poses a significant challenge when CBP is targeting shipments.

In order to address these challenges, CBP’s E-Commerce Branch has been focusing its effort to improve trade risk management by working closely with the trade community. In 2019, CBP convened an E-Commerce Task Force (ETF) of industry participants covering all aspects of e-commerce to identify more accurately the nature and origin of Section 321 shipments.

Title 19 of the United States Code (U.S.C.) §1321(a)(2)(C) enables CBP to admit qualifying merchandise duty- and tax-free, provided that the merchandise is imported by “one person on one day” and has a total fair retail value in the country of shipment of $800 USD or less. Section 321(a)(2)(C) of the Tariff Act of 1930, as amended (Section 321), authorizes CBP to provide an administrative exemption to admit, free from duty and tax, shipments of merchandise (other than bona fide gifts and certain personal and household goods) imported by one person on one day having an aggregate fair retail value in the country of shipment of not more than $800 USD. This exemption is known as a de minimis entry.

In coordination with the ETF, CBP mapped business models specific to e-commerce, identified parties responsible for the sale and movement of goods, and established which parties had access to and could provide additional data with which to better assess e-commerce risk. This effort to receive advance electronic data to target risk shipments in a more effective and timely manner served as the foundation for two test programs, namely, the Section 321 Data Pilot and the Entry Type 86 Test, which CBP launched in July and September of 2019, respectively. CBP is now looking to formalize the success of these two pilot programs, with the objective of enabling the agency to monitor and protect against illegitimate trade while providing the public with the benefits of duty-free shipments for qualifying imports.

**Section 321 Data Pilot and administrative ruling**

On 23 July 2019, CBP published its intent to conduct a voluntary pilot to collect certain advance data related to shipments potentially eligible for release under Section 321. CBP collaborated with carriers, technology firms, logistics providers and non-traditional CBP partners, such as online marketplaces, to invite them to participate. Pursuant to this pilot, participants transmitted electronically certain data elements pertaining to de minimis shipments to CBP in advance of arrival. The pilot allowed CBP to accept shipment-level information directly from online marketplaces and match it with the information received from traditional carriers. CBP is conducting this pilot for two reasons. The first is to determine the feasibility of requiring advance data from different

---

Informal entries do not require a posting of a Customs bond and are liquidated at the time of release.

The Section 321 administrative ruling better positions CBP to identify duty evasions and other abuses consistent with current statutory authorities, and helps create a more predictable enforcement environment for trade. Owners or purchasers of a shipment wishing to qualify as the “person” under Section 321 are required to provide their first and last name, or the name of the business. This ruling therefore also provides CBP with important foreign seller information with which to target and interdict counterfeit products, consumer safety violations, and other threats before they enter the U.S.

Entry Type 86 Test

In addition to the Section 321 Data Pilot, in September 2019 CBP also conducted a test of a new entry process for Section 321 shipments, including those subject to Partner Government Agency (PGA) data requirements, which currently cannot be cleared through the Section 321 de minimis entry process. Known as the "Entry Type 86 Test", it allows Customs brokers and self-filers (an owner or purchaser of a Section 321 low-value shipment) to electronically submit de minimis entries with a limited data set through the Automated Broker Interface, including those entries which are subject to PGA data requirements for clearance but exempted from PGA duties, taxes and fees. Merchandise imported by mail and transported by the United States Postal Service was excluded from the Entry Type 86 Test. This new entry type is intended to improve import safety and security by providing greater visibility into low-value shipments for both CBP and PGAs, while ensuring regulatory requirements are met.

Proposed advance electronic data elements

CBP is currently in the process of formalizing the processes established under the Section 321 Data Pilot and Entry Type 86 Test. The new processes which are to be adopted will leverage results and
lessons learned from the two pilot programs and sunset both programs.

CBP proposes that the following information must be submitted to CBP by the importer of merchandise or authorized agent of the importer for a shipment to receive clearance:

1. Data Transmission ID (Unique Identifier)
2. Marketplace Name and Website or Phone Number
3. Consumer Purchaser Name and Address
4. Shipper Name and Address
5. Advertised Product Description
6. Value
7. Country of Origin
8. One or more of the following must be provided:
   - Link to Product Listing
   - Product Picture
   - Product Identifier
   - Shipment X-Ray
9. PGA Data Set (If applicable)
10. 10-Digit Harmonized Tariff System Number

**Documented benefits**

As of August 2021, CBP received additional data on 603 million shipments: 206 million Section 321 Data Pilot transactions and 397 million Entry Type 86 transactions. In the fourth quarter of fiscal year 2020, CBP received Section 321 Data Pilot data on nearly 25% of all non-mail de minimis shipments. Similarly, Entry Type 86 filings accounted for almost 50% of all non-mail de minimis shipments. The two pilot programmes have also shown significant operational benefits when pilot participants provided seller information, product pictures, and other transactional details. First, the programmes led to a more predictable and consistent enforcement environment for low-risk shipments and trusted trade partners. Second, obtaining advance data elements significantly reduced CBP workload, with same-day clearance compared to the previous six- to eight-day wait times. Further, advance information led to fewer CBP holds and improved overall security, including mitigating risks associated with the importation of potentially counterfeit test kits, medical devices, and personal protective equipment related to COVID-19.

Pilot participants also experienced fewer holds. One e-commerce platform experienced 97% fewer holds from when they first began transmitting data, and another experienced 90% fewer holds. In addition to such operational benefits, feedback received in a CBP survey revealed that pilot participants saw an estimated $2 billion USD in time and cost savings associated with the Entry Type 86 test.

**Informed compliance efforts**

While administering the two pilot programs, CBP has made significant efforts to engage with the trade community and to inform stakeholders of the Section 321 administrative ruling and its implications. In addition to engaging with the ETF, CBP’s E-commerce Branch and Office of Trade Relations actively connect with the trade community in various fora. For example, CBP holds quarterly public meetings with the Advisory Committee on Commercial Operations (COAC), a group of private sector stakeholders selected to advise the Secretaries of the Department of Treasury and the Department of Homeland Security on the commercial operations of CBP (minutes and documents related to these meetings can be found online). The Branch also participates in numerous webinars and online training events to inform the public of the latest regulations and available resources.

CBP understands the importance of working closely with the trade community to achieve its objectives, especially when implementing new administrative rulings. CBP has been engaged with the trade community throughout this dynamic process and will continue to work not only with the traditional players, but also with foreign stakeholders who will be affected by the Section 321 administrative ruling.

**More information**

https://www.cbp.gov
By Yonghwan CHOI, Director of R&D and Equipment Division, Korea Customs Service

Korea Customs Service (KCS) has introduced a range of measures since early 2010 to respond to a growing number of imports and exports generated by online sales and purchases by both businesses and individuals, given the strong upward trend in cross-border e-commerce.

KCS previously described the measures it had taken to streamline the import and export process for goods bought online in the October 2015 edition of WCO News. It also introduced the analytical tools it was testing to root out commercial fraud via express cargo and postal items in the June 2018 edition of the magazine. In this article, the focus is on the use of three types of technology to enhance current KCS targeting capacities: blockchain, artificial intelligence and big data.

**Traditional clearance process**

KCS started the process of computerization back in the 1970s, since when it has been building a strong ITC capacity, has automated 93% of its business processes and has developed a data-driven culture among its staff.

Figure 1 describes how data related to an online cross-border transaction is captured and processed, from order to payment. Currently, KCS captures data reported in the manifest and Customs declaration, and analyses it through its automated targeting system. Postal operators and couriers are obliged to send information requested for clearance electronically, to permit the pre-advice and potential pre-clearance of items. To do this, postal operators use the electronic version of the CN 22 and CN 23 forms developed by the WCO and the Universal Postal Union (UPU).

---

1 https://mag.wcoomd.org/magazine/wco-news-78/supporting-e-commerce-korea-customs-services-strategy
X-ray inspections are carried out on all expedited cargo and international mail. When a package is flagged by the risk management system, the Customs officer handling the inspection sees all of the data contained in the form used for clearance, as well as the X-ray, on his or her computer screen. For small and medium courier companies which do not have modern facilities, KCS has built an Express Cargo Logistics Centre which is equipped with the latest facilities, including automatic X-ray scanners integrated into the conveyor system.

Since 2014, delivery service providers have also been required to report the actual destination of express cargo to KCS once delivery is complete. The objective is to prevent any abuse of the de minimis facility by way of vendors splitting consignments in order to willfully take advantage of the tax exemption system and the simplified procedures for low-value goods. Once the delivery has taken place, the information is fed once again into the automated targeting system which conducts another risk analysis focusing on the delivery address.

**Strengthening data capture through blockchain**

At the moment, assessing risk presents some constraints, given the low quality of data available. One way to strengthen the risk management system would be to obtain the data, including the value of the goods and the delivery address, directly from the various parties creating that data, such as e-commerce sellers, express carriers, and Customs brokers.

From 2018 to 2020, KCS carried out a pilot project exploring the use of blockchain technology to elevate the levels of transparency in information flows, and trust among individual data creators, and to automate the data entry process, which is currently partly manual (see Figure 2). The pilot was successful in that information held by each participant in a transaction was shared directly with Customs via the blockchain. The reason for this success lies partly in the fact that e-commerce transactions are relatively simple and are computerized, and that each participant holds very specific data at very specific points in time during a transaction.

In the traditional clearance model, information related to a purchase is submitted to Customs by the delivery company and the declarant who collects it from the buyer or seller. In this process some data may be changed, accidentally or intentionally, leading to a risk of undervaluation or misdeclaration.

In the blockchain scheme, all parties to a transaction (sellers, express carriers, and Customs brokers) are sending their piece of information, or block, directly to Customs in real time. During the pilot, KCS controlled all the transactions...
recorded on the blockchain and confirmed that the information received was accurate.

One lesson learned from the project is that the initial cost of setting up and operating the blockchain is higher than that of other types of data-sharing system. Moreover, it is important to consider issues such as maintenance, data privacy, sustainability, and scalability of the network when choosing the type of blockchain to use. KCS uses a private-permissioned blockchain, and has encountered issues related to high-volume data transmission.

**Leveraging automatic detection tools to enhance image processing**

As mentioned, all items transported via the mail or express cargo chain go through an X-ray scanner. But this system has some limitations. Firstly, only the images of packages flagged by the automated targeting system are analysed. Secondly, although KCS image analysts are very skilled, there is a limit to their observation and concentration capacity. Finally, with the increase in the number of packages received, there is a chronic shortage of image analysts. One way to solve the problem is by enhancing targeting capacities so that fewer packages need to be inspected. Another way is to leverage automatic detection tools, commonly known by the acronym "ATR", which stands for "automatic threat recognition" or "assisted target recognition".

KCS has been working on the development of algorithms that will enable scanners to recognize objects, to connect with the automated targeting system and to display the name of objects on top of the scanned image to assist image analysts. By comparing the data received from the scanner with the data contained in the cargo manifest or Customs declaration, the automated targeting system could verify whether the data and image received from the scanner match. When a shipment has been flagged, Customs officers will be alerted either by a signal displayed on their monitor or by a sound.

The process started with the establishment of a research project in 2017 which was tasked with undertaking a proof of concept (POC) exercise. The research team concluded that it was possible to use the tremendous volumes of historic scanning images held by KCS and build up a massive reference database for building ATR algorithms which would identify a list of high-risk goods, and modify itself or create new algorithms in response to learned inputs and new data in an automated mode. In other words, the system will make use of Artificial Intelligence.

In 2019, KCS started setting up the technical infrastructure required and, in 2020, it carried out the process of training the machine to recognize certain items of interest, such as guns. The algorithm analyses pictures based on their shape, density, and texture, and even atomic numbers. It is updated regularly. In 2021, the focus was to
develop additional functions needed by image analysts who work at frontline Customs offices.

**Big data**

Big data can be defined as data sets of a size or type that traditional relational databases do not have the ability to capture, manage or process. KCS has been harnessing big data since 2017. It first identified specific problems that it wanted to solve, and the key data required to solve these problems. It then ensured it collected this data and acquired missing data, before developing analysis models. This last activity was carried out in stages. Enhancing auditing capacity to combat tax fraud more effectively was the first area of work, followed by enabling the comparison of export and import data. KCS then looked at where to find data that was not already available to tackle other issues. In 2020, the organization-wide big data system was established, and a designated team set up to develop and operate analytical tools.

**Lessons learned**

During its journey, KCS has learned a few lessons. First, a basic requirement for using technology is access to data. But data is a means, not an end. The second lesson is therefore that teams developing analytics must understand the different needs of staff. All successful technology-focused projects aim to find solutions to actual issues faced by operational officers. Teamwork between ICT and Customs experts is critical, and mechanisms must be in place to ensure that IT solutions can be refined following their deployment, in other words to create feedback loops. Last but not least, it is necessary to develop a global innovation strategy approved by Customs top management and developed with the support of its various divisions, and also with foreign partners in the case of projects with an international dimension.

**More information**
yonghwanc@korea.kr
kcsrnd@korea.kr
Peru develops new processes and services to facilitate and secure cross-border e-commerce

By the National Superintendency of Customs and Tax Administration (SUNAT), Peru

In Peru, the importation of goods purchased online has increased by 23% annually over the past five years. Consumers and companies buy products through marketplaces such as AliExpress, Amazon, eBay, and Wish from sellers mostly located in Asia, the United States, and Europe. Products are mainly transported by air via express courier delivery services called Empresas de Servicio de Entrega Rápida (ESERs).

A number of years ago, as part of its digital transformation efforts, SUNAT began reviewing the way it processes goods transported by ESERs. The Covid-19 pandemic gave renewed impetus to the reform process as it became a matter of urgency to minimize physical contact and the unnecessary movement of people. Indeed, until 2020, importers of goods shipped internationally by express couriers were required, in certain circumstances, to handle the clearance process themselves and to visit a Customs office or warehouse in person in order to submit the documents required by Customs and to pay any duties and taxes.

All this changed at the end of 2020 when SUNAT implemented a new clearance process for express shipments that allows ESERs to transmit advance declarations and submit advance deferred payment guarantees, and SUNAT to perform risk analysis based on selectivity and release small packages upon arrival. As additional services, it launched a web platform and a mobile application enabling importers to track the status of their shipments and pay duties and taxes at authorized banking institutions.

A new clearance process for express shipments

In Peru, some 1.3 million shipments are imported every year by express air carriers. Since the end of 2020, ESERs are responsible for declaring shipments and must transmit all data required by Customs electronically in a consolidated format via an online platform.
About 80% of the shipments they carry contain goods whose total FOB value does not exceed USD 200, the de minimis threshold under which no duties and taxes are collected. Such shipments are usually released on arrival of the carrier for immediate delivery directly to the end consumer.

Shipments whose value is above the de minimis threshold but below USD 2,000 are subject to taxes and must be declared by the ESERs using a courier import declaration. ESERs may submit a bank guarantee to the Customs office to facilitate the clearance process and ask the importers for payment of the duties and taxes which they then redistribute to SUNAT.

Finally, shipments exceeding USD 2,000 in value and/or 50 kg in weight must be cleared via a broker. In this instance, the ESERs’ role is limited to the storage of express shipments.

**New services enhance communication with importers**

To enable importers to track the status of their shipments, SUNAT launched a web platform and a mobile application. Importers can query the system by entering the air waybill number or the Customs declaration number. They are then informed in real time of the location of their shipment and receive notifications from ESERs either to an email address or via the app installed on their phone.

**Risk management capacity has improved**

The new process has enabled SUNAT to improve its risk management procedures in two ways. First, data related to shipments are now received in advance, before the arrival of the goods in the Customs territory. Second, the quality of the data has improved, as ESERs have professional teams who handle Customs declarations.

**Time required for the release of goods has been reduced**

The average time required for the release of goods was gradually and significantly reduced to 2.1 hours in August 2021 (see Figures 1 and 2).

SUNAT’s achievements did not go unnoticed. The Administration received the Best Practices Award in Public Management 2021 which is awarded by Ciudadanos al Día, a non-governmental organization, and the School of Public Management of the Universidad del Pacífico in recognition of the efforts of public servants in providing quality services to consumers and companies.

More information
rmallea@sunat.gob.pe
cvillarruel@sunat.gob.pe
### Table 1 - WCO Reference Data elements for cross-border E-Commerce

Data collected by Peru Customs are in blue

<table>
<thead>
<tr>
<th>No.</th>
<th>Data Elements</th>
<th>Description</th>
<th>Purpose</th>
<th>Source</th>
</tr>
</thead>
</table>
| 1   | Seller name and address | Name [and address] of a party selling merchandise to a buyer | Safety & Security | SAFE  
1 |
<p>| 2   | Seller identifier | Identifier of the party selling merchandise to a buyer | Safety &amp; Security | SAFE |
| 3   | Shipment initiator (Name/ Address &amp; Phone number) | | Safety &amp; Security | US Pilot Data |
| 4   | Buyer, name and address | Name [and address] of a party to which merchandise is sold | Safety &amp; Security | SAFE |
| 5   | Buyer, phone number &amp; Email address | | Safety &amp; Security | US Pilot Data |
| 6   | Buyer identifier | Identifier of a party to which merchandise is sold | Safety &amp; Security | SAFE |
| 7   | Consignor, name | Name of the party consigning goods as stipulated in the transport contract by the party ordering transport | Safety &amp; Security | IRG |
| 8   | Consignor, address | Details relating to the address of the consignor | Safety &amp; Security | IRG |
| 9   | Consignor, phone number &amp; Email address | | Safety &amp; Security | US Pilot Data |
| 10  | Place whence consigned | Name of the place in country from which the goods were initially dispatched to the importing country | Safety &amp; Security | IRG |
| 11  | Place or country whence consigned, coded | Identification of the place in country or country from which the goods were initially dispatched to the importing country | Safety &amp; Security | IRG |
| 12  | Consignee, name | Name of the party to which goods are consigned | Safety &amp; Security | IRG |
| 13  | Consignee, address | Details relating to the address of the consignee | Safety &amp; Security | IRG |
| 14  | Consignee, phone number &amp; Email address | | Safety &amp; Security | US Pilot Data |
| 15  | Final Deliver to Party (Name/ Address) | | Safety &amp; Security | US Pilot Data |
| 16  | Number of packages | Number of individual items packaged in such a way that they cannot be divided without first undoing the packing | Safety &amp; Security | IRG |
| 17  | Merchandise / Product Quantity | | Safety &amp; Security | US Pilot Data |
| 18  | Total gross weight (incl. Measure unit qualifier) | Weight (mass) of goods including packaging, but excluding the carrier's equipment for a document | Safety &amp; Security | IRG |
| 19  | Merchandise /Product weight | | Safety &amp; Security | US Pilot Data |
| 20  | Transport charges method of payment, coded | Code specifying the payment method for transport charges (DM ID 098) | Safety &amp; Security | JP |
| 21  | Enhanced Product Description | | Safety &amp; Security | US Pilot Data |
| 22  | Product Picture | | Safety &amp; Security | US Pilot Data |
| 23  | Link to Product Listing | | Safety &amp; Security | US Pilot Data |
| 24  | Shipment Security Scan | | Safety &amp; Security | US Pilot Data |
| 25  | Trading Platform/ Marketplace Name | Name of the trading platform/marketplace | Safety &amp; Security | |</p>
<table>
<thead>
<tr>
<th>No.</th>
<th>Data Elements</th>
<th>Description</th>
<th>Purpose</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>31</td>
<td>Order Number</td>
<td>Unique purchase order number of the trading platform/marketplace</td>
<td>Safety &amp; Security</td>
<td>US Pilot Data</td>
</tr>
<tr>
<td>32</td>
<td>Parcel Number</td>
<td>Unique number assigned to parcel/shipment</td>
<td>Safety &amp; Security</td>
<td>US Pilot Data</td>
</tr>
<tr>
<td>33</td>
<td>Credit card number (last 4 digits)</td>
<td>Credit card number (last 4 digits) for transactions via E-commerce platforms</td>
<td>Safety &amp; Security</td>
<td>JP</td>
</tr>
<tr>
<td>34</td>
<td>First Port of arrival, coded</td>
<td>To identify the first arrival location. This would be a port for sea, airport for air and border post for land crossing</td>
<td>Safety &amp; Security</td>
<td>IRG</td>
</tr>
<tr>
<td>35</td>
<td>House Bill Number &amp; Master Bill Number</td>
<td></td>
<td>Safety &amp; Security</td>
<td>US Pilot Data</td>
</tr>
<tr>
<td>36</td>
<td>Mode of Transportation</td>
<td></td>
<td></td>
<td>US Pilot Data</td>
</tr>
<tr>
<td>37</td>
<td>Originator Code</td>
<td></td>
<td></td>
<td>US Pilot Data</td>
</tr>
<tr>
<td>38</td>
<td>Participant Filer Type</td>
<td></td>
<td></td>
<td>US Pilot Data</td>
</tr>
<tr>
<td>39</td>
<td>Nature of transaction, coded</td>
<td>Code specifying the nature of a transaction associated with a shipment</td>
<td>Revenue</td>
<td>IRG</td>
</tr>
<tr>
<td>40</td>
<td>Customs value</td>
<td>Amount declared for Customs purposes of those goods in a consignment which are subject to the same Customs procedure, and have the same tariff/statistical heading, country information and duty regime</td>
<td>Revenue</td>
<td>IRG</td>
</tr>
<tr>
<td>41</td>
<td>Retail Price in Export Country &amp; Listed Price on Market Place/Intrinsic value</td>
<td></td>
<td>Revenue Safety &amp; Security</td>
<td>US Pilot Data NL</td>
</tr>
<tr>
<td>42</td>
<td>Charges</td>
<td>Aggregate cost of freight, insurance and all other costs and expenses from the foreign exit location to the entry location</td>
<td>Revenue</td>
<td>IRG</td>
</tr>
<tr>
<td>43</td>
<td>Commodity Classification</td>
<td>The non-commercial categorization of a commodity by a standard-setting organization</td>
<td>Revenue Safety &amp; Security</td>
<td>IRG (applicable to goods outside De minimis)</td>
</tr>
<tr>
<td>44</td>
<td>Additional document reference number</td>
<td>Identifier of a document providing additional information</td>
<td>Revenue</td>
<td>IRG (applicable to goods outside De minimis)</td>
</tr>
<tr>
<td>45</td>
<td>Additional document type, coded</td>
<td>Code specifying the name of an additional document</td>
<td>Revenue</td>
<td>IRG (applicable to goods outside De minimis)</td>
</tr>
<tr>
<td>46</td>
<td>Invoice number</td>
<td>Reference number to identify an invoice</td>
<td>Revenue</td>
<td>IRG (applicable to goods outside De minimis)</td>
</tr>
<tr>
<td>47</td>
<td>Additional fiscal references identification No</td>
<td>Special registration number of the taxable person</td>
<td>Revenue</td>
<td>In the case of vendor-based approach to revenue collection</td>
</tr>
<tr>
<td>48</td>
<td>Customs declaration number</td>
<td>Reference number identifying a Customs declaration/document</td>
<td>Revenue</td>
<td></td>
</tr>
<tr>
<td>49</td>
<td>Customs declaration date</td>
<td></td>
<td>Revenue</td>
<td>United Kingdom</td>
</tr>
</tbody>
</table>
It’s time to certify your Customs competency

PARCOURS

certifiants

Our training “PARCOURS” meet your goals:

☑ Eligible for CPF funding
☑ In partnership with the French Customs
☑ Recognised by the European Commission
☑ Customs Competency-Based Training (in accordance with the UCC)

Contacts: contact@odasce.org +33 (0)1 55 34 76 80 Paris 9e

www.odasce.asso.fr
Dubai Customs launches an app to help with goods classification

By Dubai Customs

Trade operators required to classify their goods in the Unified Customs Tariff of countries belonging to the Cooperation Council for the Arab States of the Gulf (GCC) now have a helpful application (app) at their disposal. The app, called Al Munasiq (The Harmonizer), enables them to look up a tariff code by either entering an item’s description, capturing a photo of the item using their smartphone camera, or uploading an existing photo/picture to the app.

The app will provide users with one or more results, ranking from a higher to lower probability, as well as with commodity information such as the description of the item, applicable Customs duty rate and any related prohibitions and restrictions. As every country in the GCC applies the same tariff nomenclature, the app should prove useful to all exporters and importers operating in the Gulf.

Based on machine learning, which is the development of algorithms that learn from experience, the app compares the photo/picture received with those in its library. The Google Cloud Vision API was used to integrate vision detection features within the application, including image labelling. The object description/tariff code correlations were then used to teach the machine how to classify objects. Results were reviewed by tariff experts to train the model. The latter will continuously be improved, with new expert-verified data sets being integrated into the model for retraining on a periodic basis until the classification accuracy is almost perfect.

Dubai Customs also provides assistance on classification matters for a fee via an online form. If users have any doubts about the results provided by the app, they can still fill in the form to request a tariff expert’s opinion. It is worth pointing out here that, despite being somewhat similar to an advance ruling system for classification, the classification decisions issued by Dubai Customs are not binding.

The app has considerably reduced the time required to answer operators’ classification requests. It previously took an average of 20 hours for an officer to process such a request, whereas it now takes the app under a minute to do so. Even though operators may still contact Dubai Customs via the online form, they have expressed their satisfaction with the app.

The Al Munasiq app is available on the Google Play Store.

How the app works

1. The user captures a photo of the item or enters a description of it.
2. The app identifies the item through image recognition techniques or by searching the keywords entered in the description.
3. The app selects a possible heading (or headings) and displays the accuracy rate for each heading.
4. The user selects the tariff code heading he/she considers to be the most accurate.
5. The app provides a description of the heading, the applicable duty rate and information on existing prohibitions and restrictions.

More information

External.Relations@dubaicustoms.ae
Africa has a long history of initiatives aiming at supporting regional economic cooperation. Let me give a few examples. The Southern African Customs Union (SACU) dates back to the 1889 Customs Union Convention between the British Colony of the Cape of Good Hope and the Orange Free State Boer Republic, which was expanded by a 1910 agreement to include the Union of South Africa and the then British High Commission territories of present-day Lesotho, Botswana, Eswatini and Namibia. The Mano River Union (MRU), which comprises Liberia, Sierra Leone, Cote d’Ivoire and Guinea, was formally established in 1973 but was preceded by the Kondo Confederacy which at its peak in the 19th Century had two-thirds of its area in present-day Sierra Leone and one-third in present day Liberia. The East African Community (EAC) was officially established by the Treaty for East African Cooperation (1967-1977); however, formal economic and social integration in the Eastern Africa region actually started with, among other things, the construction of the Kenya-Uganda Railway (1897) as well as the establishment of the Customs Collection Centre (1900) and the Customs Union (1919).

Over the years, many Regional Economic Communities (RECs) have been created. As for initiatives at the continent level, they started with the Treaty Establishing the African Economic Community (AEC) adopted in 1991 by Members of the Organization of African Unity (OAU) which had been created in 1963. It was envisaged that the AEC would be established by strengthening the existing RECs and by creating other economic groupings in other regions of Africa, so as to cover the continent as a whole. In other words, progress by RECs was seen as progress towards and a step closer to the AEC.

The OAU was succeeded by the African Union (AU) which envisaged deeper integration of the continent, beyond what was conceived.
by the OAU Charter, as can be seen from its establishment of a number of specialized technical committees. One of the committees is the Committee on Trade, Customs and Immigration Matters. In 2006, the AU Assembly of Heads of State and Government made a decision to suspend the recognition of new RECs. Today, eight RECs are recognized by the AU. In June 2015, the AU launched the negotiations for the Agreement Establishing the African Continental Free Trade Area (AfCFTA) which was signed on 21 March 2018.

This long introduction is aimed at demonstrating that the AfCFTA is the latest of many regional integration initiatives that go back to the years prior to the colonization of Africa, of integration efforts by the colonial powers, and of initiatives by independent African States under the auspices of the OAU and the AU.

The Agreement creates a single continental market for goods (Article 3 of the Agreement), which will be achieved through the progressive elimination of tariffs and non-tariff barriers to trade in goods (Article 4). Some of the negotiating principles made provision for (a) the negotiations to be driven by Member States of the AU; (b) the RECs’ Free Trade Areas (FTAs) as building blocks of the AfCFTA; (c) variable geometry; (d) flexibility and special and differential treatment; (e) transparency and disclosure of information; and (f) preservation of the acquis. In effect, this meant that the negotiations would lead to substantial liberalization of intra-African trade, building upon the achievements that had been made within the RECs without replacing them.

Architecture of the AfCFTA Agreement
Article 6 provides that “the Agreement shall cover trade in goods, trade in services, investment, intellectual property rights (IPR) and competition policy.” The Agreement is complex in that it is being negotiated in several phases, and even within each phase there are aspects where consensus has been achieved as well as outstanding issues.

Phase I of the Agreement covers trade in goods, trade in services, and rules and procedures for the settlement of disputes (see Figure 1). Negotiations on the Schedules of Tariff Concessions (Annex 1 to the Protocol on Trade in Goods), and on some aspects of Rules of Origin (Annex 2) are ongoing and expected to conclude by the end of 2021.

This means that, currently, it is possible to trade some goods under the AfCFTA preferential terms.

Phase II of the negotiations, which is ongoing, covers investment, IPR and competition policy. At the 33rd AU Summit in February 2020, Members made a decision to negotiate a Protocol on e-Commerce as part of Phase III immediately after the end of the Phase II negotiations. Moreover, in December 2020, AU Members directed the AfCFTA Secretariat to commence work towards developing the AfCFTA Protocol on Women in Trade. The Phase III negotiations, while not explicitly provided for in the Agreement, are in accordance with one of its objectives, namely to "cooperate in all trade-related areas" (Article 4).

As provided in Article 8 of the Agreement, the Protocols, Annexes and associated Appendices shall, upon adoption, form an integral part of the Agreement, as well as part of the single undertaking, subject to entry into force. The Agreement does not allow any reservations (Article 25).

Figure 1 - Architecture of the Agreement (Phase I)

Customs in the AfCFTA Agreement
The Customs administrations of AU Member States have been active in Phase I of the negotiations, primarily through participation in the Technical Working Groups (TWGs) on Rules of Origin, and on Customs Cooperation, Trade Facilitation and Transit. One of the general objectives of the Agreement is “to
lay the foundation for the establishment of a Continental Customs Union at a later stage” (Article 3), where the State Parties will apply a Common External Tariff. This is ambitious: out of the eight RECs that are recognized by the AU, only two (EAC and Economic Community of West African States (ECOWAS)) are operational Customs unions with a common external tariff (CET). The Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC) have operational FTAs without a CET, while the Arab Maghreb Union (AMU), the Community of Sahel-Saharan States (CEN-SAD), the Economic Community of Central African States (ECCAS) and the Intergovernmental Authority on Development (IGAD) have not made significant progress towards integration. As for SACU, it is not an REC recognized by the AU.

Specific objectives of the Agreement include “to cooperate on Customs matters and the implementation of trade facilitation measures” (Article 4). Most of the provisions of the Agreement relevant to Customs are found in the Protocol on Trade in Goods (see Figure 2). Five out of the nine Annexes to the Protocol are of specific relevance to Customs. These are (a) Annex 1: Schedules of Tariff Concessions; (b) Annex 2: Rules of Origin; (c) Annex 3: Customs Cooperation and Mutual Administrative Assistance; (d) Annex 4: Trade Facilitation; and (e) Annex 8: Transit.

Schedules of Tariff Concessions

The term “Schedules of Tariff Concessions” is defined in Article 1 of the Protocol as “a list of negotiated specific tariff concessions and commitments by each State Party” which “sets out, transparently, the terms, conditions and qualifications under which goods may be imported under the AfCFTA.” The AU has adopted modalities for tariff liberalization with a level of ambition of 90% of tariff lines, over a period of five years for non-least developed countries (non-LDCs) and 10 years for least developed countries (LDCs). For products in the sensitive list, non-LDCs have a transition period of 10 years, while LDCs have 13 years, with effect from 1 January 2021 when liberalization started (Table 1). The exclusion list is subject to review every five (5) years. These negotiations are supported by the AfCFTA Tariff Negotiations online portal where Member States upload their tariff offers. The negotiations have not yet been concluded. Article 42, paragraph 3 of the Protocol on Trade in Goods provides that “pending the adoption of the outstanding provisions, State Parties agree that the Rules of Origin in existing trade regimes shall be applicable.”

Table 1: Modalities for Tariff Liberalization

<table>
<thead>
<tr>
<th>Tariff Line</th>
<th>Coverage (%)</th>
<th>Value of Imports</th>
<th>Transition Periods</th>
</tr>
</thead>
<tbody>
<tr>
<td>General</td>
<td>90</td>
<td>90</td>
<td>5 Years 10 Years</td>
</tr>
<tr>
<td>Sensitive Products</td>
<td>7</td>
<td>10</td>
<td>10 Years 13 Years</td>
</tr>
<tr>
<td>Exclusion List Products</td>
<td>3</td>
<td>10</td>
<td>No Liberalization No Liberalization</td>
</tr>
</tbody>
</table>

Source: Adapted from Taisuke Ito (2020) Designing Trade Liberalization in Africa: Modalities for Tariff Negotiations towards an African Continental Free Trade Area, UNCTAD.

Rules of Origin

As indicated above, the AfCFTA Rules of Origin are found in Annex 2 to the Protocol on Trade in Goods. Annex 2 provides the general criteria for determination of the originating status of goods (“wholly obtained” and “substantial transformation”). In addition, there are product-specific rules, contained in Appendix 4, providing the minimum conditions required for some products to be considered as sufficiently worked or processed.

Determination of origin requires, first of all, classification of the product in the World Customs Organization (WCO) Harmonized System (HS) as the requirements for determination...
of origin for specific products are indicated in the tariff schedules which are based on the WCO Nomenclature. Secondly, it is necessary to identify the export market destination. The AfCFTA Rules of Origin shall only apply to trade between AfCFTA Contracting Parties that do not already trade with one another on a preferential basis within an existing regional economic community. Indeed, Article 19 of the Agreement provides that in case of any inconsistency between the Agreement and any regional agreement, "this Agreement shall prevail to the extent of the specific inconsistency" (paragraph 1), but that "State Parties that are members of other regional economic communities, regional trading arrangements and Customs unions, which have attained among themselves higher levels of regional integration than under this Agreement, shall maintain such levels among themselves" (paragraph 2).

Thirdly, one must ensure that goods are wholly obtained or produced in a State Party (Article 5 of Annex 2 to the Protocol on Trade in Goods). If the product contains any imported materials from non-AfCFTA third countries, it is necessary to determine whether those materials have been substantially transformed in accordance with the sufficient processing requirements. Moreover, there are processes that do not confer origin, specified in Article 7 of Annex 2, which must be taken account of, even if the product in question may have met the requirements of the "wholly obtained" or "substantially transformed" criteria.

Finally, there is a provision for cumulation of origin within the State Parties (Article 8 of Annex 2), which allows all the State Parties to the AfCFTA to be considered a single territory for origin purposes. This means that goods can be wholly produced in one State Party, then undergo processing in one or more State Parties before the finished products are exported to another State Party. Such goods will be considered as originating in the last country of processing for the purpose of issuance of the Certificate of Origin, using the criterion of cumulation.

**Customs procedures**

Some 16 out of the world’s 32 landlocked developing countries are in Africa. There are 55 AU Member States, separated by numerous borders that constrain movement of goods, people and capital. Even within RECs, bottlenecks remain. Speaking at a forum organized by the Manufacturers Association of Nigeria in early September 2021, Mr. Aliko Dangote, President of the Dangote Group that has investments across many African countries, indicated that the opportunities in the AfCFTA had the potential to increase business income substantially, but that this was not possible when a lorry from Lagos to Lomé (a distance of 270 kilometres) took 10 days, while moving goods from Nigeria to Ghana took two weeks. For this reason, some commentators have said that the biggest benefit of the AfCFTA will not be from tariff liberalization, but rather from reduction in non-tariff barriers to trade.

AU Member States are overwhelmingly supportive of the multilateral trading system. Most of them are Members of the WCO (96.4%) and the World Trade Organization (WTO) (76.4%). Nine of those which are non-WTO Members are negotiating accession to it (Algeria, Comoros, Equatorial Guinea, Ethiopia, Libya, Sao Tome and Principe, Somalia, South Sudan and Sudan).

Table 2: AU Members - Ratification of Relevant International Instruments

<table>
<thead>
<tr>
<th>Convention or Agreement</th>
<th>Number of Contracting Parties out of the 55 AU Members</th>
<th>Percentage of AU Membership</th>
</tr>
</thead>
<tbody>
<tr>
<td>Convention establishing the Customs Co-operation Council, 1952</td>
<td>53</td>
<td>96.4%</td>
</tr>
<tr>
<td>WCO HS Convention, 1983</td>
<td>52</td>
<td>98.1%</td>
</tr>
<tr>
<td>WCO Revised Kyoto Convention</td>
<td>37</td>
<td>69.8%</td>
</tr>
<tr>
<td>Marrakesh Agreement establishing the WTO, 1995</td>
<td>42</td>
<td>76.4%</td>
</tr>
<tr>
<td>WTO Agreement on Trade Facilitation, 2014</td>
<td>41</td>
<td>97.6%</td>
</tr>
</tbody>
</table>

Source: Author, based on WCO and WTO documents

The World Bank estimates that the AfCFTA has the potential to take up to 30 million Africans out of extreme poverty and increase the incomes of 68 million Africans who live on less than USD 5.50 a day.
The provisions in Annexes 3 (Customs Cooperation), 4 (Trade Facilitation) and 8 (Transit) of the Protocol on Trade in Goods are generally in line with WCO and WTO trade facilitation instruments, consistent with the principle that the AfCFTA shall be governed by, among other things, best practices in international conventions binding the African Union (see table 2). Under the AfCFTA, African Customs administrations therefore have to abide by norms and procedures which are not, or should not be, new to them.

A comparison between the provisions of the WTO TFA and the AfCFTA Protocol on Trade in Goods shows similar (and in some cases identical) provisions relating to Publication and Availability of Information (TFA Article 1), Advance Rulings (TFA Article 3), Procedures for Appeal or Review (TFA Article 4), Disciplines on Fees and Charges Imposed on or in Connection with Importation and Exportation and Penalties (TFA Article 6) and Release and Clearance of Goods including Pre-Arrival Processing, Risk Management, Post-Clearance Audit and Authorized Operators (TFA Article 7). However, there are also important provisions in the TFA that have not been included in the AfCFTA, such as providing traders and other interested parties with an opportunity to comment on new or amended legislation before its entry into force (TFA Article 2), notifications for enhanced controls and inspections, and other measures to enhance impartiality, non-discrimination and transparency (TFA Article 5) and provisions for temporary admission of goods and inward and outward processing (TFA Article 10, paragraph 9).

The apparent shortcomings in the AfCFTA Agreement do not mean that the Agreement is “TFA-lite”. There are cases where the AfCFTA goes beyond the provisions in the TFA. For example, it seeks deeper harmonization of the
legal framework in AU Member States, including harmonization of Customs tariff nomenclatures using the WCO HS Nomenclature (Article 3 of Annex 3 to the Protocol on Trade in Goods), of valuation systems and practices (Article 4), and the simplification and harmonization of Customs procedures, using the WCO Revised Kyoto Convention and the TFA (Article 5).

Furthermore, while Article 12 of the TFA provides a framework for Customs cooperation in the exchange and sharing of information for the purpose of enhancing compliance, and protection of confidentiality, State Parties to the AfCFTA undertake to establish and continually upgrade modern data processing systems to facilitate effective and efficient Customs operations and transmission of data amongst themselves (Article 6 of Annex 3 to the Protocol on Trade in Goods) and cooperate in the prevention, investigation and suppression of Customs offences (Article 8).

In spite of the impressive legal commitments that AU Member States have made at the international level, we have not seen a matching commitment to implementation of these obligations at the national level. It is hoped that the AfCFTA Secretariat will be able to give new impetus to this process, such as by monitoring border procedures and the use of trade preferences on the African continent.

Let us take the WCO HS as an example. Even though most African countries are Contracting Parties to the HS Convention and thus have an obligation to use the latest version of the HS, they still do not do so. With the advent of the African Continental Free Trade Area, this obligation has been further reinforced. Indeed, under the AfCFTA, State Parties undertake to adopt Customs tariff nomenclatures and statistical nomenclatures which are in conformity with the latest applicable version of the HS.
About the author
Creck Buyonge Mirito is an independent consultant in Customs, international trade, trade facilitation and border management based in Nairobi, Kenya.

Many projects have been rolled out to assist African Customs administrations, RECs and Customs Union secretariats in implementing international standards, harmonizing procedures, applying modern working practices, exchanging information and deploying IT tools. For example, the EU-WCO Programme for the Harmonized System in Africa involves 49 AU Member States and six RECs/Customs Unions (Central African Economic and Monetary Community (CEMAC), EAC, ECCAS, ECOWAS, SACU and the West African Economic and Monetary Union (UEMOA)). The more difficult work entails addressing non-tariff trade barriers (NTBs), and the Agreement provides for a governance structure to tackle the problem. In this regard, the United Nations Conference on Trade and Development (UNCTAD) has assisted the AU in developing and implementing the online continental NTBs Reporting, Monitoring and Elimination Mechanism which has been in operation since January 2020. Among other features, this Mechanism allows traders to log in and register NTBs that they face in the course of doing business, and enables National Focal Points to take action to resolve NTBs and report within given deadlines (https://tradebarriers.africa/).

From negotiation to implementation
The World Bank estimates that the AfCFTA has the potential to take up to 30 million Africans out of extreme poverty and increase the incomes of 68 million Africans who live on less than USD 5.50 a day.

The AU is banking on technology to deliver this promise. One of the “operational instruments” of the AfCFTA is the Pan African Payments and Settlement System (PAPSS) which will be the first centralized payment market infrastructure for processing, clearing and settling intra-African trade and commerce payments. PAPSS is an arm of the African Export Import Bank (Afreximbank), which is a Pan-African multilateral financial institution established in 1993 for the purpose of financing and promoting intra and extra African trade. It will make it possible for African companies to clear and settle intra-African trade transactions in their local currencies.

However, one should not forget the fundamental role of Customs administrations here. They are expected to participate actively in implementing the Agreement at the national level, and in the structures established at the continental level to monitor implementation of the Agreement, including in the Sub-Committee on Customs Cooperation, Trade Facilitation and Transit, and in the Sub-Committee on elimination of Non-Tariff Barriers. They will also have to provide sound data to enable an assessment of the impact of the Agreement in terms of regional integration of trade flows.

More information
creckbuyonge@gmail.com
The illegal wildlife trade: modus operandi and transport routes in West and Central Africa

By the Environmental Investigation Agency

The illegal wildlife trade (IWT) poses a risk not only to biodiversity and ecosystems, but also to public health, good governance, economies and security worldwide. Given that the point of sourcing and the end-market are often on opposite sides of the world, criminals exploit existing international transport systems to move their products, and Customs authorities have a critical role to play in disrupting their activities. They must therefore be equipped with the knowledge, resources and capacity to capitalize on their strategic position in the trade chain in order to monitor and control the transboundary movement of illegal wildlife products.

The Environmental Investigation Agency (EIA)\(^1\) is a non-governmental organization dedicated to combating environmental crime, with over 35 years’ experience in tackling wildlife trafficking. The aim of this article is to share the data we have collected, and the results of the analyses and investigations we have carried out, on IWT modus operandi and transport routes in West and Central Africa, with a particular focus on Nigeria which has emerged as the principal exit point for illicit ivory and pangolin scales leaving Africa for Asian markets.

**Shifting tides: West and Central Africa**

In its December 2020 report, *Out of Africa*, EIA reveals that there has been a marked shift of ivory and pangolin trafficking operations from Eastern and Southern Africa to West and Central Africa, with the products being destined for East and Southeast Asia.\(^2\) This year alone, Nigerian Customs has seized nearly 17 tonnes of ivory

---

\(^1\) The Environmental Investigation Agency, [https://eia-international.org/](https://eia-international.org/)

\(^2\) EIA (2020). *Out of Africa: How West and Central Africa have become the epicentre of ivory and pangolin scale trafficking to Asia* [online]. Available at: [https://reports.eia-international.org/out-of-africa/](https://reports.eia-international.org/out-of-africa/) [Accessed 08/09/2021].
and pangolin scales, in two separate seizures in January and July, indicative of the central role of Nigeria in the large-scale illegal wildlife trade, and of the work done by Customs authorities.\(^3\)

Despite some successful seizures of wildlife contraband, significant challenges remain in terms of ensuring that Customs in the region can play an impactful role in deterring and disrupting wildlife crime. The COVID-19 pandemic has further exacerbated the situation. EIA’s data shows that wildlife criminals are exploiting corruption, the lack of scanning equipment and the reduction in staff availability during the pandemic in order to smuggle wildlife across borders.

Criminal networks operating in West and Central Africa’s export hubs extend across a swathe of the region’s tropical rainforests and savannahs, presenting sustained threats to the last strongholds of forest and savannah elephants and pangolin species (white- and black-bellied and giant ground pangolins) in the region. Smuggling routes involve many countries, including Togo, Cameroon, Gabon, DR Congo, the Republic of Congo, the Central African Republic, Liberia, Côte d’Ivoire and Benin.

**Transit and export hubs along the illegal wildlife trade chain**

Since 2016, Nigeria has been implicated in global seizures of nearly 40 tonnes of ivory and 184 tonnes of pangolin scales, representing many thousands of dead elephants and pangolins. In many seizures, ivory and pangolin scales have been found in the same shipment, demonstrating a high level of convergence. Ivory and pangolin traffickers may also be involved in trafficking other wildlife commodities such as rhino horn, lion teeth, seahorses and shark fins, as well as donkey skins and timber.

Through undercover investigations conducted in West and Central Africa, EIA has highlighted how ivory and pangolin scales are being trafficked across the region, into and out of Nigeria; for example, illegal wildlife products are sourced from suppliers in Cameroon before being sold to customers in Nigeria and abroad – to predominantly Vietnamese and Chinese buyers. Lagos-based traders are known to work closely with clearing agents, who in turn exploit corrupt connections with Government officials, particularly in the Customs departments of specific sea and airports, to export ivory and pangolin scales in staggering quantities. These highly organized and sophisticated operations span multiple jurisdictions and violate Customs laws, as well as laws related to wildlife/environmental protection, organized crime, conspiracy, money laundering and corruption.

**Concealment methods**

Traffickers in West and Central Africa are known to exploit the services of major maritime shipping and air transport companies to move their illicit cargo. These companies include Maersk, Pacific International Lines, Ethiopian Airlines, Turkish Airlines and Emirates Airlines.\(^4\) Smugglers use a variety of concealment methods or “fillers” to disguise ivory and pangolin scales, their choice being dictated by the legality of the filler, costs, and whether the filler is similar in shape and size to the contraband. For example, cashew nuts have been found to be commonly used to hide pangolin scales sent by sea freight from Nigeria to Asia, often exported from Apapa seaport. Other types of fillers used by traffickers include donkey skins, ginger root, peanuts, beans, timber, plastic, charcoal, palm oil and moringa seeds.

---


\(^4\) EIA has engaged in preliminary discussions with these companies and will continue to share actionable intelligence.
From Nigeria to Vietnam

Traders in Nigeria work closely with shipping agents at major hubs, including Apapa seaport and Lagos airport, to export illegal goods. Although there are direct route options from Nigeria to seaports in Vietnam such as Hai Phong, Da Nang and Ho Chi Minh City, most syndicates opt for transhipment and/or transit locations such as Malaysia and Singapore so as to circumvent detection. Repacking of goods and bill switching may take place through clearing agents during transit, before onward transportation to Vietnam and China via air, sea or land routes. Upon arrival, clearing agents at the destination are responsible for clearing the illicit ivory and pangolin scale shipments before forwarding them to the importers, who then sell the goods on to processors and/or end consumers.

Examples of recent large-scale seizures of ivory and pangolin scales implicating Nigeria and Vietnam⁵

<table>
<thead>
<tr>
<th>Location</th>
<th>Date</th>
<th>Product</th>
<th>Quantity</th>
<th>Route</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lagos, Nigeria</td>
<td>July 2021</td>
<td>Ivory, pangolin</td>
<td>7,137kg pangolin scales, 4.6kg pangolin claws, 846kg ivory</td>
<td>Unknown</td>
</tr>
<tr>
<td>Apapa port, Nigeria</td>
<td>January 2021</td>
<td>Pangolin</td>
<td>8,800kg pangolin scales and ivory</td>
<td>Destined for Vietnam</td>
</tr>
<tr>
<td>Cai Mep port, Vietnam</td>
<td>May 2019</td>
<td>Ivory, pangolin</td>
<td>5,260kg pangolin scales</td>
<td>Provenance Nigeria</td>
</tr>
<tr>
<td>Da Nong port, Vietnam</td>
<td>October 2018</td>
<td>Ivory, pangolin</td>
<td>6,334kg pangolin scales, 1,800kg ivory</td>
<td>Provenance Nigeria</td>
</tr>
</tbody>
</table>

Role of corruption

It is universally understood that corruption “oils” organized crime, and IWT is no exception. Nigeria is regarded as a “safe” country for the trade and shipment of illegal goods by wildlife traffickers, specifically because bribes can easily be paid – and accepted. Corruption enables criminals to avoid detection, seizure and arrest, and may even permit them to retrieve their goods on the rare occasions when they have been seized by the authorities. Up to 70 per cent of the fees charged by corrupt clearing agents are for bribes to government officials and private transport company staff involved in the inspection process.

Our research indicates that illegal traders in Nigeria will commonly build up a network of corrupt individuals, including shipping line staff, Customs officials and the port security staff involved in scanning shipments. They work as a team and share the bribes paid by illegal wildlife traders and freight agents. Further, there is evidence that traffickers use multiple front companies to disguise their illegal business, using each company two to three times before switching to a new one.

⁵ EIA, Global Environmental Crime Tracker.

Raw ivory offered for sale by traders in Nigeria during EIA investigations

© EIA
Impact of COVID-19
The impact of COVID-19 on wildlife trafficking has led to a dynamic situation. EIA data indicates a significant drop in the number of seizures of ivory and pangolin scales reported in 2020 and 2021, compared with previous years, most likely due to global travel restrictions and the reduction in passenger flights due to the pandemic. The decrease in the number of seizures may be due to fewer enforcement staff available to conduct investigations and detect shipments at borders as well as reduced reporting of wildlife seizures due to pandemic priorities. However, EIA investigations have also confirmed that ivory and pangolin scale trafficking is continuing despite the pandemic, as demonstrated by Nigerian Customs’ seizure of nearly 17 tonnes of ivory and pangolin scales between January and August 2021.

Vietnamese and Chinese buyers who used to visit Nigeria to carry out transactions have been prevented from travelling during the pandemic. Traffickers have adapted to the travel and transport restrictions, with suppliers and buyers increasingly using online communication and social media platforms. Furthermore, testimony from traffickers suggests that throughout the pandemic large amounts of wildlife contraband have been stockpiled in anticipation of renewed business post-COVID-19. As international travel resumes, it will be especially important for Customs and law enforcement authorities to maintain and strengthen checks at border crossings in order to disrupt wildlife trafficking attempts.

It also appears that less stringent checks at sea ports have led to the continued use of maritime shipments. Despite intelligence suggesting that business has slowed on the receiving end in Asia, it is believed that goods are still being shipped to Vietnam and Malaysia by sea.

Corrupt practices have also continued during the pandemic. Intelligence suggests that workers at seaports may have been more willing to accept bribes from traffickers as a means of mitigating the economic hardships linked to national lockdowns, and even that the price for clearing shipments of ivory and pangolin scales has increased during lockdown.

Conclusion
Identifying and addressing corruption within key government agencies, including Customs, is key to tackling wildlife crime; EIA encourages national Customs authorities to work closely with national anti-corruption bodies to ensure corrupt elements are investigated and prosecuted.

Given the transboundary nature of illegal wildlife trade, international and regional coordination is key to disrupting and deterring wildlife criminals. Furthermore, it is also necessary to incentivize shipping companies, clearing agents, freight forwarders and other private transport operators to enhance the security of the supply and transportation system and effectively cooperate with Customs officials to detect, seize and investigate wildlife trafficking. With elephant and pangolin populations in severe decline in West and Central Africa, including some local extinctions, there is no time to waste.

More information
rachelmackenna@eia-international.org
Brand new facility for the training of Customs officials in Morocco

By Khadija Arfaoui, Head of Division, Customs Training Institute, Customs and Indirect Taxation Administration, Morocco

Knowing that strengthening human capital is one of the key factors that determine performance, Moroccan Customs made this one of the five objectives of its 2017-2021 Strategic Plan. In September 2019, as part of this Plan, a Customs Training Institute came into being. In this article, the Administration explains how it is planning to use the new training infrastructures and methods offered by the Institute to fulfil its ambitions to build Customs capacities.

In September 2019, a new Customs Training Institute (Institut de Formation Douanière, IFD) was set up in Benslimane, a small town equidistant from Casablanca and Rabat. The Institute has taken over from the Customs Training Centre (Centre de Formation Douanière, CFD), established in 1975 with the aim of easing the way of new recruits into their new working environment and allowing serving officials to gain skills and adapt themselves to their new assignments. Since 1999, the Centre had also been training French-speaking Customs officials from Africa and Haiti as part of the South-South Cooperation effort implemented by the Administration.

Basic and continuing vocational training
Before we set out the reasons for the establishment of a new structure for training in greater detail, it is important to outline the policy in this area. In Morocco, training is provided for new recruits and for serving personnel.

The initial programme for new recruits is centred on three phases:

- military training, giving them the opportunity to learn the theoretical, technical and practical
fundamentals and to develop, among other things, a sense of honour, duty and discipline;

- Customs training, which varies according to whether the new recruits have passed the competitive examination for Customs inspectors or Customs guards;

- gradual induction into the position, which takes place during the last few months of training and takes the form of combined work and training.

Once they have taken up their positions, Moroccan Customs officials are still eligible to receive training. The training programme is developed on the basis of an analysis of needs in relation to current and future operational priorities. This analysis is conducted by the Institute and the regional training units each year. It is based on the annual results produced by the teams responsible for the system of forward planning of jobs and competencies, with the support of the various operational managers.

Training is also offered for what are known as support positions within the Administration, such as human resource management and budget management. In addition to this, there is specific training known as “succession training”, which is intended for a pool of Customs officials selected for their potential to occupy positions of responsibility.

Lastly, training in supervisory skills is designed to instil a genuine managerial culture within the Administration. This training is currently available to senior operational managers, but Moroccan Customs has the aim of making it more widely available to the whole of its management team in the medium term.

There is a detailed catalogue setting out all the details of the available training courses in terms of target population, objectives, content and learning progress. These may be short-term activities (one to two days) or longer programmes (one to two weeks).

Evaluation

The training provided is systematically evaluated on the spot: on the one hand, so that it can be assessed in terms of its usefulness in improving work performance and, on the other hand, to identify gaps and make the necessary adjustments.

The evaluation is carried out by means of online forms tailored to each training course in accordance with its specifications. The responses and comments are analysed by all those involved, both operationally and as stakeholders (the Institute’s trainers and trainees).

Trainers

Moroccan Customs have more than 100 accredited in-house trainers, around 20 of whom work at the Institute all the time, continuously upgrading their skills and updating their knowledge by taking part in workshops, train-the-trainers programmes and periodical work experience within the Administration’s operational units. The Administration also uses the services of professionals working for various public and private institutions.

International cooperation

Since 1999, basic training programmes have been laid on each year for foreign Customs officials, with the assistance of the Moroccan International Cooperation Agency (Agence Marocaine de Coopération Internationale, AMCI). These have already been attended by 1,011 foreign officers from 22 African countries and Haiti. Given in French, this training is increasingly in demand, and Moroccan Customs is planning to increase the number of beneficiaries from 60 places in the 2021-2022 cycle to about 100 in the medium term.

From Centre to Institute

Although the Customs Training Institute follows in the footsteps of its predecessor, the CFD, its foundation marks a significant turning point as regards both infrastructure and working methods. The change of name was needed to reflect Moroccan Customs’ ambition to build competencies and know-how and to convey its commitment to excellence in training.

The training model is based on an even more balanced combination of theory and practice. This lays emphasis on simulations and role playing, on-the-job training and case studies, supplemented by field trips and practical training within the operational units. A series of short videos lasting between 30 seconds and five
minutes, known in Arabic as “fil maydane” (in the field), has also been developed. Presented at workshops, the videos help the trainees to see themselves more clearly in their future working environment.

The Institute’s new infrastructure was to accommodate this multiplicity of approaches to teaching, with training activities no longer confined to conventional practices. The Institute’s teaching and living spaces have therefore been designed so that it is possible to:

- learn from experience: several spaces have been fitted out to recreate circumstances out in the field, to offer trainees the opportunity to practise in conditions that are as realistic as possible;

- facilitate switching between different, complementary teaching modes (classes, presentations, problem solving);

- foster contacts and exchanges and encourage sociability;

- make it easy to consult works of reference – 3,000 of these are accessible in the Institute’s library, and hundreds of others can be borrowed through the Administration’s intranet site;

- respect the learning rates of the trainees, who can alternate between training periods and leisure time while remaining on the Institute’s premises. In addition to the student residences, the premises offer common living areas, including a restaurant and a cafeteria, a gym and a sports ground;

- provide campus-wide access to the WiFi network, so that people can work anywhere, on their own or in a group.
Private-sector training

Although Moroccan Customs was already holding training for the benefit of some of its institutional and private partners, with the new Institute it has made arrangements to flesh out its offer to meet the needs of a broader audience. This initiative forms part of the deployment of the Administration’s new strategy in the run-up to 2023, which, among other things, aims to consolidate the Customs/private-sector partnership and to build trust between the two parties. The training programme is currently being developed with the new partners concerned.

Training in English

Moroccan Customs has also made provision to provide training in English to meet the increasing demand from its English-speaking partners. Among the one- to two-week programmes that will soon become available, the following will be held in both English and French:

- human resource management;
- targeting, Customs valuation and clearance procedures;
- risk assessment and selectivity;
- Customs audit procedure.

The trainers and facilitators on these programmes are Customs officials who are experts in their fields, chosen for their mastery of the English language.

Technology and COVID-19

The new technologies have also been put to good use, both to allow computerized management of the Institute and to diversify the ways in which training is provided.

In its day-to-day running and in its interactions with trainees, the Institute uses a system that allows end-to-end management of training, from the enrolment of students to the issuing of certificates and diplomas, via the management of training programmes and courses and support for the logistical aspects relating to accommodation and catering.

Each student has a personal account which, on a yearly basis, records the number of days spent in training. Currently, to ensure fairness in access to training, each Customs official is entitled to five days of continuing vocational training a year.

An e-learning platform called “Takouine” provides access to some 50 online training modules, some of which supplement classroom-based courses. The platform also makes various teaching materials available to the trainees, including exercises and case studies. Support for distance learning is provided by tutors, in order to back up the trainees’ learning efforts and keep up their motivation.

To align the training as closely as possible with the operational procedures, which are computer-based, a tool providing a faithful simulation of the Automated Customs Network Database (Base Automatisée des Douanes en Réseau, BADR), the Moroccan computer system for Customs clearance operations, has been put in place. An exact replica of the BADR and its applications, it allows the trainers to use the actual data architecture and to create fictional data during practical exercises.

Before the health crisis brought about by COVID-19, e-learning and online courses were much used, but as a supplement to classroom-based learning. They have now taken the lead in ensuring the continuity of training. Some 20 distance learning courses had to be developed in short order for various profiles, along with tests and quizzes so that the students’ progress could be assessed on an ongoing basis. The technical staff had to scale up the platform so that it could accommodate a large number of simultaneous users. This challenge was met with success, with 2,130 participants benefiting from online training in 2020, compared with 1,424 in 2019 – an increase of nearly 50%.

More information

k.arfaoui@douane.gov.ma
An overview of Uzbekistan Customs’ reform journey

By Ulugbek Tadjiev and Mirshod Kurbonov, International Cooperation Department, State Customs Committee of the Republic of Uzbekistan

In December 2020, Uzbekistan acceded to the International Convention on the Simplification and Harmonization of Customs Procedures (Revised Kyoto Convention). This article describes the impact of the Convention on the Customs reform process and introduces the work done in recent months towards the implementation of international standards and modern working methods.

Uzbekistan is a landlocked country in Central Asia. Although it gained its independence from the Union of Soviet Socialist Republics (USSR) in August 1991, the country only broke with the state-led model and economic isolation in 2016, following the election of President Shavkat Mirziyoyev. Since then, it has embarked upon an ambitious programme of economic modernization and institutional reform.

At the Customs level, a first move in the direction of change was to adopt a new Customs code aligned, to the greatest possible extent, with international standards. The code entered into force on 20 April 2016. This was only the beginning. Uzbek Customs intended for the country to accede to the WCO Revised Kyoto Convention, and the new code had been only partially aligned with the Convention’s provisions and principles. The meeting of the WCO Secretary General, Kunio Mikuriya, with President Mirziyoyev in November 2019 gave a new impulse to this endeavour. A little more than a year later, the Instrument of Accession was deposited, and the RKC entered into force in Uzbekistan on 16 May 2021.
RKC accession process
Overall, the RKC, which is a blueprint for modern Customs procedures, is aimed at developing predictable and transparent Customs procedures based on the use of information technologies, risk management, a coordinated approach to controls along with other governmental agencies, and partnerships with trade, among other things. The RKC consists of three parts: the text, a General Annex with 10 Chapters, and 10 Specific Annexes. The entire General Annex is binding on Contracting Parties, and no reservations are possible with respect to its implementation. Specific Annexes of the RKC consist of Standards and Recommended Practices regarding other aspects of Customs procedures. Contracting Parties may accept one or more of the Specific Annexes as well as submit reservations to Recommended Practices to the WCO.

In 2015, while drafting the new Customs code, Uzbek Customs had conducted a gap analysis with the help of WCO Secretariat experts to assess the level of compliance of the national legislation and regulatory frameworks with the Convention's standards. All RKC provisions were compared to the national legislation.

The analysis concluded that 73 standards (63%) of the General Annex and 200 standards (83%) of the Specific Annexes were already implemented in Uzbekistan. The drafted code covered all Customs procedures except for:

- the “Processing of goods for home use” (Chapter 4, Specific Annex F);
- the provision on de minimis values;
- the provision on Authorized Traders;
- the Customs procedures/controls related to Free Zones.

A key challenge was therefore to establish, in the coming years, the legal frameworks enabling the introduction of these procedures.

Moreover, changes were made to implement RKC provisions on expenses chargeable by Customs (“When the Customs cannot supply information free of charge, any charge shall be limited to the approximate cost of the services rendered”) and on the “operation of joint Customs controls at common border crossings”.

Uzbek Customs had considered the possibility of acceding to the Convention on several occasions, but the combination of legal, political and technical challenges had halted this process. When the President expressed support for substantial Customs reforms in 2016, the Administration brought the issue to the table once again. The rationale was not only to push for reforms but also to achieve national and international recognition of the efforts made towards more efficient, transparent and predictable Customs procedures, regulations and practices in compliance with international standards.

In December 2020, the accession process was complete, and Uzbek Customs participated in the 23rd Meeting of the Revised Kyoto Convention Management Committee. Uzbekistan has accepted all Specific Annexes of the Convention (standards and recommended practices), except for Chapter 3 of Specific Annex E (Carriage of goods coastwise), as the procedure described in the Annex does not apply to landlocked countries.

Ongoing work
As foreseen by the Convention, Uzbek Customs must implement all its provisions by December 2023. The WCO considers that implementing the RKC supports countries’ efforts towards the efficient and harmonious implementation of the World Trade Organization’s Trade Facilitation Agreement (TFA) that entered into force on 22 February 2017. Uzbekistan resumed WTO membership negotiations in July 2020, and accession to the RKC is also part of its commitment to bring its trade regime into conformity with WTO rules.

Another diagnostic mission was undertaken in February 2020 by the WCO Secretariat as part of its Mercator Programme, which was designed to assist governments in implementing the Customs trade facilitation measures outlined in the TFA, while promoting adherence to WCO standards such as those of the RKC.

The experts’ recommendations include:

- developing a multi-year Customs Strategic Plan streamlining all the different initiatives and governmental instructions.
- devising and implementing a communications strategy to keep staff and external stakeholders better informed about the changes being adopted.
• adopting a competency-based approach to human resource management and strengthening the existing Capacity Building Plan.

• implementing the WCO Time Release Study (TRS) methodology.

• implementing the procedure to enable the electronic lodgement of the Customs declaration in advance and providing an opportunity to process that information in order to determine whether the goods need to be inspected or released upon arrival.

• developing and implementing a formal Risk Management Strategy to: (a) ensure that risk management is carried for all operations, at all checkpoints, and leave a small amount for random inspections to allow the automated system to continue learning; (b) avoid multiple inspections for the same operations and eliminate the possibility for local officials to alter the outcome of the selectivity system; (c) allow green channel and blue channel consignments to be released at border checkpoints; (d) monitor adequately the effectiveness of risk management.

• establishing a Post-Clearance Audit (PCA) Unit with well-defined processes and standard operational procedures that allow the Unit to develop investigations and programme audits that are based on risk management and are focused not on specific operations but on operators.

• establishing a working group with border agencies to develop inter-agency cooperation and communication.

• enabling traders to submit documentation and/or data requirements for importation, exportation or transit of goods through a single entry point.

Digital Customs
It is worth noting that the digitization of Customs processes was declared as a top priority. The decision was a direct consequence of the COVID-19 pandemic crisis. Uzbek Customs wants to develop new ITC solutions to eliminate paper-based processes and implement risk management and data analytics.

In this domain, the following initiatives are underway:

• digitizing trade-related documents to facilitate electronic data processing (the State Quarantine Agency has started receiving documents in electronic format and discussions are ongoing with the agencies respectively responsible for Veterinary Controls and for Health and Epidemiological Surveillance).

• integrating the Customs Declaration System with the IT systems of other border regulatory agencies;

• creating a system enabling the real-time monitoring of goods from their entry into the Customs territory until their release for free circulation, including in liaison with the railway authority;

• enabling the use of the Customs Declaration System through a mobile application;

• developing risk indicators and making use of automated data analysis tools to enable automated Customs clearance procedures and reduce the discretionary practices of Customs officers;

• joining the eTIR international system which replaces the paper TIR Carnet.

More information
u.tadjiev@customs.uz
m.qurbonov@customs.uz

We are deeply convinced that people must not serve government bodies, rather government bodies must serve the people.

Shavkat Mirziyoyev, President of Uzbekistan
Improving the business environment through reform and innovation: a look at recent changes in China regarding the administration of rules of origin

By Ms. Jiang Feng, Director General of the Duty Collection Department, China Customs

China Customs plays a key role in the administration of rules of origin, from their formulation to their implementation. Insiders who follow trade and Customs reforms in China may have noticed the emergence, in recent years, of new expressions and terms in this domain, such as “self-service printing of certificates of origin”, the Electronic Origin Data Exchange System (EODES) and “intelligent examination”. This article explains each of these terms.

Two recent moves have triggered a transformation in the way that rules of origin are administered in China. The first was the launch by China Customs of an initiative known as “Smart Customs, Smart Borders, and Smart Connectivity,” or the 3S initiative, which establishes a roadmap towards smart solutions for Customs control, governance and cooperation. The second was the decision by the Chinese Government to integrate into China Customs the functions and workforce of China’s entry-exit inspection and quarantine services from March 2018, including the administration of certificates of origin.

These two measures gave China Customs the impetus to review the processes surrounding rules of origin and ultimately improve the implementation of free trade agreements (FTAs) and preferential trade arrangements (PTAs). Three key initiatives are explained below: “self-service printing of certificates of origin”, the Electronic Origin Data Exchange System (EODES) and “intelligent examination”.

Self-service printing: making life easier for exporters

There are three types of certificate of origin issued in China: non-preferential, preferential and

These two measures gave China Customs the impetus to review the processes surrounding rules of origin and ultimately improve the implementation of free trade agreements (FTAs) and preferential trade arrangements (PTAs). Three key initiatives are explained below: “self-service printing of certificates of origin", the Electronic Origin Data Exchange System (EODES) and “intelligent examination".
special. This last category of certificate is used for particular products and industries for which specific rules of origin requirements apply in the importing country.

Exporters can submit their certificate application in paper copy or electronically, either by connecting to the International Trade Single Window System or by visiting the “Internet + Customs” website. Once the application has been examined and approved, China Customs notifies the exporter. In addition, exporters can obtain a certificate from the China Council for the Promotion of International Trade. The issuance process will then be supervised by China Customs.

Upon receiving notification, exporters have two choices: they can ask Customs to provide them with an original paper copy of the certificate which will bear a manual signature and the stamp of the regional Customs office; alternatively, they can use the “self-printing service” and print their own certificate which will bear the electronic signature and seal of China Customs. The document has equal effect as a certificate manually signed and stamped by a Customs officer. Only the “first” printed copy will be considered as the original certificate to be presented to authorities when requested. If the exporter prints the document again, it will bear a reference indicating that the certificate is a copy.

For the self-printing service to work, self-printed certificates must be recognized in the importing country. To ensure that this is the case, China Customs had to reach out to the contact point indicated in each FTA/PTA. It also published articles and held seminars to ensure exporters make use of this feature.

The Customs authority and traders in the importing country wishing to cross-check details of a certificate of origin can consult http://origin.customs.gov.cn for those issued by China Customs and http://check.ccpiteco.net for those issued by the China Council for the Promotion of International Trade.

**EODES: towards greater digitalization**

Importers wishing to claim preferential treatment under an FTA or PTA must submit, electronically or in paper format, documentary proof of origin as set out in the FTA or PTA (such as the certificate of origin and documents requested to prove that no manipulation or alteration has taken place).

A risk engine then analyses the submitted data according to predefined risk indicators and classifies the declarations. Transactions identified as low risk will be released without being subject to any further inspection (green channel), while those posing a high risk (red channel) will undergo in-depth checks. The importer or its representative may be required to provide the hard copy of the certificate of origin or additional information. This document check may be followed by a physical inspection of the goods. During controls, Customs therefore focuses both on the nature of the goods and on the authenticity of the documents provided by the importer.

There are two main issues with the process currently in place. The first is that checking the authenticity of scanned copies of documentary proof of origin furnished by parties and authorities located in another jurisdiction (exporting country) is a cumbersome process. The second is that this cannot be done in "real" time, when the Customs declaration is submitted.

To resolve these issues, China Customs has developed the Electronic Origin Data Exchange System (EODES). It enables China Customs and the designated administrations in the 11 partners having signed an FTA/PTA with China to exchange electronic data on proof of origin for goods being imported into or exported from their respective country under a preference claim. Importers and exporters do not need to submit and exchange certificates or other documentary evidence; instead, they simply need to indicate the certificate number on their declaration. The Customs authority on the import side can then compare the data submitted by the importer at the time of claiming preferential tariff treatment against the information recorded in EODES.

**Intelligent examination**

With a view to further automating checks of documents submitted by applicants and more effectively identifying attempted fraud, China Customs launched a pilot project called "Intelligent Examination" in August 2020. Its objective was to create an artificial intelligence (AI) system, which can be defined as “a group of algorithms that can modify its algorithms and create new algorithms in..."
response to learned inputs and data as opposed to relying solely on the inputs it was designed to recognize as triggers. The technology has been in application since December 2020 and has already been used for the secure processing of over 4.6 million requests for origin certification. The AI system is still being trained. Its developers hope that it will be able to mimic the thought processes of a fraud analyst and detect and adapt to new fraud patterns as they emerge.

Thanks to "self-service printing" and "intelligent examination", it only takes a few minutes for applicants to obtain a certificate of origin. These initiatives, together with EODES, have contributed to transforming the way rules of origin are administered in China, thereby making the process more convenient, intelligent and efficient for importers, exporters and Customs authorities in other countries.

More information
http://english.customs.gov.cn/

---

SACU Members make progress in enhancing the uniform application of their Common External Tariff

By the SACU and the WCO Secretariats

The Southern African Customs Union (SACU) consists of five Member States – Botswana, Eswatini, Lesotho, Namibia and South Africa – with a combined population of over 63 million people and a combined GDP in excess of 300 billion US dollars. It is the oldest functioning Customs Union in the world, dating back to 1910.

SACU Member States form a Common Customs Area (CCA), having eliminated Customs duties on trade in goods among themselves and agreed on a Common External Tariff (CET) schedule for goods imported from outside the CCA. In accordance with Article 22 of the SACU Agreement 2002, as amended, the Member States are required to apply similar legislation with regard to Customs and excise duties. However, Article 26 of the Agreement allows the Governments of Botswana, Eswatini, Lesotho and Namibia to temporarily levy additional duties on goods imported into their areas, to enable infant industries to meet competition from other producers or manufacturers in the CCA. This is on condition that such duties are levied equally on goods grown, produced or manufactured in other parts of the CCA and on products imported from outside such areas. The rule applies irrespective of whether those goods are imported directly from outside the CCA or from another SACU Member State.

Improving management of HS-related matters

South Africa has been assigned as champion for the management of the CET, in terms of carrying out the technical work on behalf of other SACU Members. This work is undertaken by the South African Revenue Service (SARS): once decisions have been made on the changes to the CET, SARS prepares the amendments in consultation with the Customs Administrations of Botswana, Eswatini, Lesotho and Namibia (BELN) and circulates the final amendments for implementation by all Member States. Each of the Member States is then responsible for implementation of the final amendments in its own territory, including any necessary national and administrative procedures.

The CET comprises two elements: a goods nomenclature and a list of tariff rates. It is based on the WCO Harmonized System (HS) and is therefore updated every time that a new HS edition enters into force.
In order to promote uniform classification of goods within the Customs Union and contribute to the overall management of the CET, the SACU Secretariat has in recent years been working with the WCO Secretariat as part of a specific capacity building programme funded by the European Union (EU): the “EU-WCO Programme for the Harmonized System in Africa” (HS-Africa Programme). Launched in 2019, the Programme aims at delivering assistance to Regional Economic Communities (RECs) and Customs administrations in Africa in implementing the 2022 Edition of the HS and, in the longer term, in building organizational capacities and resources to apply future HS versions in a timely and coordinated manner.

Discussions on the topic started in November 2019 between WCO Secretariat experts and representatives from the Lesotho Revenue Authority (LRA) during a diagnostic mission on the implementation of the HS and advance rulings on the classification of goods in Lesotho. The need for a regionally coordinated process of migrating to new editions of the HS and of managing advance rulings had been identified, and the experts had recommended organizing a meeting between SACU Members to collect everyone’s views.

The regional meeting took place in January 2020, with the objective of taking stock of various issues: (i) the preparations made for the implementation of HS 2022 in each SACU Member; (ii) the management of HS matters within the Union in general; and (iii) the implementation and management of advance rulings relating to the determination of tariff classification.

Participants agreed on an Activity Plan incorporating various activities, including:

- development of a Migration Framework and a Roadmap for Migration from HS 2017 to HS 2022;
- establishment of a SACU Working Group to coordinate the implementation of HS 2022 and to work on amending the CET in future;
- national information campaigns to promote awareness;
- ensuring availability of relevant HS tools; and
- establishment of advance ruling systems for tariff classification.

Progress to date and outlook to January 2022

Since the COVID-19 outbreak, discussions have been held virtually. The SACU and the WCO Secretariats facilitated three more meetings, one in July 2020 and two others in April and August 2021, to take stock of progress made on the
implementation of the Activity Plan and, more specifically, of the SACU 2017-2022 Roadmap for Migration.

SACU Members are on track, with the following milestones already achieved:

- the HS Migration Framework has been developed, as well as a specific Roadmap for Migration from HS 2017 to HS 2022, with 1 January 2022 as a completion target;
- following the publication in February 2021 of a first set of HS 2022-related draft tariff amendments for public consultation, initial comments have been received from the private sector and duly considered, both at national and regional levels;
- a second set of draft amendments for public consultation has been published, the consultation period having ended on 31 July 2021;
- the work on HS migration has been incorporated into the broader SACU Trade Facilitation Programme, and a SACU Working Group on HS, Tariff, Origin and Valuation has been established, with responsibility, among other things, for ensuring successful migration from HS 2017 to HS 2022; and
- national advance ruling systems have become operational in some Member States.

Looking ahead to the rest of 2021 and to January 2022, an intensive work programme lies in store for the SACU. It is expected that, by October 2021, most of the work on the preparation of amendments for implementation of HS 2022 will be complete. After October, further activities will take place at the national level as Member States will be undertaking final legislative and administrative processes to meet the January 2022 target. Another meeting is anticipated before January 2022 to make a final assessment of the Member States’ readiness.

A regional framework for advance rulings
Thanks to the assistance received under the EU-WCO HS-Africa Programme, SACU Member States are on track to migrate successfully to HS 2022 and to adopt a new system for amending the CET which will facilitate uniformity in goods classification within the Union. As part of the Activity Plan under the Programme, Member States are planning to develop a regional framework on advance rulings. Issues for consideration under the regional framework could include the recognition of rulings across the SACU, whereby a ruling issued by one Member State would be binding on all national Customs authorities when the same holder uses the ruling to import the goods. The framework will enable a Customs officer from one Member State to refer to existing rulings issued by all Member States, and to consult an officer from another Member State should he find inconsistencies in the rulings previously issued. Together with regular meetings of the Working Group on the HS, Tariff, Origin and Valuation, the framework will enable SACU Customs administrations to enhance uniformity in the interpretation of the HS throughout the Customs Union.

More information
capacity.building@wcoomd.org
wcoHSAfrica@wcoomd.org
Remote validation of AEO Programme applicants: the experience of Guatemala

By the Guatemalan Customs Administration

Like many of its counterparts, the Guatemalan Customs Administration has faced many challenges in recent months due to COVID-19. One of these is the validation of applicants for the Authorized Economic Operator (AEO) Programme, and the supervision of existing AEOs, while minimizing travel and physical contact to reduce the spread of COVID-19.

Previously, AEO validation and supervision were handled mainly through on-site visits at the AEO’s premises. This changed on 1 September 2020, with the publication of a resolution issued by the Superintendent of the Tax Administration Office, which allowed such operations to be carried out by combining a physical and virtual method. Re-validation of existing AEOs was already done virtually by requesting AEOs to conduct an annual self-evaluation and by analysing the reports generated during the exercise.

Adopting a hybrid approach when evaluating the compliance of a company is actually recommended in the WCO AEO Implementation and Validation Guidance. As for the re-validation process, the Guidance states that a virtual methodology “should only be considered for those AEO companies that have in the past undergone a physical or on-site validation”.

Training
To conduct the verification, the staff of the AEO Unit were trained in face-to-face and remote audit techniques by representatives of the Business Alliance for Secure Commerce (BASC). BASC is a private sector-led organization established to promote the security of international trade. It has developed security standards with which it certifies the compliance of companies’ supply chain security systems. Companies certified by BASC can apply to receive AEO certification for free, while AEOs can obtain BASC certification easily.

The staff of the AEO Unit also received support from the Association of Secure Companies, a private body specialized in international logistics security, which shared with the team its methodologies for carrying out remote validations.

Lessons learned
The Guatemalan Customs AEO Unit carried out several validation exercises of applicants for the AEO Programme during the pandemic, combining a physical and virtual validation method. In 2020, 23 companies were certified as AEOs using this methodology.

It was necessary as part of this undertaking to list separately the requirements for which compliance could be checked through administrative controls, and those for which compliance could be checked only through an on-site visit. The list was customized for each company being audited, and some actually found adequate solutions for carrying out remotely the activities usually done on-site. For example, some companies organized real-time video transmissions to enable auditors to assess the security of their facilities remotely.
The Unit shared its experience in conducting partly virtual validation with countries of the region interested in adopting the same approach.

One identified challenge is to ensure access to appropriate technology and to high-speed internet networks which are fairly stable. The live transmissions require equipment such as a video camera, phone and wireless microphone. Participants must be able to communicate with each other without interruption.

It is also essential to understand the amount of work and resources which a remote validation process requires. Companies must submit digitally all the evidence that they comply with AEO requirements. If they do not have a management system that issues digital documents and records, they will have to convert the records of their procedures and documents into PDF or a digital format which can be shown on a computer screen and shared online with the verification team during meetings.

Preparation is also key. Customs must establish good communication with the company to be certified and advise it of the technical requirements involved in performing remote validation.

**Regional Recognition Arrangement**

Before the COVID-19 outbreak, some Customs administrations in the region were busy working on the establishment of an AEO Regional Recognition Arrangement (RRA) with the Global Alliance for Trade Facilitation. Under such a scheme, AEO status awarded in one country is recognized by all the signatory countries of the RRA, thus enabling the AEO company to benefit from favourable treatment when trading in each country involved.

During the RRA negotiation phase, each AEO Unit of the countries involved must organize joint validation exercises with their counterparts to compare their validation and re-validation procedures and practices. Guatemala Customs did not want to stop the negotiation process but deemed it necessary to adopt remote methods of working when possible, to comply with the sanitary measures and restrictions imposed by its government. It therefore proposed to its counterparts that a hybrid approach be used here too, with only those verifications which could not be done remotely taking place physically at applicants’ facilities.

The first remote joint validation exercise was carried out in July 2021. Brazil and Chile agreed to use a fully remote validation process, while Paraguay and the Dominican Republic opted for an on-site visit.

The COVID-19 pandemic has enabled Guatemala Customs and other administrations in the region to reconsider the way they conduct AEO validations. Many processes and practices will continue once the pandemic subsides.

**More information**

https://portal.sat.gob.gt/portal

---

1 Argentina, Bolivia, Brazil, Chile, Colombia, Costa Rica, the Dominican Republic, Guatemala, Paraguay, Peru and Uruguay.
A look at the RCEP from a Customs perspective

By Dr. Tong Hua, Programme Supervisor and Researcher, Shanghai Customs College

The Regional Comprehensive Economic Partnership (RCEP) is becoming the world’s largest existing free trade agreement in terms of economic size. Aimed at further integrating the economies of Southeast and Northeast Asia, the RCEP sets high requirements on Customs in terms of procedures, processes and performance. This article looks at the agreement from a Customs perspective and puts forward suggestions for its effective implementation.

In 2012, the 10 countries belonging to the Association of Southeast Asian Nations (ASEAN) invited China, Japan, Korea, Australia and New Zealand to develop a multilateral free trade agreement. After 31 rounds of formal negotiations over eight years, they finally reached a consensus. The Regional Comprehensive Economic Partnership (RCEP) was signed on 15 November 2020. It will come into force following ratification by at least six ASEAN countries and three non-ASEAN countries. As at 23 October 2021 when this magazine went to print, Brunei Darussalam, Cambodia, China, Singapore, Thailand and Japan had already completed the ratification process. Once ratified by all signatories, it will create the world’s largest free trade zone measured in gross domestic product, covering 30% of the world’s population and accounting for 25% of global trade in goods and services.
Table 1: Comparison in size of some multilateral FTAs

<table>
<thead>
<tr>
<th></th>
<th>RCEP</th>
<th>CPTPP2</th>
<th>EU</th>
<th>USMCA³</th>
</tr>
</thead>
<tbody>
<tr>
<td>Countries covered</td>
<td>15</td>
<td>11</td>
<td>27</td>
<td>3</td>
</tr>
<tr>
<td>Average economic growth rate</td>
<td>4.4%</td>
<td>2.8%</td>
<td>2.1%</td>
<td>2.2%</td>
</tr>
<tr>
<td>Population (millions)</td>
<td>2,262(29%)</td>
<td>508 (7%)</td>
<td>448 (6%)</td>
<td>493 (6%)</td>
</tr>
<tr>
<td>Total economy (US$ billion)</td>
<td>25,816 (29%)</td>
<td>11,197 (13%)</td>
<td>15,593 (18%)</td>
<td>24,369 (28%)</td>
</tr>
<tr>
<td>Total export (US$ billion)</td>
<td>5,481 (29%)</td>
<td>2,942 (16%)</td>
<td>5,815 (31%)</td>
<td>2,551 (13%)</td>
</tr>
<tr>
<td>Total import (US$ billion)</td>
<td>4,956 (26%)</td>
<td>2,851 (15%)</td>
<td>5,532 (29%)</td>
<td>3,498 (18%)</td>
</tr>
</tbody>
</table>

Compiled by the author


2 CPTPP: Comprehensive and Progressive Agreement for Trans-Pacific Partnership.
3 USMCA: The United States-Mexico-Canada Agreement.

Figure 1: Overview of the parties to the RCEP, ASEAN and CPTPP

Figure 2: Ranking of China’s top 10 trading partners

Compiled by the author

Source: General Administration of China Customs
The GDP of Asian countries is on the rise as well as regional trade. Let’s take China as an example. Among the country’s top 10 trading partners in the past five years, there are six Asian countries and the ASEAN bloc. The latter, in fact, became China’s largest trading partner in 2020.4 The same year, China’s imports and exports to the other 14 RCEP trading partners accounted for 31.7% of China’s total imports and exports. In the first half of 2021, China’s imports and exports to its RCEP trading partners increased by 22.7% year on year.5

**Highlights of the RECP**

*For the first time, China and Japan have agreed on tariff concessions*

There is no FTA between China and Japan, and the two countries do not belong to the same free trade bloc. This is therefore the first time that the two countries have agreed on common provisions for trade in services and goods, besides those agreed at the multilateral level. This includes tariff reduction. Currently, both countries apply zero tariffs on about 8% of originating goods. Under the RCEP Agreement, the proportion will reach about 86%. The policy of preferential treatment will be implemented in phases over 21 years, the two countries having opted for a gradual opening of the market (see Table 2). It is worth noting that RCEP will become the basis for a future high-level China-Japan-Korea FTA.

---


5 Report from Yingjie Dang, Deputy Director-General of the National Post Administration Office of the General Administration of China Customs on the regular briefing on State Council policies held by the State Council Information Office on 29 July 2021.


The Customs Administrations of Australia, Japan, Cambodia, China, Indonesia, Korea, Laos, Malaysia, New Zealand, Philippines, Singapore, Thailand, Myanmar and Vietnam have all undertaken at least one WCO time release study (TRS). Some have integrated the measurement of the different phases of the clearance process into their electronic Customs clearance system. Some have even developed real-time cargo tracking management. This is the case in Korea with UNI-PASS, which is a Cargo Management System that is connected to delivery companies, warehouses and other private entities involved in the movement of goods.8

### Harmonized rules of origin and cumulation
Similar to other regional agreements, the RCEP established product specific rules of origin and regional value content. Recognizing its regional nature, the Agreement’s rules of origin provide a means of allowing materials to be cumulated across the RCEP Parties during the production process (Article 3.4). The cumulation provision allows manufacturers to source materials and utilize production processes from across the RCEP Parties and then include these materials and processes in the final determination of whether a good has origin status. On entry into force, the ability to cumulate materials is limited to originating goods, but the Agreement stipulates that RCEP Parties could undertake a future review to consider the extension of the cumulation rule, allowing inputs not meeting the originating criteria to be counted as part of the qualifying content for goods produced and traded between all RCEP Parties. Such a scheme is known as full cumulation.

### Requirements regarding Customs procedures
The RCEP Agreement contains trade facilitation measures and other provisions that respond to concerns raised by trade operators regarding non-tariff barriers affecting trade. The impact of the implementation of its provisions is expected to exceed that of the WTO Trade Facilitation Agreement, especially in terms of a reduction in trade costs and product prices in the region, as well as an increase in regional trade flows. According to the UN Conference on Trade and Development, exports will grow by more than 10% by 2025 in all RCEP countries.

Requirements listed under Chapter 4 related to Customs procedures are higher than those which can be found in other free trade agreements. For example, parties are requested:

- to issue advance rulings for classification, rules of origin and Customs valuation within a specific timeline set in the Agreement;
- not to exceed the time period set for the clearance of goods;
- to provide operators who meet specified criteria (authorized operators) with trade facilitation measures;

---

to apply a risk management approach for Customs control and post-clearance audits.

Recognizing that the Parties are at different levels of readiness to implement some commitments, especially those that go beyond the WTO TFA, Chapter 4 allows these countries to implement them in stages. Details of the staged implementation of commitments are provided in an Annex to the Chapter.

Parties should use the TRS to its full potential

Conducting a Time Release Study will not only enable Customs administrations to measure their commitments when it comes to clearance time but also to undertake a comprehensive assessment of the effectiveness and efficiency of border procedures, including those of other border and regulatory agencies. It will also enable administrations to identify gaps and needs, and, if the TRS is carried out regularly, to monitor and measure the outcomes of the implementation of specific RCEP measures and associated policies and programmes.

The TRS can be conducted at specific points of entry and the methodology adapted to focus on specific goods or procedures, such as express delivery and perishable goods. The RCEP Contracting Parties could explore the possibility of coordinating TRS at the regional level to get an overview of the average time required to move goods among Parties and identify their needs in terms of capacity building and reforms.

Customs must ensure that rules of origin are understandable and workable in practice

The Agreement was negotiated based on the 2012 edition of the HS. With a new edition of the HS entering into force on 1 January 2022, there will be a need for the rules of origin laid out in the RCEP to be revised and updated. In countries that will implement the 2022 edition of the HS as from next year, goods would have to be classified twice – using the 2022 edition of the HS for classification purposes, and the 2012 edition for origin determination – if the rules of origin in the RCEP are not updated.

The RCEP rules of origin have provisions relating to transport requirements. Like in the ASEAN Trade in Goods Agreement, the term "direct consignment" is used which is, as it was highlighted at the Second WCO Conference on Origin, "neither in line with modern commercial practices, nor with Customs procedures". The Agreement provides for evidential requirements to verify that no manipulation or alteration of existing documents, such as bills of lading or invoices, has taken place. But it does not limit them to such documents, referring to "a non-manipulation certificate, or other relevant supporting documents, as may be requested by the Customs authorities". In practice, there will be a need for Customs to provide some clarifications and to limit evidential requirements to existing documents.

Most RCEP Parties already have FTAs in force with each other through a combination of bilateral and plurilateral agreements. Trade operators wishing to claim preferential treatment will therefore have to choose between at least two agreements. Customs administrations may want to set up a consultation service to help businesses understand which FTA best fits their interests.

**Table 4. Application of different free trade agreements**

<table>
<thead>
<tr>
<th>Categories of FTA</th>
<th>RCEP</th>
<th>China – Korea FTA</th>
<th>Free trade area of the Asia-Pacific</th>
</tr>
</thead>
<tbody>
<tr>
<td>Is the product covered?</td>
<td>yes</td>
<td>yes</td>
<td>no</td>
</tr>
<tr>
<td>What is the duty rate?</td>
<td>0%</td>
<td>0%</td>
<td>/</td>
</tr>
<tr>
<td>What is the origin criteria?</td>
<td>Good must have a regional value content of no less than 40% (RVC40) or change in tariff subheading</td>
<td>Change in tariff heading</td>
<td>/</td>
</tr>
<tr>
<td>What is the certification requirement?</td>
<td>Certificate of Origin or Declaration of Origin</td>
<td>Certificate of Origin</td>
<td>/</td>
</tr>
</tbody>
</table>

Source: example and data both from Shanghai Customs

As it was explained in a previous edition of WCO News, "Customs administrations […] are well placed to address the inconsistencies and confusion attaching to procedures laid down in trade agreements". It is suggested that the

---

Customs administration of each Contracting Party provide training to trade operators and develop supporting information management systems in an effort to make it easy for importers and exporters to declare the origin of goods and, in general, to facilitate compliance with the various provisions of the Agreement. The Chinese Government is working on the development of RCEP Country of Origin Management Measures and Approved Exporters Management Measures. These sets of measures aim at reorganizing the process of managing the issuance of RCEP certificates of origin and promoting "self-certification of origin", a type of certification of origin which utilizes a declaration of origin or a self-issued certificate of origin as a means of declaring or affirming the originating status of goods.

More information
tonghua@shcc.edu.cn

"Studying with the Centre for Customs and Excise Studies not only enhanced my knowledge, but broadened my understanding of the customs profession. I now have greater confidence in executing my role in cross-border regulation."

SHAFIQAH ABDUL SAMAT
Regional Trade Manager
Asia Pacific
Focus: Non-Intrusive Inspection
What is to be done when non-intrusive inspection (NII) equipment has reached the end of its life? In this article, we asked Customs administrations and manufacturers how they manage the decommissioning of NII systems.

The average operating life of conventional imaging equipment is estimated to be 10 years in the field. It is therefore important, when buying such equipment, to foresee how it is to be disposed of, especially as decommissioning some parts of the equipment, such as radiation sources and parts containing heavy metals, requires specialist knowledge and equipment, as well as a government licence.

It is worth noting that some Customs administrations do not own their own scanning equipment and instead rely on third parties to procure and operate scanners. In such a scenario, the decommissioning is not their responsibility.

The solution chosen for the decommissioning process depends on whether or not the legislation provides for the scanning equipment, when procured by the government and treated as government property, to be handed over to a manufacturer or a company specialized in the disposal of such equipment at the end of its life cycle.

If the legislation does allow this, a Customs administration could include the decommissioning of the scanning equipment as a requirement in the tender process. Under this option, the cost of decommissioning should be considered as part of the contract award criteria. If this requirement is not included in the initial purchase contract, a second option could be for the decommissioning of the existing system to be included in the tender process for the procurement of a replacement system. A third option would be to launch a separate tender solely for the decommissioning of the scanning equipment.

One issue with decommissioning NII scanning equipment is that manufacturers own the intellectual property rights (IPR) to some parts of the equipment. These include the radiation source and related peripherals, accelerators, proprietary software and firewalls. The parts with
no IP protection include shielding walls, buildings, cabling, barriers, vehicles and traffic lights. As part of the contract, the original equipment manufacturer (OEM) can be offered the possibility of removing all parts of the equipment which are subject to IP protection in the decommissioning process. If the company responsible for decommissioning the old equipment is not the OEM, it will have to come to an agreement with the OEM as to how to proceed with respect to those parts that are protected by IP rights.

Some legislation may provide that obsolete scanning equipment should still be treated as government property or be sold by public auction. As a result of the public auction, the equipment moves into the hands of a public or private company. Here again, the equipment manufacturer should be offered the possibility of removing all parts of the equipment that are subject to IP protection.

In the Netherlands
The Customs Administration of the Netherlands works with a government agency called Domains which is in charge of organizing auctions to sell government-owned equipment that needs to be decommissioned. Under the agreement between the two entities, all parts of the scanning equipment which is the intellectual property of the OEM must be returned to it. One exception is small scanners, which are returned to the OEM in their entirety.

Take the example of decommissioning mobile scanners, for instance. All vehicles remain the property of the government and must be sold by auction following the removal of all IPR parts.

The Customs Administration of the Netherlands does not bear any of the costs of decommissioning its obsolete NII equipment. On the contrary, Domains remits the money from the sale to the Customs Administration after deducting its administrative fees.

The decommissioning procedure is stipulated in the contract signed at purchase. The contract also lays out detailed information as to which parts of the equipment are considered to be protected by IP rights, and indicates the expected timeframe for the decommissioning, as well as the anticipated cost and who is expected to bear it.

In Nigeria
In Nigeria, the procurement of NII equipment for cargo inspection is managed by the Federal Ministry of Finance, which is the umbrella ministry for both the Nigeria Customs Service (NCS) and the internal revenue service. NCS staff have access to fixed scanners, gantry scanners, mobile scanners and baggage scanners purchased from three different suppliers. The purchase contracts provide for the procurement and installation of the equipment, as well as for the training of Customs staff, but not for the decommissioning of the equipment, either by the OEM or by the equipment supplier.

The cost of decommissioning is therefore borne by the NCS. The process is as follows:

- NCS sends an application to the Nigerian Nuclear Regulatory Authority (NNRA) for the decommissioning of the obsolete equipment.
- NNRA staff visit the scanner sites and inspect the equipment; this incurs a fee.
- The NCS Radiation Safety Advisor develops a "decommissioning plan" detailing the preferred decommissioning method and the resource requirements, as well an estimate of the costs and the funding mechanism.
- NCS submits the decommissioning plan to the NNRA and pays the requested fees.
- The NNRA sends licences to the NCS to begin the decommissioning process.
- The NCS Radiation Safety Advisor dismantles the fixed scanner and transports its parts and any other equipment to an approved safe and secure location.
- NCS stores those parts that are protected by IP rights, such as radiation sources, accelerators, software and firewalls, and contacts the OEM to ask how to proceed with respect to this equipment.
- NCS drafts the Final Report on the decommissioning, which clearly identifies the
location of the facility in which the parts that are protected by IP rights are stored and what was done with the other parts.

Drawing on its experience, the NCS highly recommends including the decommissioning of all of the equipment as a requirement in the tender process.

In Uganda
The Customs Department of the Uganda Revenue Authority (URA) initiates the decommissioning process through its Procurement and Disposal Unit, and must inform the Uganda Atomic Energy Council in writing of its intention to dispose of radiation generators or accelerators and obtain its approval for the operation.

The Unit staff, with the assistance of the equipment supplier or OEM:

- carefully identify the X-ray tubes and the parts surrounding the generator to ensure they are not radioactive,
- remove the head of the generator unit,
- detach the cables that power the equipment, and any other electrical components,
- dismantle the parts of the radiation generator,
- test the equipment parts for the presence of any hazardous material,
- hand over the dismantled parts (except the X-ray tube) to be sold to recycle or scrap dealers as scrap material,
- compile a report on the dismantling exercise stating, among other things, the location of any hazardous material and of the X-ray tube and other parts, as well as an updated inventory of the radiation sources, which is kept at the Customs facility.

The technical team is composed of trained and experienced individuals and only they are allowed to carry out the exercise. They receive guidance from suppliers as to the best way possible to dispose of components which cannot be sold.

Smiths Detection
Smiths Detection seeks to extend the product life of NII equipment for as long as possible by installing new software or by replacing parts that give equipment a second life with additional functionality and capabilities. Such upgrades sometimes combine both software and hardware. Some equipment is still delivering results to customers after 15-20 years of life.

If it is truly the end of life for a system, the best thing a customer can do is contact the manufacturer. OEMs have the most information on the various parts that make up a system. Of particular importance are the X-ray generating components. Additionally, around and within the NII system there are many elements, such as lead, rare-metals, lithium batteries and computing equipment, which must be disposed of responsibly. The OEM can and will give guidance on their disposal. It can also help to advise and ensure that all sensitive data is wiped from systems, and should be consulted to ensure that the IP data relevant to the OEM is protected.

Smiths Detection has worked with customers on the decommissioning of NII equipment in jurisdictions where responsible disposal is mandated by law as well as where it is not. This demonstrates the growing importance of responsible disposal globally. Customers can request support by directly engaging with the company or through its partners and distributors. The company will usually work with a disposal company based locally.

The Customs administration should contact the OEM when it is considering replacing or decommissioning equipment. While having close relationships with customers is one way to ensure this is done, building decommissioning or life-extension reviews into tenders or contracts would likely have a stronger impact on ensuring responsible disposal of equipment at its end of life.

NUCTECH
The fact that OEMs are entitled to recover and recycle the components of IPR-protected equipment at the end of the product life cycle alleviates the burden placed on the customer. NUCTECH provides this service for free, especially for X-ray generators and proprietary software. It can also provide a paid recycling service for the entire system. The costs depend on the customers’ specific requirements, local policies and regulations.
There is a gain in efficiency if disposal is handed over to the OEM, be it fully or even only partially. OEMs have better knowledge of the working principles, system composition and functionalities of their equipment. By applying reverse processing, a machine can be disassembled quickly, minimizing the time required for the disengagement and ensuring more professional, more secure and more environmental-friendly recycling, in full compliance to the requirements of local laws and regulations.

Below are the three main scenarios:

- the original sales contract provides for the recycling and decommissioning of parts of the equipment or the entire system;

- if there is no provision in the contract, NUCTECH carries out discussions with the customer and subsequently enters into a written agreement on the equipment recovery and treatment – this service is sometimes provided at no charge, in which case the agreement takes the form of a deed of gift;

- If the customer handles the decommissioning, NUCTECH provides guidance during the process and physically supervises the disposal of parts that are protected by IP rights (IPR-protected parts).

The customer needs to give at least 10 days' notice to the OEM to enable it to make proper arrangements for the disposal of IPR-protected parts. A designated field technician is then assigned to the removal process, and a dismantling plan communicated to the customer, taking into account any specific constraints and requirements. Together with assistants, the field technician completes the work within a few hours, as IPR-protected parts can be dismantled and removed in a quick and easy way using simple tools. No special arrangements need to be put in place by the customer to facilitate the removal. Space requirements are kept to the minimum, with no disruption to the smooth operation of the port or border crossing.

The IPR-protected parts that are removed are recycled or destroyed. This is done either at a local facility or in China where NUCTECH headquarters are based. If both options are viable, the company engages in discussions with the customer to take a decision. Disposal working plans and implementation are properly documented, and all operations are recorded, to enable the customer to monitor the disposal process.

Conclusion
The WCO recently added a section on decommissioning in its Guidelines for the Procurement and Deployment of Scanning/NII Equipment. By providing practical examples, we hope that we have been able to shed some light on how to handle this process in an efficient, safe, sustainable and cost-effective manner.

More information
facilitation@wcoomd.org
The challenges of X-ray image analysis and the value of training

By Sara Bracceschi, Head of Consulting and Services for Customs at the Center for Adaptive Security Research and Applications (CASRA)

The implementation of X-ray machines to support security screening was introduced approximately 50 years ago to accelerate the process of baggage inspection. Equipment was then developed to enable the non-intrusive inspection of vehicles, containers and trains.

Today’s X-ray systems produce a stream of electromagnetic radiation that interacts with an anode in an X-ray tube within the X-ray machine itself. The X-rays generated in the tube are then directed towards the object to be examined, producing an image (see Image 1).

Different types of X-ray machines exist on the market. They are usually classified as conventional or high energy, depending on the doses of X-rays applied. Conventional X-ray machines are smaller and less powerful X-ray systems, primarily used for airport and cargo screening. Vehicle inspection requires bigger and more powerful X-ray machines which are high-energy systems whose X-ray doses are about one order of magnitude higher than conventional X-rays.

The basics of X-ray systems: colours and density

Officers tasked with image analysis and interpretation of X-ray images should acquire a certain knowledge of the basics of X-ray systems in so far as an understanding of these fundamental elements facilitates the X-ray screening task and ultimately enhances detection performance.

First of all, it is important to know that an X-ray image is genuinely black and white. The term greyscale image is also used. This is actually how all people usually conceptualize X-ray images, as
they tend to think of the black and white X-ray images they saw at their doctor’s office. Machines used for the detection of items show objects in different colours to facilitate the recognition of items. In order to obtain coloured X-ray images, dual-energy imaging technology (high and low energy beams) is required. It enables the machine to analyse the atomic composition of the various materials present. A specific colour is then applied to each different atomic composition (see Image 2).

Organic materials are depicted in orange shades and metals in blue, while inorganic and mixed materials appear in green. But there are some exceptions to the rule if, for example, a composition is not 100% clear, such as in the case of a mixture. Zinc alloys may, for example, appear green, as in Image 3. Similarly, different types of material that overlap may also be depicted in green.

When an object is X-rayed, some of the X-rays are absorbed by the object, whereas other X-rays pass straight through it. It is therefore the density and thickness of the materials that affect how easily X-rays pass through objects. The lower the density of a material, the more transparent the material is to X-rays, and the lighter and clearer the object will appear in the X-ray image. On the other hand, the denser and thicker an object is, the darker the item in the image will look and the more challenging the identification of objects and potential anomalies will be.

If the X-ray cannot penetrate an item, a dark blue to black colour appears, also known as dark alarm, meaning that the material is so dense that the X-rays could not penetrate it to an acceptable...
It is usually recommended either to repeat the scan from a different angle if possible or to proceed to a manual inspection.

It is worth mentioning that the exact colouring of the materials may vary slightly from one system manufacturer to another, but the underlying principles remain the same.

**X-ray image analysis and interpretation: basic factors to be considered**

Despite the advances in technology, the actual decision as to whether an X-ray image of a bag or a lorry contains a prohibited item or an anomaly is taken by a human operator, an X-ray screener. In recent years, the focus has been placed on how to enhance operator capacities, as errors in X-ray image screening can lead to severe consequences.

Vehicle inspection, in particular, is an extremely challenging task. It requires analysing the substantial amount of data collected in a single X-ray image within only a few minutes. The identification of prohibited articles becomes even more complicated when dealing with proportionally small threat items, such as a weapon, and even more so when the weapon has been decomposed into parts purposely concealed in different vehicle compartments or among cargo. When it comes to concealment methods, ever changing modi operandi add another layer of difficulty to an already complex undertaking.

Two factors must be considered to enhance man-machine system performance: the selection and the training of X-ray screeners.

Research on the X-ray security screening of passengers at airports has shown that not every individual has the potential to become a good X-ray screener. Specific visual information processing abilities, such as mental rotation, figure-ground segregation and visual search of specific patterns, are very important for the correct interpretation of X-ray images.

Training is inevitably a key consideration. First, all X-ray screeners need to be aware of which items/products are allowed and which ones are not; second, they must know what those items/products look like, both in real life and in an X-ray image. Research on object recognition and visual cognition has taught us that shapes other than or not similar to the ones stored in our visual memory are difficult to recognize or not recognized at all.

Many factors influence the capacity to analyse and interpret X-ray images, such as the viewpoint of an object, the superposition of an object by other objects and the complexity of the image itself.

The identification of a weapon will be difficult if the object is showing from a certain angle (see Image 6), or is mixed with other goods, especially if those are superimposed. An empty container or homogeneous cargo do not present the same level of difficulty as, for instance, heterogeneous cargo.

**A by-product of X-ray systems: geometric magnification and distortion**

Another challenge with X-ray image interpretation relates to geometric magnification and distortion, which are natural side-effects of X-ray systems.

X-rays travel in straight lines. An X-ray source generates a beam of X-rays; one of them will be the central ray of the beam and the others the peripheral rays. As the beam exits the X-ray tube, it will diverge, while the centre point (central ray)
of the beam will not suffer from any divergence. There are two types of X-ray beams: fan-shaped and cone-shaped, with fan-shaped being the most prevalent. A traditional fan-shaped beam emits a “fan type” X-ray and is detected by a linear detector array system. Because of the beam shape, this system allows for the whole of a vehicle to be scanned without leaving any dead angle (see Image 7). Additionally, because the intensity of the beam is greater in the centre, it guarantees that even the denser objects in the middle of a lorry can be scanned and hence appear in the X-ray image generated.

Image 7: Simplification of the lorry scanning process

New Training for High Energy Systems
X-ray Image Analysis and Interpretation

AVAILABLE NOW on X-Ray Tutor 4

www.casra.ch

The Centre for Adaptive Security Research and Applications
However, because of the beam shape itself, the structures that the beam hits first will appear magnified in relation to those which are further away from the source and closer to the detector.

In addition to this magnifying effect, due to the angle at which the beam hits the objects and structures, the ones that are closer to the beam source will shift upwards in the X-ray image, so that ultimately we can see both sides of the object or vehicle scanned.

Understanding these two phenomena enhances the X-ray screeners’ ability to identify objects but also allows them to distinguish where the anomaly is located in real life, which is fundamental for the final step of the vehicle inspection. An X-ray screener who appreciates and is trained on the effects of geometric magnification and distortion will be able to distinguish where the anomaly is positioned, for instance whether certain packages of organic material are located among the merchandise on top of the container floor or inside the container floor, in a hidden compartment, which certainly impacts the decision on whether to clear the vehicle or send it for a physical inspection.

**Optimizing performance**

The results of different studies have shown that image analysis performance can be improved through training. The objective of the training is to enhance the detection performance of the screener as well as to reduce the reaction time required for recognition to occur. Adaptive computer-based training (CBT) is considered to be a very powerful tool for enabling screeners to achieve and maintain a good X-ray image interpretation capacity. A method is called adaptive if it is able to select an item on the basis of trainee performance at an earlier stage. The term CBT is used for activities in which the computer presents a problem, registers answers and provides feedback.

The use of CBT makes it possible to expose screeners to images of objects that they do not encounter so often in live operation, such as improvised explosive devices, as well as to images of objects from different angles, images showing superimposed objects and images of different complexity levels.

In 2020, CASRA carried out an international cargo study aimed at assessing, among other things, the impact of adaptive CBT on the capacity of trainees to recognize objects accurately and the relevance of X-ray screening selection tests, such as the X-Ray Object Recognition Test (X-Ray ORT). The cargo study demonstrated that substantial improvements in the performance of the screeners can be achieved after approximately 11 hours of training. The number of positive identifications by screeners who participated in the study had increased by 8% on average and the number of false alarms had decreased by 6%.

In terms of the usefulness of the X-Ray ORT, the study showed that such tests can assess the visual information processing capabilities of individuals, independently of the visual knowledge acquired through training and experience. However, it is important to ensure that the objects to be identified in the test are shapes that everyone would be expected to recognize, namely items from everyday life or objects, such as knives and guns, with which individuals have become familiar through cinema and other entertainment media.

It is worth stressing that employees with exceptional visual abilities can learn faster and achieve a higher level of threat detection performance through training. Customs administrations should therefore consider the benefits offered both by CBT systems and the use of a well-designed X-Ray ORT as part of their selection processes.

**More information**

www.casra.ch
info@casra.ch

---

The world’s first air-track intelligent transport system at an Asian port was unveiled and stepped into operation recently.

NUCTECH is so proud to join the Air-track Project with our tailor-made Container Inspection System, creating an unprecedented in-transit container control solution in air and contributing to the fully-automated port operation.
Extending the ISO Audit Data Collection Standard to improve Customs and indirect tax audits and bring some innovation into this field

By Richard van’t Hof, IT-Auditor, Dutch Customs Administration

International Standard ISO¹ 21378:2019 aims to make data collection for financial audits more efficient and reliable. In this article, Dutch Customs explains the structure of this ISO Standard and why the Netherlands has submitted a proposal to extend it to cover data related to Customs and indirect tax audits. The article argues that this development is critical to facilitating post-control audits and bringing much-needed innovation in this field of work. At the same time, it will offer the business community the opportunity to reduce administrative burdens and improve their internal control processes and their compliance with regulations.

Since the adoption of ERP systems² and accounting software at the end of the last century, information systems have been widely used by auditors who now often rely on the data and reports that are generated by such systems (the era of information). However, given the plethora of systems on the market, accessing this data may require time and effort. Every system has its own data structures, data definitions, data formats and ways of storing the data. Auditors often need help to understand the data and this restricts their ability to act independently.

To make the collection of audit data more efficient and reliable, experts in auditing techniques representing businesses, governments, software developers and universities worked together under the umbrella of the International Standards Organization (ISO) to standardize the data required for financial auditing. They based their work on existing national standards, such as the Swedish SIE format³, the Dutch Auditfile Financieel⁴, China National Audit Office Version 2 Audit Files, the American Institute of Certified Public Accountants’ Audit Data Standards⁵, and

---

1 ISO: International Organization for Standardization
2 An ERP is an application that makes use of a central database which receives information from various departments within a company. It includes integrated modules dedicated to functions like accounting, inventory management and CRM. An ERP gives companies a single place to store, view, manage and interpret data. Source: https://www.netsuite.com/portal/resource/articles/erp/what-is-erp.shtml
3 https://sie.se/format-en
5 https://www.aicpa.org/interestareas/frc/assuranceadvisoryservices/audittdatastandards.html
international standard OECD SAF-T® (Standard Audit File for Tax), which has been adopted by several countries. This resulted, in 2019, in the publication of International Standard ISO 21378:2019 – also known as the Audit Data Collection Standard (ADCS).

**ADCS: the universal adapter for ERP systems**

What auditors need is a universal adapter for ERP systems, just like we use an adapter to plug in electronic devices when we are in a country that uses a different type of electric plug.

The ADCS aims at bridging the “gap of understanding” between auditors, auditees, software developers and IT professionals, by creating a common mechanism for expressing information stored in accounting and ERP systems in an independent manner. It describes a way to access data for audit purposes, regardless of the system or underlying data structures. In other words, it is a data model (Figure 1) for financial audit purposes.

The Audit Data Collection Standard (ADCS) covers the main areas of accounting and ERP systems and the main business processes in the production supply chain. It consists of eight modules, corresponding to the following areas: Base (BAS), General Ledger (GL), Accounts Receivable (AR), Sales (SAL), Purchase (PUR), Accounts Payable (AP), Inventory (INV) and Property, Plant and Equipment (PPE). The modules, and the interaction points between them, are shown in Figure 2 (readers should note that this is a high-level representation which is not intended to depict all interactions in detail).

**Figure 1: International Standard ISO 21378:2019 as a data model for financial audits**
(Source: presentation ISO PC 295)

**Figure 2: Structure of ISO 21378:2019**

The Base (BAS) module contains basic information that is used across multiple modules.
In total, the ADCS defines accounting data elements in 71 tables spread across the eight modules. Of particular importance here are the inventory module (INV) which consists of 7 tables, including one called INV Product which lists the basic attributes of inventory items and other tracked items through purchase, use and sales, and another called INV Transaction, which sets out the transaction history impacting the inventory accounts during the specified time period. Figure 3 shows some elements of the INV Transaction table.

Piggybacking on behalf of Customs and indirect tax audits

The Audit Data Collection Standard, as published, focuses on supporting the financial audits usually performed by large accounting firms. As such it does not focus on other types of audits, for example those performed by governments to ensure the correctness and completeness of declarations regarding indirect taxes and Customs duties.

In general, the latter audits largely require the same data elements as the financial audits for which the ADCS was drawn up, plus certain additional, specific data elements related to Customs and indirect taxation. ISO has therefore endorsed a proposal initiated by the Netherlands to extend the ADCS and enable data related to Customs duties and indirect taxes to be collected in a coherent manner.

Figure 3: Elements 1 to 8 of the INV Transaction table
(Source: ISO 21378:2019)

<table>
<thead>
<tr>
<th>No.</th>
<th>Name</th>
<th>Data-type</th>
<th>Representation</th>
<th>Description</th>
<th>Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Transaction_Document_ID</td>
<td>String</td>
<td>%100s</td>
<td>Unique identifier for the picking ticket, shipping notice or other document created upon or associated with movement. Typically auto-generated by the system.</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Transaction_Document_Line_ID</td>
<td>String</td>
<td>%100s</td>
<td>Unique identifier for the line number for a document other than a customer order or supplier purchase order. Typically auto-generated by the system.</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>Transaction_Date</td>
<td>Date</td>
<td>%10c</td>
<td>Date of activity per associated transaction document, if applicable.</td>
<td>1</td>
</tr>
<tr>
<td>7</td>
<td>Transaction_Time</td>
<td>Time</td>
<td>%8c</td>
<td>Time of the activity as per the associated transaction document, if applicable.</td>
<td>1</td>
</tr>
<tr>
<td>8</td>
<td>Transaction_Type</td>
<td>String</td>
<td>%80s</td>
<td>Captures information regarding movements and adjustments. Movement types may include receipt, shipment, transfer, return, moved to production and moved from production. Quantity adjustment types may include physical count adjustment, damage, obsolete and scrapped. Cost adjustments may include the lowering of cost or market realization.</td>
<td>2</td>
</tr>
</tbody>
</table>

Figure 4: Extended Inventory Module
Figure 5 shows data elements of a consignment of wine leaving a bonded warehouse in the INV Transaction Characteristic table. The table includes columns for Transaction Document ID, Transaction Document Line ID, Characteristic Type, Characteristic UOM Code, Standard Characteristic Value, and System Characteristic Value. The data elements include an indication of the level to which they refer (GEN for general, EU for European Union, and NL for the Netherlands). In this example, the data element in line 3 referring to the commodity code applies at EU level. The last two columns show the values of the characteristics. The letter "S" in line 4 referring to VAT means "Standard", while the "1" is the corresponding value as represented in the company’s ERP system.

**Benefits for Customs and tax administrations**

The use of the ISO Standard will bring transparency and efficiency to the process of retrieving data when conducting post-audit controls. The query – in other words, the description of the data retrieval process based on the audit objective – will be standardized. The outcome (the dataset) will directly match the purpose of the audit, in terms of both semantics and syntax. In addition, it creates the possibility to standardize the analyses for the auditees, leading to more fairness in supervision and, ultimately, increased willingness to comply on the part of the company. This article does not discuss a Standard for data exchange. However, a proposal (XML, JSON and CSV) has also been submitted to ISO and the Standard will be ready by September 2022 at the latest.

**Business perspective**

In the Netherlands, we have observed that companies are making increasing efforts to comply with Customs and tax legislation. They invest a huge amount of time and effort into obtaining the right data in the right format, but this can be a complex endeavor, especially for companies which operate in multiple jurisdictions. The ADCS, with its extension for Customs and indirect tax, will support these efforts as it reflects the data requirements of Customs, tax authorities and audit firms, while at the same time establishing the basis for the exchange of the data required. Responding to a request for data from a supervision authority will require nothing more than the "push of a button". The Standard also provides flexibility. Companies can extend (and improve) the system using their own data characteristics – in order to monitor their internal control, for example. The ADCS and its extension also open up opportunities for the joint development of analytical methods. Software vendors are fully aware of these advantages, and have got involved in the development of the Standard.
Data-driven organizations

Many Customs and tax authorities have adopted strategies which include the objective of becoming data-driven organizations. Artificial Intelligence, Machine Learning, Advanced Data Analytics, Robotics and Block Chain are among the tools and technologies often mentioned in their strategy documents. Such tools and technologies leverage data, and data standardization is key to their implementation because it enables easy access to the data. The ADCS will enable us to be ready for the audits of the future – a future where data is easily accessible and auditors can focus on their core mission.

How to get involved

The extension for Customs and indirect taxes is still under development. It must be ready for publication by September 2023. A list of countries which are participating in or observing the development of the Standard can be found at https://www.iso.org/committee/5648297.html. At present the participants are working on the structure of the extension tables, as well as looking at which information (characteristics) should be included, the naming conventions and the standard maintenance procedure. On behalf of the members of the technical group, Dutch Customs would like to invite other Customs administrations to join in with this effort. We highly desire your input. If you would like to participate in the development of the extension, please contact your country’s ISO Member institute (see https://www.iso.org/members.html).

More information

https://www.youtube.com/watch?v=1OghzWkNvN8
https://www.iso.org/committee/5648297.html
re.van.t.hof@douane.nl
Governments should consider waiving taxes on transport costs until we are back to “normal”

By Omer Wagner, attorney specializing in Customs law

The exponential increase in transport costs over the past few months has placed a strain on importers and on economic recovery. One solution would be for governments to waive taxes on these costs. In Israel, the law already allows for such an exemption in the case of special circumstances beyond the importer’s control.

At the beginning of 2020, when the COVID-19 pandemic began to take hold, the production of goods ground to a halt in many countries and shipping companies reduced the number of cargo ships leaving ports. The usual flow of imported and exported goods effectively stopped. Due to lockdown regulations and other factors, such as staff shortages, empty containers were no longer collected and sent to Asia, where they were needed. Instead, they were stacked up at inland depots or cargo ports. A backlog of containers began to build up as a result.

The global shortage of containers in Asia, coupled with congestion in many ports, has led to drastic inflation in shipping costs. Let us take Israel as an example. In early 2020, renting a container for sea transport from China to Israel cost about 2,000 US dollars. Today, the price has gone up to approximately 15,000 US dollars. The cost is even higher if ships cannot actually dock in Israel’s ports because of congestion.

CIF and FOB
The increase in transport costs has led to an increase in the value of goods for Customs purposes in countries levying taxes on the CIF (cost, insurance, freight) value, rather than on the FOB (free on board) value which includes all expenses incurred up until the goods are actually loaded on board a vessel at the departure port.

It is worth recalling that Article 8.2 of the Agreement on Implementation of Article VII of the General Agreement on Tariffs and Trade (WTO Customs Valuation Agreement) allows countries to deliberate on the inclusion of international transport costs in the Customs value of goods.

“The in framing its legislation, each Member shall provide for the inclusion in or the exclusion from the Customs value, in whole or in part, of the following:

a) the cost of transport of the imported goods to the port or place of importation;

b) loading, unloading and handling charges associated with the transport of the imported goods to the port or place of importation; and

c) the cost of insurance.”

WTO Customs Valuation Agreement.

According to the WCO Guide to Customs Valuation and Transfer Pricing, “the majority of WTO Members made the one-off decision to include these elements in the Customs value; known as CIF (cost, insurance, freight) basis.” A few WTO Members, including the United States, Australia and New Zealand, chose not to include these elements.

Israel applies the CIF value. The Israeli Customs Ordinance of 1957 stipulates that the transaction value is the price paid or payable for the goods [...] plus the cost of insurance and the costs specified in Section 133. These costs include “the cost of transporting the goods to the port of import or place of import.” There is, however, an exception to this rule when such costs “are incurred due to
special circumstances beyond the control of the importer."

**Exceptional circumstances**

Price increases in the transport domain can be caused by a wide variety of events such as wars, border closures, trade sanctions and strikes. In such exceptional circumstances, the Director of Israel Customs may decide to exclude certain transport costs according to Section 133 (a) (5) of the Customs Ordinance.

An example of such a case of force majeure "beyond the control of the importer" was the security incidents which occurred in the north of Israel in 2006. On 24 April 2006, the Head of the Customs Administration ruled that transport costs caused by these incidents were not to be included in the import tax calculation: "I stipulate that levies and additional transportation costs incurred by importers due to the security incidents in the north of the country should not be included in the transaction value for the purpose of calculating the import taxes. It is clarified that these are additional transportation, unloading and loading costs caused by security incidents." On 6 June 2008, the Customs Administration also ruled to exclude container demurrage fees from the Customs value: "The demurrage fee in the importing country, which is charged for the use of the container beyond the period agreed between the ship's agent and the importer, is not to be included for import taxes."

Another example was the labour strikes which paralysed Israel's ports in 2008. On 7 September 2008, Customs exempted certain transport costs: "Additional transportation costs incurred by importers due to work stoppages in the ports of Israel will not be considered for the transaction value for the purpose of calculating import taxes. It is clarified that these are additional transportation, unloading and loading costs which were caused due to the labour strikes and the importer has no control over them. The importer must prove the existence of such additional costs."

**Possibility of waiving taxes on transport costs**

Israel's Chamber of Commerce recently appealed to the Director of Israel Customs to set a maximum value for transport costs. In other words, no duties should be imposed on any values higher than this "normal" fixed cost. However, this request was denied. Customs stated that reducing the actual transport costs is not possible and that it has not been proven that the increase in transport costs is indeed due to the COVID-19 crisis or other unforeseen circumstances.

I believe that the question as to whether the shortage of ships and containers as well as the congestion in ports generated by the COVID-19 crisis constitute "special circumstances beyond the importer's control" deserves to be discussed and looked at in greater detail.

As it happens, Israel's courts issued the following ruling on a non-trade-related case, according to which the COVID-19 crisis is an unexpected event: "It is hard to believe that any reasonable person could or should have expected the full far-reaching consequences of the Corona epidemic, including on the economy and commercial life, in Israel and around the world. We are dealing with an unparalleled epidemic which has no precedent in the last hundred years (at least since the Spanish Flu epidemic which caused many deaths around the world between the years 1918 - 1920)."

Do importers have any control over the changes in world freight rates? Could any of them have anticipated the COVID-19 crisis? I believe the answer is "no".

Governments should therefore consider the possibility of waiving import duties on transport costs. In certain countries, such as Israel, there is no need to amend the law as it already allows for such decisions to be taken. All that is required is goodwill, along with a little flexibility in interpreting the law.

**More information**

Communication@wcoomd.org

**About the author**

Omer Wagner is employed in the Indirect Taxation Department at PWC Israel and Kesselman & Kesselman, and is an attorney specializing in Customs law, purchase tax, indirect taxation, import, export, regulation, trade levies, and international trade. This article solely reflects the views of the author and should not be considered a legal opinion.
CrimsonLogic’s next generation of Total Trade Solutions, pioneering over 30 years of trade facilitation systems with cutting edge technology.
As we face new global challenges

Webb Fontaine’s technology is now more important than ever.

Powered by Artificial Intelligence, our solutions optimise the entire spectrum of Trade.

We’re building something big.

http://www.webbfontaine.com