



Brussels, 24 March 2017.

FUTURE OF CUSTOMS

- The way forward for the Virtual Working Group on the Future of Customs -

(Item V. (a) on the Agenda)

Introduction

1. Almost two years after its establishment under the Permanent Technical Committee, the Virtual Working Group on the Future of Customs (VWG FC) is taking stock of the work undertaken so far and to seek PTC's guidance on the way forward.

Future direction of the VWG FC

2. The PTC has during each of the sessions in the past two years addressed different topics under the Future of Customs agenda item, steered mainly by the inputs from the VWG FC. It is now felt to be an appropriate time to look into the results and seek its future direction, bearing in mind the outputs reached to date and the original underlying idea for establishing such a group.
3. Annex to this document is a draft Report on the PTC's Future of Customs Agenda and the Virtual Working Group on the Future of Customs which addresses both the work carried out so far and the suggested direction which the work should be taking in the future. It also represents a reflection of the Committee's decision to be taking a more forward-looking approach and to be providing strategic guidance on Customs issues.

Conclusion

4. The PTC is invited to:
 - discuss the draft Report on the PTC's Future of Customs Agenda and the Virtual Working Group on the Future of Customs; and
 - provide strategic guidance focusing in particular on the future direction of the VWG FC.

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Draft Report on the PTC's Future of Customs Agenda and the Virtual Working Group on the Future of Customs

Background

Based on the proposal submitted by PTC delegates, the discussion on the Future of Customs was launched at the 207th/208th Sessions of the PTC in March 2015. This came as a result of previous discussions on the role of the PTC, where it was agreed that the Committee take a more active role in discussing strategic matters and future-oriented topics.

The March 2015 PTC discussed new and emerging threats and how this would affect the roles and responsibilities of Customs in the future. The discussions resulted in the establishment of a Virtual Working Group on the Future of Customs (VWG FC) consisting of Customs, the private sector, international organizations and academia. Even though the Customs in the 21st Century strategic document (C21) was agreed to still be a sufficient framework for tackling the roles and responsibilities of Customs today and in the future, it was agreed to be used as a starting point of the Group for its intersessional discussions.

The VWG FC which currently consists of 30 members¹ has been communicating virtually, including by use of the CLiKC! platform. In addition, the Group has had three face-to-face meetings in Brussels, where a number of delegates joined through conference call. The Group is moderated by Mr. Matome MATHOLE, Brussels-based Customs Attaché of South Africa and Vice-Chairperson of the PTC.

Introduction

Since its establishment in March 2015, the VWG FC has been working intersessionally on different assignments and has produced a number of outputs which had been further discussed in the PTC meetings.

Two years later is a good time to take stock of the results and to look into how the VWG FC should be moving forward.

The results of the VWG FC so far

The work of the Group has served to steer discussion at the PTC on different topics. The main outputs of the Group and the PTC under the umbrella of the Future of Customs include the following:

Overview of the progress on implementation of the 10 building blocks of the Customs in the 21st Century Document. The VWG FC felt that the Customs in the 21st Century Strategic Document was still relevant for Customs and agreed that for moving the work forward, it was important to have a general overview of how far the WCO and its Membership have progressed with the implementation of the C21's 10 building blocks since its adoption in 2008. The Secretariat produced such an overview which is contained in Annex I to the PTC document PC0422.

¹ Members of the VWG FC include (in alphabetical order): Belgium, Canada, China, Cross-Border Research Association (CBRA), Egypt, Eindhoven Technical University, EU, International Federation of Freight Forwarders Associations (FIATA), Finland, Global Express Association (GEA), Hungary, India, Ireland, International Road Transport Union (IRU), Israel, The Netherlands, New Zealand, Norway, Morocco, Serbia, South Africa, Swaziland, Togo, Turkey, University of Applied Sciences Geneva, University of Munster, United Arab Emirates, United Nations Officer for Coordination of Humanitarian Affairs (UN OCHA), United States and Vietnam.

Short papers on relevant topics: Another important step taken by the VWG FC included developing short papers on different topics which were identified as critical or of interest to the Members of the VWG FC. The key messages coming out of these papers have also been reflected in the update of the appropriate sections of the C21 (Annex I to PC0422).

The following topics were examined by the VWG FC members:

- 3D printing (China)
- Automatic exchange of information (Netherlands)
- Border Models (China)
- E-commerce (China)
- Future of Customs (Togo)
- Future of Customs – a high capacity to adapt to changes and interoperability (Morocco)
- Future Role of the WCO (University of Münster)
- Integrated Supply Chain Management (Cross-Border Research Association – CBRA)
- Framework for Assessment of Socio-Economic Negative Impacts of Common Illicit Cross-Border Freight Logistics Flows (CBRA)
- Survey on Law Enforcement Agencies' Training Needs (CBRA)
- Development of a strategic roadmap towards a large scale demonstration project in European logistics and supply chain security (CBRA)
- Enhanced cooperation between Customs and Tax administrations (Hungary)
- Natural disaster relief (UN OCHA)
- Review of available existing strategic plans of Customs administrations to further identify already known future-oriented topics (Canada)
- Trade Facilitation (IRU)
- Strategic Plan Survey (US)

Compiling topics impacting Customs in the Future: The VWG FC had also agreed to compile a non-exhaustive list of future oriented topics, including those which are under discussion within other WCO working bodies. In addition to the topics already mentioned in this document, the list includes: new economic models and globalization, mega ports, new modes of transport, new working and production methods, terrorist threats, climate change, global migration, WTO Agreement on Information Technology, e-commerce, system-based controls, and many more. The complete list is included in Annex II to document PC0422.

More in-depth research and discussions on a number of topics: The PTC had an opportunity to discuss in more detail a number of topics that were submitted by the VWG FC members or the Secretariat under the Future of Customs agenda item, including:

- ✓ **3D printing:** China, in the capacity as member of the VWG FC launched a discussion on 3D printing and its impact on Customs in the future which brought up questions such as: what are the implications of enhanced use of 3D printing on Customs and other governmental agencies, such as Tax administrations and the Police; implications on origin, valuation, IPR and security; potential need to redefine “goods” in the future etc. The PTC concluded that there was a need for more research on the topic, which was then followed-up by both China and the University of Munster. Some common points identified in their research papers include: 1. WTO Ministerial Decision of 19 December 2015 on the Work Programme on

Electronic Commerce which states that WTO Members will maintain the current practice of not imposing Customs duties on electronic transmissions until the next Ministerial Conference in 2017 implies that there should be no revenue implications of enhanced use of 3D printing, at least not before 2017; 2. 3D printing will accelerate the movement of raw materials; and 3. There are already some IPR implications and there might be many more in the future. The two research papers launched a PTC discussion where some of the delegates argued that Customs deals only with tangible goods and therefore digital transmissions should have no implications on Customs work, even though it was important to still keep a close eye on the developments in the future. On the other hand, there were views that Customs needed to monitor the cross-border movements of intangible goods too or to at least to look into this new manufacturing mode and identify whether the same rules would apply, for instance, in determining the origin of goods. Some delegates felt that Customs still had an important role to play in monitoring cross-border movement of intangible goods. The PTC concluded that the topic of 3D printing and its implications on Customs is not to be closed at this point in time, but is to be revisited in the light of any relevant future developments.

- ✓ **Drones:** The Secretariat carried out research on the emerging developments in the area of drones, looking at potential opportunities, challenges and reflections on future policy/regulatory requirements/adjustments, in particular relating to the use of drones by Customs for surveillance and monitoring purposes, and by trade for cross-border delivery of goods.

The PTC recognized that growing use of drones in trade and Customs environment is becoming a reality. A few Customs and police authorities are already using drones for land border and maritime surveillance. Regarding challenges and threats stemming from the misuse of drones, smuggling of drugs and other contraband items, and potentially for a terrorist attack by criminal syndicates, were given as examples. Noting that with technological advancements and sophistication, drones could soon be used for cross-border deliveries of goods, PTC delegates recognized that Customs was the responsible agency for cross-border movement of conveyances which included drones. The PTC agreed that there was a need for carrying out further research on the topic, especially exploring more practical experiences and related policy developments, as well as monitoring and coordinating the work being done in this area by other international organizations (e.g. ICAO).

- ✓ **Global Value Chains:** The Secretariat carried out research on how Global Value Chains (GVCs) impact Customs business today and will impact Customs in the future, as well as how Customs can improve the competitiveness of their countries in terms of supporting connectedness to GVCs especially from procedures point of view. The document focused on the importance of trade facilitation measures for improving connectedness to GVCs, especially those relating to processing trade, such as inward and outward processing procedures, which also present mandatory measures under the WTO Trade Facilitation Agreement.

The topic generated comprehensive discussions and inputs from the Members and Observers. There was general agreement on the benefits of better connectedness to GVCs in particular for developing countries and for MSMEs, especially with the growth of e-commerce.

Some PTC delegates felt that despite the fact that many Members had provisions on inward/outward processing embedded in their legislation, the procedures were often too complex and/or underused. In one case a Member explained that the recently introduced changes in legislation are putting more emphasis on the inward/outward processing procedures and its wide access to the industry.

Some of the points raised as of key importance in terms of better connectedness to GVCs included: use of bonded factories, economic/industrial zones, warehousing, manufacturing on premises and movements from one manufacturing location to another in the same Customs territory, as well as refund procedures. In the context of use of special zones, a Member pointed out to the VAT implications if goods are removed out of the zones. Other relevant trade facilitation measures mentioned include Authorised Economic Operators including Mutual Recognition Agreements, Single Window, Risk Management, Advance Rulings etc. The PTC finally agreed to continue research on GVCs in general and to produce a Handbook on inward/outward processing which would focus on these procedures that very specifically facilitate better connectedness to GVCs.

Future direction of the VWG FC

Bearing in mind the importance of exploring new and emerging trends for successful policy making, the VWG FC seeks to continue such research, by selecting topics which would need to be addressed more urgently.

Exploring disruptive technologies: A disruptive technology is one that displaces an established technology and shakes up the industry or a ground-breaking product that transforms life, business and the global economy. Harvard Business School professor Clayton M. Christensen coined the term disruptive technology. Disruptive technology often has performance problems because it is new, appeals to a limited audience and may not yet have a proven practical application. Historical examples of disruptive technologies include PCs, Windows operating system, emails, smartphones, cloud computing, social networking and others.

Not every emerging technology will change the way we work, but it is key that policy leaders understand which technologies will be relevant to them and to prepare accordingly. The potential benefits of the new technologies could be tremendous, but also the challenges of preparing for their impact. If the business and government leaders wait until these technologies are exerting their full influence on the economy, it will be too late to capture the benefits or react to the consequences.

The VWG FC has already dealt with some disruptive technologies, such as 3D printing and drones. Many of them might seem to be buzz words. However, careful examination of their potential impact sheds a light on the many opportunities for Customs and border management more broadly:

- *Artificial Intelligence (AI) and machine learning:* Facebook CEO Mark Zuckerberg has already shown what is possible with artificial intelligence, by building Jarvis, a virtual assistant for his home in San Francisco last year. Language processing, speech recognition and face recognition are the key AI systems used for Jarvis. Potential benefits of AI and machine learning for controlling the movement of passengers across borders are maybe the most obvious. However, there are

many more, including high advancement of risk management capabilities in cross-border movement of goods.

- *Internet of Things (IoT)*: IoT is the internetworking of physical devices, vehicles (also referred to as “connected devices” and “smart devices”), buildings and other items embedded with electronics, software, sensors and network connectivity that enable these objects to collect and exchange data. Some predict that the 2017 will be the year of the “Internet of Everything”, where a huge step will be made in terms of connecting all possible devices. One of the main challenges in the IoT remains security of information, which is more frequently being addressed especially by producers of IoT devices. In the WCO context, the potentials of IoT can also be considered, for instance, in implementing Integrated Supply Chain Management (ISCM) and/or the Unique Consignment Reference (UCR) concepts.
- *Biometrics*: Using a thumbprint to unlock a mobile phone has become an everyday thing for most people today. We are moving toward a future where personal information will be biometrically stored. Biometrics are already to a certain extent used for controlling the movement of people across borders, but how much more can be done to unravel this potential, is yet to be seen.
- *Robotics*: It is a branch of technology that deals with the design, construction, operation and application of robots. Increasingly capable robots with enhanced senses, dexterity and intelligence can take on some tasks that are considered to be too delicate for humans. It is expected that robotics will reach new dimensions during 2017, focusing more on content generation and other tasks performed primarily by humans. We see even today some Customs administrations, such as China Customs, exploring the application of robotics in their work.
- *Blockchain*: Blockchain, or the distributed ledger technology (DLT), is the new buzz word when it comes to emerging digital technologies. The impact of blockchain’s potential to fundamentally change the way markets and governments work is only now emerging. This complex development that everyone is talking about today is still to be explored and its potential use in supply chain management.
- *Virtual reality*: Samsung Gear is maybe the best widespread example of how virtual reality can work. There is still a lot to be explored around the possibilities of its use, but one is for instance having long-distance meetings with team colleagues spread around the globe.

Exploring other topics: The VWG FC will continue to explore other topical issues. Apart from those already mentioned, these could include: cybersecurity, autonomous vehicles, digital or virtual currencies, gender equality and others.

Strategic foresight: The VWG FC also seeks to get back on track of the original direction towards which it was heading. The VWG FC was initially, amongst other, established, as a result of a need for a more aspirational approach in designing the ideal Customs that we seek to have in the future and for identifying the steps required to reach such a goal.

This type of approach is known as foresight and is more widely accepted by OECD member governments. The aim of foresight is to help us harness our imagination for shaping a better future. The VWG FC will explore its potential and aim at using strategic foresight as a means of better addressing the Future of Customs agenda.

This could be achieved on the first stage, for example, by harnessing available synergies from studies already made under the aegis by OECD and other relevant bodies. Also the WCO environmental study could be an important enabler in this regard, as it already covers customs-related policy issues every year. These all could serve as easily achievable first steps towards a more detail-oriented brainstorming inside the working group
