



FUTURE OF CUSTOMS

Update on the Work of the Virtual Working Group on the Future of Customs (VWG FC) and Presentation by Members of the VWG FC

(Item II (a) and (b) on the Agenda)

Introduction

1. At its 203rd/204th Sessions in March 2014, the Permanent Technical Committee (PTC) proposed to place the topic of the Future of Customs on the agenda of the following meeting. At the PTC meeting in October 2014, the WCO Director of Compliance and Facilitation encouraged delegates to submit written contributions to this topic that was scheduled for the agenda of the March 2015 PTC meeting.
2. The topic on the Future of Customs was launched by a panel discussion at the March 2015 PTC meeting, supported by a Secretariat document which compiled some of the already identified challenges and latest developments that were expected to have an impact on Customs in the future.
3. The panel discussed new and emerging threats and how this would affect the roles and responsibilities of Customs. It further discussed whether the 10 building blocks of the Customs in the 21st Century Strategic Document (2008) of the WCO still provide a sufficient framework for tackling the roles and responsibilities of Customs today and in the future.
4. The PTC appreciated the panel discussion on the Future of Customs and the respective contributions from the floor and agreed to establish a respective Virtual Working Group. It further agreed that the Customs in the 21st Century Strategic Document was still very relevant for the future of Customs and agreed that the Working Group would use it as a starting point for its inter-sessional discussions.
5. The PTC also agreed to use the (European) autumn sessions of the PTC to discuss more future oriented topics and encouraged Members and other delegates to start respective more in-depth research on some topics that had been mentioned

during the panel and plenary discussion and could be presented at the following PTC Sessions.

Virtual Working Group on the Future of Customs (VWG FC)

6. The Virtual Working Group was established in the intersession and selected Mr. Matome MATHOLE, Brussels-based Customs attaché of South Africa and Vice-Chairperson of the PTC, as its Moderator. The VWG FC held one face-to-face kick-off meeting at the WCO Headquarters on 7 July 2015, where a number of participants also joined in by conference call.
7. At the time of drafting this document, Members of the VWG FC include representatives from 17 Members (Belgium, Canada, China, European Union, Finland, Hungary, India, Ireland, Netherland, New Zealand, Norway, Morocco, Serbia, South Africa, Togo, United Arab Emirates, United States), 6 from Academia and the Private Sector (Cross-Border Research Association (CBRA), Eindhoven Technical University (ETU), University of Münster, Global Express Association (GEA), International Road Transport Union (IRU), UN Office for the Coordination of Humanitarian Affairs (UN OCHA)). The VWG FC is still open for interested Members, especially to include also the regional structures and the private sector, as agreed by the PTC. The group mainly operates through emails and through the CLiK! platform.
8. At its meeting on 7 July, the VWG FC discussed and agreed on the approach to be taken to move the work forward, according to which a number of measures have been or are in the process of being carried out:
9. 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, but it needed to be reviewed before being able to advise on potential updates, if any. In that respect, the VWG FC agreed that for moving the work forward, it was important to grasp a general overview of how far the WCO and its Membership have progressed with the implementation of the C21's 10 building blocks in the past seven years since its adoption by Council in 2008. The Secretariat compiled such an overview which has been reflected in Annex I of this document.
10. Short papers on different 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.
11. The following papers were submitted by the VWG FC members and circulated for further inputs and remarks within the Group:
 - 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)

12. The key messages coming out of these papers have also been reflected in Annex I to this document under, which were felt to be, the appropriate sections of the Customs in the 21st Century Document (C21). Namely, the VWG FC felt it was important to differentiate topics which had strategic implications from those requiring operational solutions. It was felt appropriate to see how the topics under discussion fit under the current C21 document, as the VWG FC felt there was possibly a need to update the C21 document. Consequently, key messages coming out of some of the topics will be found under for example the “Enabling technology and tools” building block, while some others have been placed under the “Enabling powers” building block. On the other hand, some of the topics have been placed under “Fast-changing landscape” to reflect the environmental circumstances influencing Customs today and in the future.
13. Annex I therefore reflects both an overview of the progress made in implementing the 10 building blocks, as well as possible elements to be looked at when discussing a review/future update of the C21 strategic document. The PTC will be invited to contribute to and discuss these inputs.
14. Compilation of topics impacting Customs in the Future: The VWG FC had also agreed to compile a list of future oriented topics, including those which are under discussion by other WCO working bodies and to compile them into one document. This list has been developed and can be found in Annex II to this document. The VWG FC also agreed that outputs of the Group would include the provision of guidance to WCO Committees (including the PTC) and other working groups, wherever felt appropriate.
15. Prioritizing topics for research: It was also felt necessary to prioritize topics which would require more research than others, including taking into account further guidance also from the PTC. This task is still to be carried out by the VWG FC. In the meantime, the topic of 3D printing was selected to be discussed in further detail already at this particular meeting, and a discussion paper has been included as Annex III to this document.
16. Inputs to the Future of Customs at the Policy Commission in December 2015: The Policy Commission in December 2015 will most probably hold a break-out session on the Future of Customs, too. According to current exchange of thoughts with the Secretariat, the potential topics for those break-out discussions might include Customs/Tax cooperation; Coordinated Border Management; and Interconnectivity.

Action expected from the PTC

17. The PTC is invited to:
- Provide input to the general overview on the progress achieved so far on the 10 building blocks of the WCO's Customs in the 21st Century Strategic document (as reflected in Annex I);
 - Provide input to the new and emerging topics affecting Customs today and potentially having an impact on its roles and responsibilities in the future (as reflected in Annex I);
 - Suggest any additional topics to be dealt with by the VWG FC, apart from those already identified, and provide guidance on any topic which would require immediate research (Annex II);
 - Share any views and knowledge on the topic of 3D printing and possible impact on Customs (and other agencies), as outlined in the paper submitted by China for discussion under item II.b) of the agenda (Annex III).

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Annex I (Virtual Working Group on the Future of Customs) – A general overview of the progress achieved so far on the 10 building blocks of the Customs in the 21st Century Strategic Document¹ and new topics to potentially be included through a possible review

This Annex was developed to provide:

- a) A general overview on the progress achieved so far on the 10 building blocks of the WCO's Customs in the 21st Century Strategic Document (C21); and
- b) New and emerging topics affecting Customs today and potentially having an impact on its roles and responsibilities in the future.

The objective of Annex I is to form a basis for discussion and invites for further inputs by PTC delegates on both a) and b) above.

For ease of reference, the text below is sequenced with 3 different inputs, in the following order:

1. **C21**: the relevant extracts from the C21 document;
2. **Progress so far**: general overview of the progress achieved so far on the different areas/building blocks of the C21 strategic document; and
3. **Input by the VWG FC**: new topics to potentially be included through a possible review of the C21 strategic document.

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C21:

“.....FAST-CHANGING LANDSCAPE

International trade is a key driver for economic growth and development. It raises living standards in both developed and developing countries, contributes to the reduction of poverty as well as creates a more stable, secure and peaceful world. International trade is governed by the rules of the regional and multilateral trading systems, preferential trade arrangements and national governments. New developments are driven by a combination of factors including fast-evolving information and communications technology (ICT), advances in transportation methods and trade liberalization.....”

Input by the VWG FC:

Trade Facilitation: Even though trade facilitation has always been an important objective on Customs and WCO agendas, with the conclusion of the WTO Trade Facilitation Agreement (TFA) in December 2013, it has been given a very high level of priority and it is envisaged that it will continue to have an important role in the future.

¹ *Customs in the 21st Century – Enhancing Growth and Development Through Trade Facilitation and Border Security*, adopted by the WCO Council in June 2008. The whole document can be found at the following link: <http://www.wcoomd.org/en/topics/key-issues/-/media/3EE76BC165B9409CBE6E31F9923CABB8.ashx>

Implementation of the TFA opens up new opportunities for cooperation between Customs and other relevant stakeholders, including the transport industry.

E-commerce: E-commerce is increasing at a very high speed. E-commerce companies seem to be partly replacing the traditional role of traders and retailers, and the trade process has become shorter. Moving from a single declaration for a big consignment, we are moving to a big number of declarations for small parcels, bringing potential duty loss to governments when parcels are under the minimum duty free limit. The VWG is aware of discussions on de minimis which will be held at the next meeting of the RKC Management Committee.

3D printing: The use of 3D printing (and other production options including Industry 4.0) is spreading rapidly. The question which is being posed is how to go on about possible implications such as increase in movement of raw materials, cross-border movement of digital files used for 3D production and potential redesign of the integrated supply chain management. There could also be other elements to be looked at such as impact on tax collection, food security issues, legal implications, etc. How much of this would fall under responsibility of Customs, and how much under that of other agencies, is another question to consider.

(3D printing has been chosen as a topic for detailed discussion at the 209th/210th Sessions of the PTC. More information and guidance for this discussion has been provided in Annex III to this document.)

Natural Disaster Relief: “Mega disasters” continue to occur more frequently and with more devastating effects in rich and poor countries. Smaller-scale disasters, which are often cyclical and include droughts, floods and extreme temperatures, are also increasing. Small but recurrent disasters often cause more cumulative negative effects than larger disasters. A new Framework for Disaster Risk Reduction, agreed in Sendai, Japan, in 2015, for the first time set global targets to reduce the numbers of people killed or affected by disasters caused by natural hazards, and to increase international support to complement national capacity. Customs procedures are an easy and effective step in humanitarian preparedness, which can significantly improve the effectiveness of international response. Existing international instruments and national laws and procedures can be used to enhance the role of customs in the management of humanitarian relief operations and to speed up the clearance and release of relief consignments at borders in order to ensure that aid reaches victims in need in a timely manner.

C21:

CHALLENGES FOR GOVERNMENTS

“The central challenge that states face is to ensure that globalization becomes a positive force for all the world’s people”²

Recent developments have created new demands and perspectives on the role of the modern state. They have also resulted in a recognition of the collective responsibility

² UN Millennium Declaration.
I/2.

of states to build a more peaceful, prosperous and just world, as nations and societies become increasingly interconnected and interdependent. Global challenges transcend borders and demand global responses. In addition to cooperation at a global level, states are also increasing cooperation at regional level by establishing and developing Customs unions, free trade areas (FTAs) and economic partnership agreements (EPAs).....”

Input by the VWG FC:

Identifying key missions of Customs, main challenges and new avenues of cooperation for the future: It seems that despite the rapidly changing environment, the key missions of Customs remain the same: facilitation of international trade, protection of society, security of the international supply chain and Customs enforcement. However, many new emerging challenges affect the ways in which Customs work on accomplishing these missions and e-commerce seems to be one of the biggest emerging challenges. Most effective solutions for the future include: enhancing Interconnectivity, Coordinated Border Management, Single Window and mutual recognition of Authorized Economic Operators.

A high capacity to adapt to changes and interoperability: A high capacity to envisage its future roles and responsibilities might help Customs be better prepared for the future. Research on the future of Customs is a forward-thinking exercise that has to encompass a more or less distant horizon. The paper submitted calls for a specific methodology to be used and encompasses defining key variables (internal, external), strategic challenges and objectives, scanning for all possible eventualities and finally identifying key issues for the future by setting assumptions based on probability.

Socio-Economic Negative Impacts of Common Illicit Cross-border Freight Logistic Flows: Global supply chains and freight logistics systems are commonly exploited in trafficking activities. In order to design effective and efficient governmental policies and corresponding regulations, enforcement priorities, inspection schemes and other countermeasures, one needs a clear picture of such common illicit flows. Some include those such as: trafficking in cocaine and heroin; counterfeit products; ozone depleting substances; firearms; stolen cultural products; and endangered species. Some of the negative socio-economic impacts can be placed under the following categories: increasing health care and social security costs; increasing environmental damages; increasing human suffering; increasing market place distortions and/or unfair completion; losses in tax revenues regarding indirect border taxes; and losses in cultural heritage. Other illicit flows which could also be analyzed include various forms of fiscal fraud, quota violations, trafficking in human beings, currency export/import violations and others.

Priorities for enhancing supply chain security (in EU): An EU co-funded project identified many gaps in supply chain security, according to industry and governmental organizations close to the subject. These gaps can be condensed into 3 key areas: 1. Inadequate knowledge and awareness of crimes, the threats they pose and what to do about them; 2. An inability to successfully authenticate and trust the information, data, people and companies used in managing supply chain and logistics activities; and 3. Being unable to effectively protect the freight in transit.

Future oriented goals identified in CBSA Integrated Business Plan 2015-2018: One of the conclusions of the VWG FC was to review a number of existing Strategic Plans of WCO Members and identify future-oriented topics. Canada Border Services Agency includes in its Integrated Business Plan 2015-2018 a number of activities which can be seen as future oriented and may give an indication of Customs/border priorities for the future. Here are some examples: expanding trusted trade programs, including the negotiation of mutual recognition agreements; implementing the Single Window; pushing the border out (identifying high-risk travelers and cargo before they arrive in Canada); reinforcing Trade Fraud program; reinforcing performance measurement, expanding trusted traveller programs etc.

Strategic plan survey: As the VWG FC investigates future challenges; the group examined a sample of existing strategic plans from various Customs administrations. The sample provided insight into what challenges have already been identified by administrations and where commonalities exist.

One goal which was common across many of the surveyed strategic plans is creating a modern, efficient, more seamless way to collect revenue (electronically and securely).

A second was the promotion of trade and their country's economic competitiveness.

A common pattern was the inclusion of goals related to internal operations, such as human resource concerns (including corruption) and the improvement of overall agency efficiency. Some administrations even mentioned a desire to improve the image of their Customs administration within the government and/or the public.

Many administrations had a goal related to inter-agency or inter-institutional coordination (coordinated border management) and a few mentioned the importance of following and/or harmonizing regional or international norms and standards.

Most included a goal related to delivering quality service to their stakeholders and the achievement of user satisfaction, and a few specifically mentioned consumer safety or the protection of society.

Finally, there were some mentions of curtailing illicit activity and improving border controls.

C21:

21ST CENTURY CUSTOMS: A NEW DYNAMIC ROLE

- (a) ***Globally networked Customs:*** *The new challenges of the 21st Century demand a new concept of Customs-to-Customs cooperation. There is a need for closer real-time collaboration between Customs administrations and between Customs and business in facilitating legitimate trade and undertaking Customs controls.*

The new requirement is to create, in partnership between the various stakeholders of the public and the private sectors, a global Customs network in support of the international trading system. The vision of this network implies the creation of an international “e-Customs” network that will ensure seamless, real-time and paperless flows of information and connectivity.

Mutual recognition is an important enabler. This includes mutual recognition of Customs controls and Authorized Economic Operator (AEO) programmes. The concept of networked Customs is critical for the 21st Century model of managing seamless end-to-end international supply chains. End-to-end supply chain management enables risks to be assessed in more depth and managed earlier where necessary, it reduces the need to intervene with goods in the choke point of the port of arrival, and it allows for the tracking and tracing of goods throughout supply chains. The basic operation relies on secure, real-time exchange of information between business and Customs and between the Customs administrations in a supply chain starting with the export administration. This will require:

- (i) Internationally standardized data requirements for export, transit and import and the implementation of the WCO Unique Consignment Reference number as part of a Cross-Border Data Reference Model;*
- (ii) Interconnected systems and aligned Customs databases to enable the electronic exchange of data between Customs administrations as early as possible in the international movement of goods;*
- (iii) Mutual recognition and coordination protocols between exporting, transit and importing administrations to eliminate unnecessary duplication of controls in international supply chains;*
- (iv) Standards to enable the development of a system of mutual recognition for AEOs; and*
- (v) A set of rules governing the exchange of information between Customs administrations, including rules on data protection.*

Progress so far:

The Utility Blocks that had been developed by countries that had used the GNC Concept to develop their Customs-to-Customs exchanges serve as a leading indicator for the priorities of countries moving forward. Argentina, through their INDIRA system, connects regional countries, both within, as well as outside of MERCOSUR to exchange information on Customs declarations made to enhance risk management and regional integration. South Africa, through their Regional Interconnectivity Project, is similarly enabling information exchange within SACU. Serbia had also made strong steps in connecting with Customs administrations in the Balkans through the SEED system, and the SEED system also provides a strong foundation for further integration for CEFTA Members. The European Union had also made active use of the GNC concept to enable Mutual Recognition of AEOs with the United States of America, as well as mutual recognition of controls with Switzerland.

Hence, it is clear that developments such as the mutual recognition of AEOs, regional integration and free trade agreements will be important enablers in bringing about the emergence of standardized communication networks.

As Information and Communications Technology continues to mature, the technical barriers to information exchange will be diminished, but the non-technical barriers are expected to persist. Countries that do not share common economic or security interests will remain unmotivated to exchange data. The likelihood of a strong, binding international instrument for data exchange remains remote.

However, exchanges between like-minded country partners who possess the political will and legal enablers to develop such systems and processes, and who share a common interest in their bilateral or multilateral economic and security arrangements, are expected to increase. The eventual outcome might not be one single, monolithic system, but an environment based on interoperability principles that reduce the technical and non-technical barriers to sharing information, and in doing so, provide the dominant basis for international harmonization and trade facilitation. However, this is still to be seen.

Input by the VWG FC:

Automatic exchange of information (Eol): Where Eol was rare in the field of direct taxes before 2007 (if at all, it occurred on a case by case basis), today's new standard in the realm of taxes is automatic exchange of information (AEol). This development in the tax world is in contrast to Customs practice, even if a central message in Customs in the 21st Century is that no Customs administration can be efficient and effective on its own. Customs administrations that used to be in the lead in cross border cooperation and Eol, are now trailing their Revenue colleagues. This is a negative development because the essence of Customs work lies in the slogan of "your export is my import". The reluctance to explore and to act in this respect may partially be explained by the pretty unsuccessful attempts to create a multilateral WCO basis for Mutual Administrative Assistance (MAA). The world has, however, changed after embracing AEol for tax purposes. Moreover, MAA is not only relevant for enforcement purposes anymore, but may also support trade facilitation, in particular in case of trusted trade lanes, potentially offering increased benefits for AEOs. A serious debate on this issue is urgently required.

C21:

- (b) **Better coordinated border management:** *This entails coordination and cooperation among all the relevant authorities and agencies involved in border security and regulatory requirements that apply to passengers, goods and conveyances that are moved across borders. Governments also need to explore more effective solutions to border management. The establishment of better coordinated border management for the cross-border movement of goods requires:*
- (i) *The recognition of Customs or the agency responsible for the Customs function as the lead front-line administration at national borders for controlling the movement of goods. According to the UN Trade Facilitation Network, Customs administrations are usually best suited to develop integrated procedures for processing goods at points of entry; and*
 - (ii) *The introduction of the electronic Single Window concept that allows a trader to provide all necessary information and documentation once to the designated agency that, in turn, distributes the information to all relevant agencies.*

Progress so far:

Since 2008 a lot of progress has been made in the area of CBM. The then existing Integrated Border Management Compendium was updated, extended and re-named as the Coordinated Border Management Compendium. In addition, a CBM e-Learning course was developed with financial support from the World Bank. Also the Single Window Compendium was updated in 2015.

Cooperation with other International Organizations was maintained or intensified whilst at the same time the WCO initiated cooperation with others, such as the Codex Alimentarius Commission, the International Plant Protection Secretariat and the World Organisation for Animal Health. In the last case, a new Cooperation Agreement was signed at the WCO Council in 2015.

At national level, a number of Members have CBM in place or have initiated plans to achieve it. Other Members have improved their existing CBM arrangements. On the other hand, there are still a large number of countries where CBM is not in place. That is where the challenge lies for the future, improving border management at operational level, making supply chains not only safe and secure but also fast and predictable.

Even though CBM is not a one-size-fits-all solution, the use of global standards such as the RKC, SAFE, WCO Data Model and relevant guidelines and compendia will ensure a more pleasant and speedier border experience.

Input by the VWG FC:

Border models: Many developments in the last decade and more, such as 9/11, the Yemen incident and other terrorist threats, cyber crime, e-commerce, 3D printing technology and others have resulted in Customs being assigned with new responsibilities such as for instance security and control of passengers, which is reflected in some cases of reengineering of border models. Customs has either merged or is working very closely with other agencies such as those responsible for immigration, food, plant and animal protection, taxation and revenue collection. Other existing models include Customs as an independent agency/ministry or on the other hand Customs as an implementing agency under the Ministry of Finance. It seems that Coordinated Border Management and IT will continue to be an important enabler of more efficient border management. Revenue collection will continue to be important for many countries, while the movement of travellers will increasingly be a responsibility for Customs.

Enhanced Cooperation between Customs and Tax administrations: Today, at international level, more emphasis is placed on cooperation between Customs and agencies responsible for safety and security, while cooperation with agencies responsible for revenue, such as tax administrations, is equally important, especially having in mind that Customs is in most cases responsible for collecting tax and excise, apart from Customs duties. One of the first arguments for enhancing cooperation is developing a common IT basis, use of common databases and conduct of common investigations. Furthermore, it is important to consider Customs-Tax cooperation not only at national, but also at regional and international level. The WCO could advise on enhanced cooperation between Customs and Tax administrations and provide a set of minimum standards.

C21:

- (c) ***Intelligence-driven risk management:*** *The expanding responsibilities and opportunities facing Customs administrations require a more sophisticated understanding of the risk continuum. It is well understood that scarce resources need to be targeted to the higher end of the risk continuum. The challenges facing Customs administrations are two-fold: how best to apply the rapidly expanding body of knowledge of risk management to identify and mitigate risk at the operational level, and how to apply this knowledge of risk management beyond the operational level and in the management of Customs administrations. The key to this will be the building of feedback learning loops that will allow Customs administrations to integrate risk-related activities and to learn from past decisions to enable them to build an organization that is forward-looking, with more sophisticated predictive capacity, rather than being merely responsive.*

Progress so far:

The challenges facing Customs administrations are two-fold: how best to apply the rapidly expanding body of knowledge of risk management to identify and mitigate risk at the operational level, and how to apply this knowledge of risk management beyond the operational level and in the management of Customs administrations. The key to this will be the building of feedback learning loops that will allow Customs administrations to integrate risk-related activities and to learn from past decisions to enable them to build an organization that is forward-looking, with more sophisticated predictive capacity, rather than being merely responsive.

Risk management has been one of the key vehicles for Customs administrations to better meet the demands of the 21st century operating environment, which requires Customs administrations to address risk wherever they are found and increasingly as early in the supply chain as possible. The development and implementation of an intelligence-enhanced risk management framework along with embedding a risk management culture within a Customs administration have enabled more effective decision-making at all levels of the organization and in relation to all areas of risk. Today risk management is considered as one of the guiding principles associated with modern Customs administration.

In view of an increasing need to define a common approach that enables Customs administrations across the globe to both identify and treat potential risks, the WCO developed the Customs Risk Management Compendium in 2011. The methodology outlined in the Compendium establishes a common framework, but at the same time it stays sufficiently flexible in order to meet the unique conditions of individual WCO Members. Since the Compendium is considered as a living document, the WCO has developed additional modules to be incorporated into Volume 2 of the Risk Management Compendium.

Following the conclusion of the WTO Trade Facilitation Agreement, requests from WCO Members regarding Capacity Building activities in the field of risk management and intelligence have again increased significantly since optimal balance between trade facilitation and Customs control would be obtained by applying appropriate risk management systems and techniques.

C21:

- (d) ***Customs-Trade partnership:*** Customs in the 21st Century should enter into strategic pacts with trusted economic operators. Customs needs to understand the concerns of business, while business needs to know the requirements of

Customs. Most importantly, there is a need to translate this relationship into a partnership that results in mutually beneficial outcomes.

Progress so far:

A dynamic Customs-Trade partnership is essential to drive innovation and economic growth opportunities and, at the same time, create a more cost-effective, efficient and responsive Customs administration. A closer collaboration between Customs and businesses helps in an efficient revenue collection, trade facilitation, enhanced compliance, protection of industry/citizens, and trade security, as well as in the implementation of bilateral or multilateral agreements, such as Free Trade Agreements and the WTO Trade Facilitation Agreement.

Key drivers for successful partnership include: political will; senior management's commitment; mutual trust; change in mindset of Customs and Business; transparent and open communication; multi-layered engagement approach with diverse businesses including SMEs; clearly defined goals and objectives supported by time and resource commitments.

In July 2015, the WCO published the Customs-Business Partnership Guidance including its Advanced Pillar, to support Members which are yet to begin the process of engagement or are in different stages of developing an engagement/partnership with Business, as well as Members which already have well-developed partnership arrangements with Business, but wish to advance the cooperation even further. It also encapsulates and reflects substantial progress made by Members, in terms of 31 working experiences/best practices of Custom-Business engagement and 6 additional examples of advanced partnerships.

Leveraging upon new opportunities, the WCO Private Sector Consultative Group (PSCG) has been reconstituted to expand its mandate and also its membership to include businesses/manufacturers, and associations, representing diverse regions and business sizes including small and medium-sized enterprises.

As a way forward, Customs together with trade will need to continuously explore new opportunities for strengthening Customs-Business relationships at international, regional and national levels by using WCO instruments and tools. Customs-Business partnership needs to be regularly adapted to meet emerging challenges and leverage new opportunities, at the same time to meet evolving expectations from each partner. National Committees on Trade Facilitation envisaged under Article 23.2 of the WTO TFA could, for example, be a very useful forum for further engaging trade in driving the future trade facilitation agenda forward.

C21:

- (e) ***Implementation of modern working methods, procedures and techniques:*** Demands regarding the rapid movement of goods, combined with complex regulatory requirements, require modern innovative approaches. These include audit-based controls undertaken away from the border, moving from transaction-based controls alone to using systems-based controls where the level of risk allows, as well as moving away from paper-based systems. There is also a need to review existing procedures on the basis of international conventions (including the WCO Revised Kyoto Convention) and international best practice.

Progress so far:

The implementation of modern working techniques to be able to meet growing volumes and requirements for rapid movement of goods across the border remains a high priority for WCO Members. This coupled with Members' growing need to secure

revenue while facilitating legitimate trade, led the WCO to develop in 2012 Post-Clearance Audit (PCA) Guidelines based on international conventions and best practices. The guidelines encourage Members to move Customs control activities away from traditional border controls to the post-clearance environment embedded in a wider trade facilitation context. Members are encouraged to work towards aligning their practices with the Guidelines in order to ensure that they are using an approach which was developed from Members' experiences and is consistent with modern Customs techniques.

Audit systems introduced by Customs administrations differ in scope and methodology. Practice has also demonstrated that launching a fully-fledged audit system in a country with high levels of informal trade needs a careful approach. To complement the PCA Guidelines, the WCO has also developed in 2014 a diagnostic tool aimed at assisting Members in identifying the gap between current policy, operations and the WCO PCA Guidelines. This will enable the design, implementation and evaluation of Capacity Building needs and appropriate steps forward.

Although significant progress has been made, new challenges lie ahead as also the WTO Trade Facilitation Agreement will require WTO Members to adopt or maintain PCA procedures to ensure compliance with Customs and other related laws and regulations. The WCO continues to assist Members to move towards systems-based audits, through the development and enhancement of tools and instruments alongside with the delivery of Capacity Building activities and mentorship.

The WCO is also assessing the need to review the Revised Kyoto Convention and/or its Guidelines in order to update it with the requirements and procedures of Customs today.

C21:

- (f) ***Enabling technology and tools:*** Customs must take advantage of new and emerging technologies to enhance, amongst others, processing, risk management, intelligence and non-intrusive detection.

Progress so far:

Information and Communication technologies and equipment are becoming more and more a critical enabler in supporting Customs modernization efforts. The WCO has created a supporting tool, the WCO Technology Network, for Members to advance Customs-to-Customs and Customs-to-Business cooperation in the field of technologies. The network is being used by Members to exchange information on their experiences with technology as well as to find new tools that could support their control and detection activities. The WCO Information Technology Conference and the WCO Technology and Innovation Forum are also good examples of awareness-raising efforts and information exchange opportunities that the WCO has worked on around this building block.

The WCO Cargo Targeting System (CTS) is another tool that has been created for WCO Members. It is a targeting system that allows countries to accept pre-arrival and/or pre-departure electronic information and to assess it against common risk criteria. A maritime module of the system has been developed and is at the time of drafting this document being implemented in four countries. The WCO is currently developing an air cargo module which should be available for implementation in around 12-24 months' time. The CTS is a tool that can contribute to both this and the intelligence driven risk management building block.

In the field of intelligence, the nCEN system has been implemented in 12 countries and there are a number of additional countries which have requested the system. Another

relatively new intelligence related development is the WCO Iris application, which is an open source intelligence gathering system and available to all WCO Members. In addition, there currently a new initiative going on on trying to standardize the Non-Intrusive Inspection (NII) equipment image format. Standardization of the NII image format is necessary to: allow interoperability of different NII equipment bought from different manufacturers; allow exchange of images within and between Customs administrations; allow the development of a database or library of images – a more long-term goal; and assist in training of image analysts.

C21:

- (g) **Enabling powers:** In order to address these challenges, Customs administrations require appropriate legislative provisions that strengthen enforcement powers, the provision of advance information and the sharing of information domestically and internationally. These powers are necessary, in particular, in order to combat organized crime more effectively. More needs to be done to increase the safety of Customs officers.

Progress so far:

The Compliance and Enforcement Package (CEP) addresses the question of legal powers to conduct proper controls. That said, it seems that many countries still lack means to enforce the law, which is hindering the implementation of this building block of the C21 document. This is definitely an area that needs more focus in the future – especially from WCO Members who are the only ones who can get these powers for themselves. Supporting tools in the form of model legislation (IPR etc.) exist at the WCO Secretariat to help Members.

C21

- (h) **A professional, knowledge-based service culture:** The future orientation of Customs requires moving towards a knowledge-based and customer-orientated model. Staff competencies need to support timely customer-focused processes and services that minimize the administrative burden on legitimate trade. Training and organizational culture should support high levels of integrity, demonstrating consistency, transparency, honesty and fairness. Effective change management and leadership skills also need to be developed.

Progress so far:

Customs administrations continue to work towards developing a full set of competencies, capacities and skills, across all dimensions of their operating models to perform Customs functions efficiently and effectively.

Many Members have introduced a competency-based, performance-focused and customer-orientated model recognizing human capital as the most valuable asset to keep pace with an ever evolving environment. Equally, many Members are still striving towards this status. Analysis has shown that staff competencies that support the administration's business processes and services and focus on problem-solving capabilities, result in greater likelihood of reaching organizational goals.

Integrated Strategic Human Resource and Business Planning has and will continue to enable administrations to anticipate and prepare for challenges and changes. Key elements for success include leadership and management development, performance management and career-long learning and development opportunities. Organizational culture remains a major challenge or emphasis where support for high levels of

professionalism, integrity, and work ethics, for all staff, will contribute to developing leadership across the organization.

The WCO has developed numerous initiatives for the global establishment of Customs as a Profession.

The adoption in 2008 of the PICARD Professional Standards for Operational and Strategic Customs Managers has initiated the WCO achievements in identifying the set of competencies for the 21st century Customs. These standards have enabled to develop educational programmes which provide professional qualifications for Customs management.

Since 2014 the WCO Framework of principles and practices on Customs Professionalism (FCP) accompanies the Customs Administrations in their HR transformation to ensure that the Profession's specifics impact the HR management strategies and processes in Customs. The FCP competency-based methods and tools for a strategic Human Resource management in Customs cover job profiling, recruitment, training and career paths development. They are completed with an on-line living repository of practices on CLiKC!. A People Development Diagnostic Tool has been developed in 2015 to assist Members in operationalizing a competency-based HR strategy.

As per the WCO endeavors to promote a knowledge-based culture, the WCO CLiKC! web portal (Customs Learning and Knowledge Community) has since 2009 successfully been disseminating WCO Customs Training, networking and collaboratively developing more Customs Knowledge on all the Customs technical topics, Integrity, Leadership and Management. It offers, in complement of the customized on-site training activities, series of ready-to-use training materials, through a wide catalogue of on-line courses and course material for facilitators, a blended learning platform, many communities of experts and a Virtual Customs Orientation Academy opened to all new Customs recruits around the world. CLiKC! promotes widely available training and development solutions for the global Customs community and participates to the adoption of a common competency-based language for the Profession.

C21:

- (i) **Capacity building:** Customs administrations need to ensure that they have the capacity and skills across all dimensions of the operating model to perform all Customs functions most efficiently and effectively. It also goes without saying that the concept of "Networked Customs" relies on professional and competent Customs administrations, and that intensified and focused capacity building efforts are required to achieve this objective. The Columbus Programme of the WCO is an ambitious international effort to build Customs capacity. Some of the challenges that need to be addressed include how to manage scarce resources to deliver sustainable capacity building, how to promote effective performance criteria, monitoring and follow-up, how to avoid duplication of efforts and how to manage impediments in the recipient country. Leadership from both developed and developing-country Customs administrations as well as a true partnership are critical to ensure sustainable capacity building.

Progress so far:

The WCO Capacity Building Strategy is an ambitious, dynamic, yet pragmatic approach to meet the expanding roles of Customs in the 21st century. Its success over the past 7 years is primarily based on the concept of the relevant Member taking full responsibility and ownership for their own development.

Capacity Building is development and implementation of change. It is about taking decisions and delivering results. Implementation has not necessarily been complicated. Experience has shown that to be successful there has to be a strategic, holistic and structured approach to prioritized, practical, operational activities based on a proper and timely needs assessment.

Key factors for Capacity Building success are political will, leadership and commitment. Holistic development, which looks at the impact of changes across the whole of the Customs service, as well as the government priorities, must be coupled with a sustainable implementation approach. Customs services must be empowered to take full ownership of the Capacity Building programme. There must be a steering vision of the results of Capacity Building, with concrete targets, recognized programme management techniques, adequate resources and measurement of implementation and results.

Moving forward, consolidation of the above Capacity Building approach will continue, and in addition, renewed efforts to sustain partnerships at the global, regional and institutional levels between Customs, trade, donors, development agents and academia remain essential to ensure sustainable Capacity Building.

Related to the WTO Trade Facilitation Agreement and Trade Facilitation in general, the WCO has launched its Mercator Programme as one of its latest Capacity Building programmes.

Input by the VWG FC:

Law Enforcement Agencies' Training Needs regarding supply chain security:

Research on this topic was developed based on a survey of results of 16 law enforcement officials and policy makers. It highlights areas of supply chain security where the global law enforcement community may need new training material and information more urgently. Crime areas which were identified as those which could be addressed through new and enhanced training material, are the following: corruption, narcotics and drug precursor trafficking, financial crimes and tax evasion, trafficking in human beings, trafficking in counterfeited goods, terrorism and cybercrime.

C21:

- (j) ***Integrity:*** The fight against corruption remains an important task that should be undertaken over the years to come. The WCO Arusha Declaration will remain the reference document for all Customs administrations. All the efforts of the Columbus Programme could be undermined and even eliminated without integrity.

Progress so far:

The fight against corruption is an essential element of any Customs reform, and a component of national and regional economic policies. A very large majority of Customs services have already improved their capacities or are in the process of doing so, by means of computerization and the adoption of international standards for procedures. However, the positive impact of these investments in technology and human resources can be reduced by corruption, which therefore continues to pose a

challenge for administrations and for the international institutions which provide assistance and expertise.

The reference instrument for all of the WCO's integrity-related activities is the Revised Arusha Declaration. Over the past 7 years, the associated Model Code of Conduct (2003) was revised in 2011 and the Integrity Development Guide (2003) is currently under revision.

Engaging in the fight against corruption is no easy task, given the high stakes involved in taking this stance. The most senior officials, the Director General and his/her team face risks that will be difficult for them to evaluate: reduction in Customs revenue, users switching to neighboring ports or countries, social and political pressures. The risks posed by an anti-corruption policy, and the content of such a policy, are sometimes difficult for the Customs hierarchy to envisage because of information asymmetry³ with operational officers and private sector participants, who are in direct contact at the transaction level (declaration, examination, etc.) and are the groups typically engaged in corruption.

It is essential to generate and/or sustain "political will" by helping Directors General and their political hierarchy to reduce the information asymmetry between themselves and those in the field, enabling them to put forward anti-corruption policies which are pragmatic, realistic, rapidly effective and capable of being evaluated. In order to generate and sustain political will, the WCO has organized workshops for senior managers to provide for an exchange of views with WCO experts on questions directly related to corruption, such as the relationship with users, the impact of national policy objectives (revenue, security, etc.) on operational practice, governance, staff accountability, performance and quantification.

It is also key to make the fight against corruption a priority for Customs and establish a concrete link between anti-corruption policies and reforms. There is no indication over the past 7 years that the fight against corruption, in isolation, constitutes reform. Because corruption opportunities are strongly linked to existing procedures and their inadequacies, any reform of procedures or introduction of new tools aimed at improving integrity must be envisaged in the context of an Administration's institutional objectives (trade facilitation, enforcement, revenue collection). Holistic thinking on integrity and technical reforms is therefore essential in order to maximize the benefits of new procedures.

Several documented successes in the sphere of integrity over the past 7 years are associated with personal performance contracts. "The How and Why of Performance Measurement and Contracting" describes a holistic approach to fighting corruption through the Customs authority regularly analyzing data extracted from automated Customs clearance systems.

From the experiences of the past 7 years, the way forward includes continuing to respond to Members' requests to help them assess the status of their administration with regard to integrity and anti-corruption efforts and provide them with advice. There is an increasing demand to assist implementing the Performance Measurement Contracting approach. Other positive developments to fight corruption include sharing best practices, circulating information from the meetings of the Integrity Sub-Committee and producing the regular Integrity Newsletter. Finally, the WCO's Leadership and Management Development (LMD) Programme includes a chapter on integrity.

³ "Information asymmetry" means that, within the same administration, different groups of civil servants (senior management, officers at headquarters and operational staff) do not share all the information about their activities and may not be aware of the same realities, thus creating a disconnect within the administration. For instance, a Director General may not be informed of the daily practices of their field officers.

C21:

“FUTURE ROLE OF THE WCO

The WCO is an inter-governmental organization representing its Members at global level. In order to address the challenges facing Customs, the WCO needs a new supportive strategy that includes.....”

Input by the VWG FC:

New role of the WCO: Since the establishment of the WCO in 1952, economy has become transnational, while Customs has remained national. Today, multi- or transnational companies (so-called global players in international trade) account for 2/3 of world trade and approximately 1/3 of world trade takes place between a parent and its subsidiary companies (i.e. “inter-company”). This is much different from the situation more than 60 years ago. Even in the European Union, the now 40 year-old customs union has not been successful in setting up a supranational customs administration. Especially since the creation of the SAFE Framework of Standards, the WCO has been reaching out to the industry (through the Private Sector Consultative Group). However, there are suggestions to pursue such cooperation more intensively and establish project groups consisting of representatives from customs administrations and business which could develop customs under the auspices of the WCO. The WCO has to date been mainly a coordinator of customs at national level. It could possibly also be a facilitator for the transnationals and mediate between them and Customs.

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List of topics of interest, based on previous PTC documents, PTC report as well as first discussions of the VWG FC:

- a) Potential research areas that could be looked at and are not yet (at least not fully) covered in the work of any WCO Committee currently:
- New economic models, globalization
 - Regional Integration, mega-regional agreements (TTIP, TPP), new FTAs, possibly some new protectionism measures
 - Trade developments incl. rise of emerging economies incl. BRICS, understanding of how trade is done, incl. Global value chains (in this context mentioned so far: connecting to those chains, inward/outward processing procedures etc.), SMEs
 - Mega ports
 - New modes of transport
 - New working and production methods (3D printing; trend to build production sites closer to growing cities; exchanging software across borders to produce goods on national level, Industry 4.0) – taken up by a VWG FC member
 - Big data
 - WTO Agreement on Information Technology – to cover approx. 200 additional products
 - Community based technology solutions (it is presumed that this includes e.g. Cloud solutions)
 - Terrorist threats
 - Softening of regulations related to certain drugs and narcotics in a number of countries
 - Climate change (and cross-border spreading of diseases) – taken up by a VWG FC member
 - Reduction of oil prices, potentially leading to reduced transport costs and to new dynamics
 - Vision of one delegate: one day all Customs around the world would be using common practices and providing the same service in a harmonized manner
 - Post-Clearance Audit
 - Global migration and refugee situation - what does it mean for Customs
- b) Topics that WCO/Customs are already dealing with today – this work could still benefit from thoughts from the group, though:
- WTO Trade Facilitation Agreement implementation (TFA WG, PTC, CBC, WGRCF, HSC, TCRO, TCCV)
 - Coordinated Border Management (PTC, SAFE)
 - Single Window, IT, interoperability (PTC, SAFE, IMSC, DM)
 - Exchange of information, incl. with tax administrations (PTC, EC, SAFE, TCCV) - taken up by a VWG FC member
 - Cooperation with tax administrations, incl. organizational questions (PTC, CBC, TCCV, PC) - taken up by a VWG FC member
 - E-commerce (PTC, EC, PC, TCRO) - taken up by a VWG FC member
 - Authorized Economic Operators (AEOs), Mutual Recognition Arrangements (MRAs) and “what next after AEO” – incl. Integrated Supply Chain Management (PTC, SAFE)

- Increased focus on control of passengers and control of taxes (incl. carbon taxes) (PTC, EC, SAFE, API/PNR CC)
 - Relying on results of controls of other Customs administrations (PTC, SAFE, EC, TCRO)
 - System based controls (EC)
 - Informal trade (PTC, CBC, PICARD)
 - Change management (CBC)
 - Smuggling of drugs in small parcels (EC)
 - Co-creation in Customs-private sector partnership, industry-focused and account-based Centers of excellence and expertise (PTC, SAFE)
 - Life-long learning (CBC)
 - Data quality (PTC, SAFE, IMSC)
 - Integrity (ISC)
 - Information Technologies (IMSC, PTC, SAFE, EC)
- c) Additional questions – potentially research on topics above will lead to conclusions for:
- Mandate of Customs/definition of a Customs service – will become a standing item and open document throughout the work of the VWG - taken up by a VWG FC member
 - Governance, incl. WCO governance - taken up by a VWG FC member
 - e-WCO
- d) Topics taken up by volunteers of the VWGC
- 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 SocioEconomic 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)

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Guidance of the Influence of 3D Printing to the Future of Customs

-Proposed Topic for the VWG on FC from China Customs-

By SHAO Weijian of China Customs

Technology revolution of Industry 4.0 with 3D printing as one of the major characters brings about the changes of production mode, and then the changes of logistics mode. And some of the changes will implement a great influence to the Customs control even to the future of Customs.

3D printing

3D printing or additive manufacturing is a process of making three dimensional solid objects from a digital file, using a 3D printing machine with the raw materials of plastic, metal, nylon, or other materials of over one hundred kinds. There are many advantages for additive manufacturing 3D printing, including capable of creating new structures and shapes, new combinations of materials, less waste, cheaper, quicker and so on.

The first generation of 3D printers was born in the late 1980s, from the beginning of printing based model to the late of developing mold, and then gradually became involvement into rapid manufacturing; the second generation of 3D printers in recent years developed from printing models to being able to print out high-precision functional products, and has been used in aerospace and other fields. Third -generation 3D printer may be born in the next 10 years, under the background of intelligent manufacturing, combining with networking technology, big data, cloud computing, robotics, intelligent materials and other advanced technologies under Industry 4.0, 3D printing will become a portion of several intelligent manufacturing platforms.

3D printing is expected to be popular in many fields, such as manufacture, construction, bio medical etc. And for the end users, the popularity of desktop 3D printer is just a matter of time.

Industry 4.0

Technology has brought dramatic increases in industrial productivity since the dawn of the Industrial Revolution with the use of steam engine and water power, and then followed by the application of electricity, assembly line, and electronics and automation. Now, we are in the midst of a fourth wave of technological advancement: the digital industrial technology known as Industry 4.0. Industry 4.0 presents a transition of basic model from a centralized control to a decentralized, highly flexible, personalized and digital smart production mode of production and services.

There are nine pillars of technological advancement of Industry 4.0: big data and analytics, autonomous robots, simulation, horizontal and vertical system integration, the industrial internet of things, cyber-physical systems, the cloud, additive manufacturing (3D printing), and augmented reality. Among which the 3D printing is going to be crucial.

Impacts of 3D Printing to Customs management

3D printing, together with the technologies under Industry 4.0, will bring changes to traditional production and logistics mode. When using 3D printing, in some cases the end user can also be at the same time the manufacturer, because he needs only to import the raw material for his desktop 3D printer then produce products as he wishes. Also the production can be done

with the design coming online from overseas while only the printing is done in the country. So, 3D printing will create a demand for smaller, localized manufacturing environments capable of customized production, shortened lead time and drastic cuts in transportation costs and carbon foot-prints, resulting in great changes to the supply chain. The traditional horizontal supply chain will be changed to a vertical one, or a cycled one, therefore, it may have the following impact on Customs:

The increase import and export of 3D raw materials. Import and export of goods will change from semi-finished products or finished product to only raw materials in the form of powder, or wire, when they are imported or exported; customs can't judge what the final products will be and what they will be used for, this will have a negative impact on Customs license and security control.

The control of software, when the production is controlled by a designer overseas, the design is actually imported; as a result, there will be a royalties valuation and intellectual property rights protection issue.

The AEO concept. The owners of 3D printers are the real manufacturers, and become the key economic operators for Customs control. Since individual person owns a 3D printer, he can easily become a manufacturer, so the economic operators are not the same as we see before.

Possible solutions

Review of the supply chain management. Since the supply chain is going to be different from what we see now, we should have a clear picture of what the supply chain is going to be and especially how flow of goods will take place in the new supply chain.

Integrated supply chain management should become a priority. Customs should trace the flow of the raw materials after their importation for 3D printing and even the end user of the 3D printing products.

The coordinated border management shall be extended to coordinated supply chain management. So that after the importation, government agencies, like tax or security administrations who are responsible for internal tax and security can take over after Customs control at the border.

Owners of the 3D printers should be registered or licensed and be subject to Customs control, and post-clearance audit shall be applied.

Customs regulation should be revised for being able to cover the control of the owners of 3D printers.

Questions to be discussed:

1. What's the relation between 3D printing and Industry 4.0?
 2. Which kind of changes 3D printing brings to Customs control?
 3. If the owner of a 3D printer prints out products designed by an overseas company is it a tangible international trade in goods or intangible trade?
 4. Is Customs the proper government agency to control the owners of 3D printers who do not directly import goods but just print out products designed by an overseas company? Why?
 5. If Customs is the proper agency to control the owners of 3D printers, does the framework of Customs convention enable Customs to apply the control? Or we need to revise it or even create a new one?
 6. How to safeguard the IPR for the 3D printing?
 7. How to ensure the security of 3D printing?
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