



Brussels, 22 January 2019.

FUTURE OF CUSTOMS

- Draft Study Report on Disruptive Technologies -

(Item XI. (a) on the Agenda)

Background

1. At its 215th/216th Sessions in March 2017, the PTC discussed the way forward for the Virtual Working Group on the Future of Customs (VWG FC). The PTC decided that the Group would, amongst other things, focus on exploring disruptive technologies which are gradually becoming part of people's every day's lives. However, the benefits of these technologies for Customs and border management had not yet been fully explored.
2. At the October 2017 meeting, the PTC decided to develop a Study Report on Disruptive Technologies, that will collate all the work already carried out under the Group, including papers developed by a number of its members, and to more broadly bring together relevant information from open source, as well as outcomes of discussions under the PTC and other WCO working bodies and meetings.
3. The first draft was presented at the April 2018 PTC when the delegates expressed a high level of appreciation for the quality and usefulness of the Study Report that was felt to be topical and timely. The PTC agreed on the objectives and the structure of the Study Report and to continue exploring the topic and collecting experiences to be included before the next PTC meeting in March 2019.

The Study Report on Disruptive Technologies

4. The Study Report brings together lessons learnt and recommendations stemming from the research, pilot projects and discussions taking place under the PTC and other WCO bodies. The Study Report also shares some more aspirational and innovative propositions on their use in the future, put forward either by the Members of the VWG FC or the Secretariat.

5. The objective of the Study Report is to raise awareness within the Customs community of the latest technologies and their potentials, by firstly demystifying each of them individually and providing practical examples of how they could support or have an impact on Customs and border management in the future.
6. It is evident that bringing forth specific conclusions and recommendations in this domain is to a large extent a moving target as, on the one hand, advances in latest technologies are usually faster than the ability of Customs and governments to follow, and on the other, experiences in their use are not as sufficient and wide-spread as one would expect or desire. The Study Report is therefore meant to be a living document, to be updated on a regular basis to include lessons learnt and recommendations stemming from on-going work and discussions.
7. During the intersession, some relevant improvements to the Study Report have been made, as follows:
 - Foreword by the Secretary General and Acknowledgments have been added, with the latter showing that the Study Report presents an important collective effort by a substantial number of Member and Observer representatives, as well as of the WCO Secretariat.
 - An Executive Summary has been added to allow for a quick insight into the key findings from the Study Report. This short three-page chapter can be especially useful in the context of familiarizing Customs executives with the latest WCO discussions and guidance in the domain of disruptive technologies.
 - The first version of the Study Report focused on the following technologies: blockchain, Internet of Things (IoT), artificial intelligence, biometrics, drones and 3D printing. All of these chapters have been retained and updated, while a completely revamped chapter on artificial intelligence and machine learning, as well as a new chapter on virtual, augmented and mixed reality, have been added. The Study Report looks into what each technology is about; how it is currently used in Customs, border and supply chain management, as well as more broadly; what are the risks and benefits; potential application in the future etc. In some cases, such as 3D printing, the paper focuses more on the possible impact on Customs and border management in the future, rather than application in Customs. These chapters have during the intersession been updated to include the outcomes of discussions in WCO meetings, findings from research and annual reports, comments from members of the Virtual Working Group on the Future of Customs and other.
 - The Study Report was also enriched with a chapter on Strategy Behind Technology, which looks into the new approach required for managing IT-related projects today, bearing in mind that trade and traveler growth, including E-Commerce, have significantly outpaced the typical Public Service rate of evolution, challenging its conventional operations, program policies and legislation. The high rate of failure in large, multi-year IT-enabled projects has resulted in organizations moving away from large IT system development and instead selecting technologies that can easily migrate to new hardware in the future. Key to the new methodologies used is the principle of failing fast and recovering quickly, which has also been addressed in this chapter.

- The chapter on Recommendations was enhanced to include a list of recommendations brought up during the annual dialogue held between the Private Sector Consultative Group (PSCG) and the Policy Commission held in June 2018. The meeting discussed how administrations can work with the private sector to improve the use of technologies in Customs.
- The 18 use cases that have been added in an annex represent an important addition to this document. Many Members have provided examples on how they have introduced, are currently using and how they plan to use technologies in the future. Other use cases have been collected from open source.

The way forward

8. The PTC is now provided with an opportunity to discuss the Study Report and to share suggestions for any further improvements to be made during the intersession and before submission to the Policy Commission/Council in June 2019, for approval. If appropriate, the PTC is invited to endorse the Study Report.
9. The PTC is also invited to provide suggestions on any further topics or aspects of disruptive technologies to be discussed in PTC meetings, the outcomes of which would be incorporated into the Study Report in the future.
10. With the interest of the Members in the use of new technologies, and the opportunities and challenges faced in mind, the PTC could consider the benefits of organizing awareness-raising and experience-sharing workshops for promoting the Study Report on Disruptive Technologies and for further enriching its contents.
11. One of the recommendations emanating from the PSCG – Policy Commission Dialogue in June 2018 was the need for carrying out joint research and pilot projects with the private sector. The PTC is now invited to examine the opportunities for stronger Customs and WCO involvement in Members' research and development projects, which bring on board the private sector and other interested stakeholders and allow for a more hands-on involvement in forward-looking solutions affecting Customs and border management.

Action required from the PTC

12. The PTC is invited to:
 - discuss the Study Report on Disruptive Technologies, share suggestions for any further improvements and, if appropriate, endorse it, subject to further relevant updates before submission to the Council/Policy Commission in June 2019;
 - provide suggestions on any further topics or aspects of disruptive technologies to be discussed in PTC meetings, the outcomes of which would be incorporated into the Study Report in the future; and
 - consider organization of awareness-raising and experience-sharing workshops and examine opportunities for stronger Customs and WCO involvement in Members' research and development projects, exploring forward-looking solutions affecting Customs and border management, and involving the private sector and other stakeholders.

